

Mitch & Bill's Big Adventure!

Lesson's from the Freddie Spencer Racing School

By Bill Hearne

I am somewhat afraid as we step off the plane in Las Vegas. Mitch Moe and I have arrived to take Freddie Spencer's High Performance Riding School for the next three days. We had been planning this trip for a year, I was not yet sure just what to expect. My personal goal is to leave with all limbs in the same working condition as when we arrived. Even though I have ridden a few hundred thousand miles on motorcycles, the comfort and design of my trusty Goldwing is a far cry from the race-prepped Honda CBR600RRs we would be riding. Mitch has been riding sport bikes for a number of years, but I felt I might be a fish out of water. We head to dinner at the Rum Jungle of Mandalay Bay, then hit our beds to be fresh and ready for the early morning start. We discover we are not exactly party animals in Las Vegas.

Early Monday morning, we grab our gear and meet in the lobby of the Orleans Hotel where we find three of our instructors waiting to drive us to the Las Vegas International Raceway. There is lots of joking to hide the tension. The Raceway is an amazing place. As we enter, we drive past dozens of state-of-the-art garages with exotic hardware tucked inside. Names like Foyt, Andretti, Gordon, and Shelby adorn the garages. Seems like I have heard of these guys before. We go directly to the racetrack and drive around the track in our van as the instructor explains the layout and protocols we will be using. The instructor makes a point of driving the van into the runoff area of turn two to demonstrate this safety outlet should you find yourself too hot in a corner. Little did I know that in 24 hours I would test this escape route.

We have 16 students, 13 guys and 3 ladies. About 1/3 are currently racing and are quite experienced. There is one rider new to motorcycling. I discover that he and I are the only students without significant sport bike experience. Ages range from 15 to 57. I am the oldest, but what the heck, I'm a young 57.

We return to the school and I am impressed by the super clean, organized shop, a friendly staff, and pictures on the walls of racing champions that have attended this very school. Our instructors are top notch with one instructor for every four students. Racing fans will recognize the names of Nick Lenatsch, Jeff Haney, Dale Kieffer, Shane Turpin and Ken Hill and, and, of course, the great "Fast Freddie" Spencer. It takes several pages to list all of the National and World Championships these guys have won. I determine that it would be wise to listen when they speak. Nick makes the point that all of the instructors are about 40 years old and note that all of their limbs and pieces still work after 20 plus years of racing. Riding in control is the goal. Anyone can go fast for a while and then end with a sudden stop. Crashing is the elephant in the room and we hold a brief discussion. Basically, we are told to remove the concept of crashing from our mind and never speak of it again. We are told that if we follow the training, no bad results will follow. Wow, that was easy, my mental state is now crash free!

Next is our initial classroom training session. It gets hard from this point on. We hit the books before we hit the track. We study the layout of the inside road course at Las Vegas Motor Speedway. Each of the nine turns has a different approach, braking point, corner apex, and acceleration point. Initially, it seems to be an overwhelming task to remember all of the reference points and control the motorcycle at the same time. Cones will be placed on the course to help us learn the many reference points for rider actions. Instructor Ken Hill



Fast Freddie Spencer & the Author

makes a big point of proper positioning of the motorcycle on the race track. Ken indicates that if you are on the correct line you will be ahead of 70% of the riders at a typical track day. I commit to myself that, while I may not ride on the edge, I will always be in the right spot on the track. It is interesting to learn what the instructors consider being in the correct place. Your margin of error is the width of your tire! Any deviation more than your tire width and the bike is off line. Just think of having a six inch painted stripe on the entire course. Now ride around the course and never fall off the stripe. I begin to understand that there is a whole higher level of precision riding that we will need to learn. We learn little training concepts like: Radius = MPH = Safety and Lean Angle = Risk. When we begin to ride, these concepts become evident and strike home quickly.

I came to the class thinking that learning to “drag a knee” and max lean angle is the fastest way to ride. However, the best riders are always trying to minimize lean angle. Less lean angle allows more speed. This is just the opposite of my initial thoughts. Fallacy #1 is dispelled.

Many riders have been taught to never brake in the corners. Fallacy #2 now takes a high side as we reject this “no brakes in the corners” premise. We learn to always brake in the corners. Precise trail braking involves using the front brake with a quick ramp up of brake pressure, followed by a steady, but gradual release of pressure. In many cases, we brake all the way to the apex. The key is to use your front brake as a finely tuned rheostat and not as an on/off switch. All of your hand actions should be in slow motion. The goal is to input smooth trail braking deep into the corner, then go to neutral throttle and add hard throttle once you see the exit.

It is now 10am of the first day and time for the rubber to hit the road. I awkwardly slide into my Van-son racing leathers and boots. I am hoping that others don't notice that I don't know how all the zippers and buckles work. I walk to my assigned CBR600, which has been pre-tuned for my weight and size. Now I learn how to move around on the bike and the proper body position in turns. The movements are quite unnatural and take significant practice to become even moderately proficient. I learn to have no weight on my arms or hands. All of the muscle control is in my stomach and thigh muscles.



Mitch Moe.. Ready to Ride!

I start my bike and follow instructor Shane Turpin to the track. I notice that an ambulance with EMT crew is discreetly hidden behind a track partition. This ambulance and crew will be our constant companions for next three days. I have been told not to worry about crashing but obviously someone is planning for such an event. Each instructor takes four students around the track. I follow closely on Shane's rear. The goal is to learn the perfect line and the instructor rides the perfect line every time. The initial pace is moderate but learning the constant body movements and reference points has

my mind operating at maximum speed. Round and round I go for about 12 laps, then I pull in for a rider's meeting. I leave again as each rider is sent out with about 30 second spacing between riders. I have plenty of room on the track and concentrate on the proper line, trail braking, and body position. Learning seems to come fast and I feel more comfortable with each lap and know I am decreasing my lap times. At first, I never

get around the entire course without a significant flaw in one or more corners. The key is to immediately fix your error and not allow an error in one corner to cause a poor line that then bleeds into the next two or three corners. I learn that an early entry into a corner will always lead to a wide exit. Not only does the early entry cause a speed loss at both entry and exit, but more importantly, it causes excessive lean angle at the exit which dramatically increases risk. This is exactly the situation a street road rider faces with an early entry into a right hand turn. Early entry leads to a wide exit, which means you risk crossing the centerline. This is not good with on-coming vehicle traffic and is a major cause of motorcycle accidents.

At the end of each lap or two, an instructor stops me to provide guidance and correction. My lines tend to be pretty good but my body position is not up to par. I have a hard time hanging far enough off the bike while still providing subtle, light inputs to the controls. I understand why most great road racers tend to be smaller and shorter. My 6' 4" frame creates a disadvantage. Your head and helmet weigh about 40 pounds. Keeping your head low and off to the side provides tremendous movable ballast. I learn to really feel the traction level of the front tire and how small body position changes can reduce my lean angle and provide both increased speed and safety.

The instructors watch me like a hawk and correct even the smallest imperfection. The more I ride, the higher my level of concentration. I see the track in a whole different way and find that I am not focused on where I am, but on where I want to go. The farther ahead I look, the faster I go. All of this is really cool and addictively fun.

Just as I think am getting good at this, I am told that the instructor will now film my lap. The instructor follows closely behind me with a fixed mounted camera. The instructor will ride the correct line. If you do not ride the right line, you will drift entirely out of the viewfinder of the camera and the film of your lap will show only an empty race track. I end the day and head back to the shop. Everyone is hot and tired. My clothes are sweat soaked, my muscles are sore and I am bushed. I was concerned before coming to the class that there would not be enough actual riding. This is not a problem and I welcome a break in the action.

The vans take us back to the hotel. Everyone is bone tired. We have a free night in Sin City, but all we can muster is enough energy to go to dinner and then hit the rack. I don't sleep well and spend the night visualizing smooth body transitions and perfect lines.

Day Two....

Oww! Upon waking, my inner thigh muscles are so sore and stiff that I can't stand to walk. Roommate Mitch Moe has the same problem. We do a number of stretching exercises, then hobble to the awaiting vans. Our classmates are all walking funny but are grinning with excitement and anticipation of day two. We mistakenly think we have it figured out.

I have never really been concerned about having warm tires for best traction. The instructors make



**Bill Hearne &
His Lucky # 7 in Las Vegas**

a big point of warming up your tires before riding hard. I take a few warm up laps and really concentrate on my body positions and quick transitions between turns. A night of visualizing the proper technique seems to have really helped. My transitions are smoother and faster. This skill allows me to enter turns faster and in an optimal position for a strong exit. My confidence is high, and I ride more and more aggressively. Every turn is my friend and I understand exactly where I want to position the bike on the track and can generally put it there. I have gotten to be really good! Then I run off the race track! It all happened so fast. Turn four has given me no problems... maybe that was the problem. In any event, I come out of turn 3, see the exit, accelerate hard, and find myself about six feet off line. For an instant, I think I can save it by adding massive amounts of lean angle, but as I drift to the dirty area of the track my survival instinct kicks in. I stand the bike upright and ingloriously shoot across the infield until I can reduce speed and regain control. Boy, do I feel foolish. I have this faint hope that no one observed this huge mistake, but notice several students and all of the instructors looking at me. Mistakes like this are why I wanted to take this training on a race course. Other than my embarrassment, there is no penalty for my riding error. No ditch, no wall, no guardrail, and most importantly, no 4000 pound 4-wheeler to bring things to a sudden stop.

All in all, it was a good morning. The class heads back for lunch and additional concept training.



Bill Hearne executes a nice inside pass riding Lucky 13!

This is a working lunch and for the first time we discuss the use of the rear brake. Until now all braking has been exclusively with the front brake. We also get a surprise and learn we will spend the afternoon riding Honda XR200 dirt bikes on a dirt track. This training is designed to learn to slide the rear of the bike using the rear brake and to learn to pass a slower rider by taking a different line around your opponent. Doing these maneuvers at 10 mph on soft dirt is vastly easier than learning these maneuvers at 60 mph on asphalt. I change into dirt safety gear and go racing. Everyone has a number of

low side crashes, but with our good quality gear no real harm is done. We split into four-man groups and run some relay team races. The instructors have preached that race winners are always those that ride in control and without errors. True to form, the relay winners ride consistently and without mistakes. My team comes in second every time. No trophy for Bill, but I did manage to pass multiple riders in every race, so I figure I am the MAN!

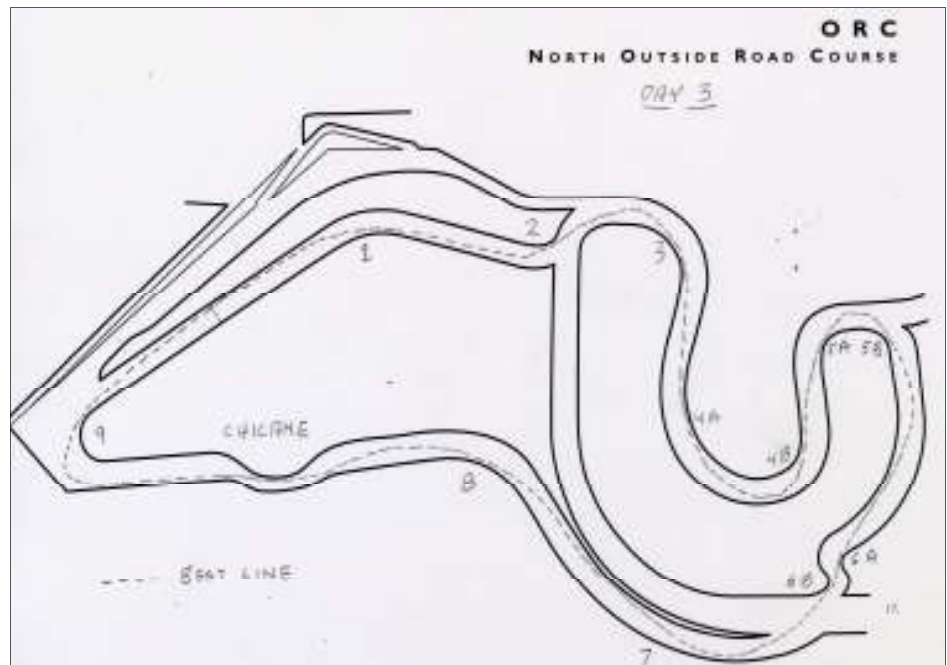
We retire to the classroom for a dinner and a movie. The dinner is a catered affair and the movie is the video tape of each rider. You can't hide from the camera. We all watch each student take his lap with commentary from the instructors. I quickly notice that two errors account for most mistakes. The first is poor bike position on the track. Many students are so far off-line that they move entirely out

of the camera's field of view. Off-line errors then lead to poor entry and exit angles and jerky movements for both the bike and the rider. Invariably the smooth rider is the fastest rider. The second mistake is poor body position. The benefit of hanging far off the bike is that lean angle is reduced. If you don't hang off then you must add lean angle which adds risk and decreases speed. Over and over again we hear, "More butt, lower head, lower chest." In other words, get your butt farther off the seat, lower your head to below the mirror area and lay your chest on the gas tank. I purposely tried to exaggerate my body position for the film lap and to have good form. I find it enlightening as I watch myself and it is evident that I still do not have enough body off the bike. It is really hard to totally hang off the bike and yet make the transition to the other side in a quick smooth manner. At least my lines are good. Mitch and I are beat once again and the night life of Las Vegas will have to wait. We head straight to bed at 9pm.

Day Three....

We will soon be done with this grand adventure as day three dawns with excitement and yet sadness. I enter the classroom in high spirits and know that today I will dominate the race track. Immediately, I am thrown a curve and learn that today we will ride an entirely new track. All of those old, comfortable lines are now gone. I must quickly learn all new reference points and this time with no cones to help the process. The new track goes clockwise, so four more additional right hand turns are added. Everything is harder. The straights are faster, the transitions between corners are quicker, a chicane is inserted, and an 80mph sweeper, complete with a concrete wall is just an added concern. I again follow the instructor to learn the best lines. I have much to learn about reading proper bike position, as the lines I would have chosen differ greatly from those of the instructor.

We also discuss the use of the rear brake at high speeds. The body position for road racing is much different than the position for street riding. You place the tips of your toes on the very end of the foot pegs. Your feet are constantly swiveling on these two contact points and you tend to grind holes into the bottom of your boots. Using this foot position, your feet do not cover either the shift lever or the rear brake. Shifts are done with a quick jam of your foot and an even quicker return to the tip of the foot peg. Rear braking is even more difficult. You can't just jab at the rear brake. It must be used in a smooth, controlled fashion. You also can't use the rear brake on right hand turns because you must keep your knee and right foot extended on right hand turns and cannot cover the brake pedal. This procedure is why many world-class racers have a thumb-operated



rear brake. Once again, I learn that there is much to learn.

Riding the new course is great fun. I quickly learn six of the nine corners and perform well in these six. There are three turns that are most difficult and I make slow progress in mastering these new angles and



Nick Ienatsch– Lead Instructor & Author of Sport Riding Techniques: How To Develop Real World Skills for Speed, Safety, and Confidence on the Street and Track

speeds. The previous training helps greatly and I am surprised how comfortable I feel after about 20 laps. Even the big concrete wall blurs from my vision as I zoom near and I have no fear.

At about 11 am it is video time again. The instructor follows me closely and I am determined to ride a perfect lap. I concentrate on my bike position and quick, smooth body transitions. I also twist the grip just a little harder. I nail seven of the nine turns and produce one of my quicker laps, but wonder if the film will confirm that I have ridden as well as I think. We have a group lunch and review the video of each rider. My video lap looks good and I even get some congratulations from fellow students. I notice that most students have greatly diminished their faults from day one. Interestingly, riders who rode poor lines on day one continue to ride poor lines on day three.

After lunch, the instructors ride near each student and give corrections in real time as we ride. I am riding as hard as I can, while the instructor is on my outside and riding with one hand and pointing to where I should be and how to improve body position. It doesn't seem fair that they can be 10 times better even after my three days of hard training.

We are now near the end and for the first time we have the semblance of a race between the students. A group of eight students ride the course simultaneously. Each group will ride for 20 minutes or until you become fatigued and quit. This is close to real racing. I must not only be concerned with my position, but also watch other riders. For the first time, I must figure a different line to pass slower riders. I am consistently able to pass about 1/3 of my group. I am able to pass only those who ride poor lines. I find it is quite easy to follow a fellow rider, watch for his early entry, and then blast past him on the inside as he inevitably goes wide on the exit. The speed differential on the passes is tremendous and dramatically demonstrates just how important is the correct line.



**Shane Turpin
Bill's main instructor**

Whether it is on the street or on the track, if you only do one thing right... ride the correct line. Not only is the correct line faster, it is absolutely safer. This is the major lesson I will take from this racing school and transfer to my street riding.

Sadly we must quit. We assemble for a graduation ceremony and receive our diplomas. Many friendships have been made. We establish a group email and web page and continue to share our thoughts and adventures. There is no doubt that any rider can greatly benefit from Spencer Racing School. Freddie Spencer got his nickname, "Fast Freddie", by winning three GP championships. I am going to work on getting a similar nickname. How does "Blazing Bill" sound?



**Rumor has it that this was the fastest class ever assembled for the
Freddie Spencer High Performance Riding School!**