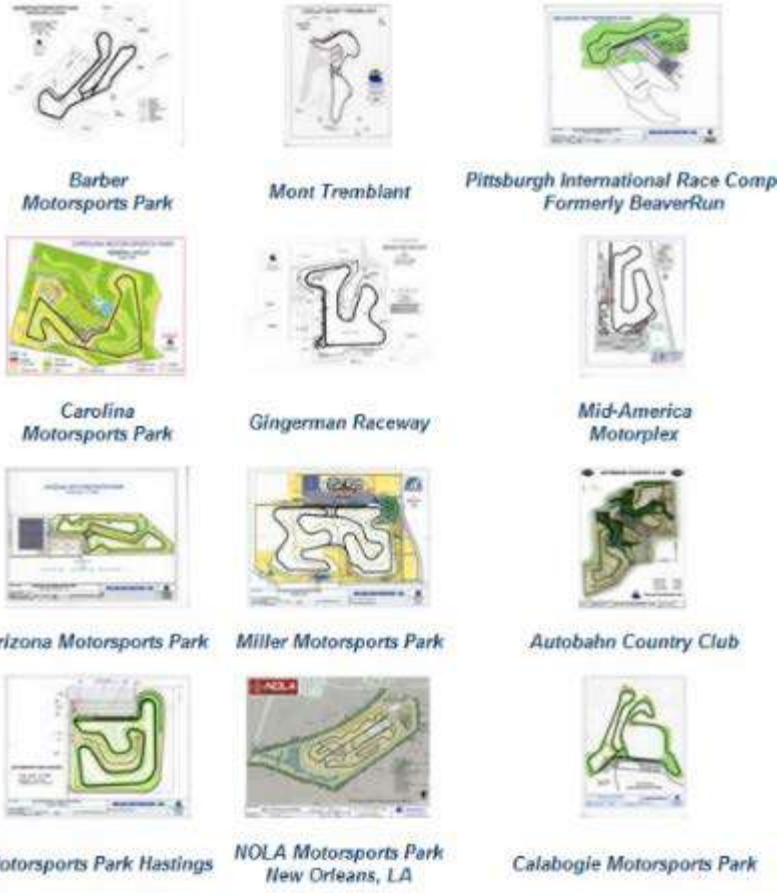
Designer of Barber, Miller, Gingerman & Mont Tremblant, Alan Wilson, speaks candidly about his long career.

World Renowned Race Track Designer Alan Wilson Talks with Auto TrackDay Monthly

By Ziva Allen



What do you get when you combine the skill to be a competitive racecar driver, the good fortune to marry a competitive female racecar driver, the talent to design some of the most well-regarded race tracks in the world, and the sense to do it all with one of the best, if not the best, safety records in existence? Alan Wilson! Here is a man who has done it all. He has raced competitively going back to South Africa in the 60s and 70s. He married a woman who is herself an accomplished racer, being one of only five women in the world to ever compete in the Formula 1 race series and the only woman who won a Formula 1 race, and he has made a successful career out of designing some of the premier race tracks in the world and re-designing some of the toughest. Wilson is well-regarded in the professional racing industry. But more importantly, he is well respected right here in our community of everyday track driving. He has designed and built some of the safest race courses that we have been driving on all along. Following is an interview conducted with Wilson, the man who has created these tracks, wherein he speaks candidly about his long career and what shaped it. Additionally, he has shared with us his expert advice as we move forward in exploring our own fullest potential as track day drivers.

Q. Designing tracks seems to be such an obscure job to me. How did you find yourself transitioning from driving on the track to actually creating them?

A. I raced cars and bikes in South Africa until deciding to support my wife's racing. She won the national Formula Ford Championship in 1976 so we went to Europe for a year in FF2000 in Holland and the UK and then the following year, 1978 we went to race in the UK. I became track manager at Brands Hatch and then quickly became General Manager and Director responsible for the operations at four tracks, Mallory Park, Snetterton, Oulton Park and Brands Hatch. This involved, among other things, updating the safety of the four tracks, so it gave me lots of

experience with detail design and operational requirements. We moved to the USA in 1983 for her to go IndyCar and IMSA GTP racing and I became involved in track design with a projected F1 temporary track in New York, which was stopped by the Sierra Club, and then as designer and CEO for the Columbus 500 street race in Ohio. This led to becoming a consultant designer/operations manager for several other street races (three in Dallas, and in Minneapolis and Grand Rapids and to becoming CEO of the Denver IndyCar street race in 1991. We closed that event when its costs proved too high and then started a company to design other tracks including a project in Denver and the Fontana Speedway before it was taken over by Penske. After that I helped bring Road Atlanta out of bankruptcy and then we lost our bid to buy that, and so went out on my own designing tracks. Wilson Motorsport has designed over 130 tracks (road courses, street tracks, Industry R&D and training courses, Kart tracks, infield oval tracks) and has seen 33 of them built and operated.

Q. How did you become involved in motorsports?

A. I got interested when reading Mike Hawthorn's book, 'Challenge Me the Race' in a hospital bed when I was about 10 and I became a life-long fan. I started rallying an MGA in 1965, then raced and rallied bikes until 1970 while at University, except for a year off as a mechanic in F3 in Europe in 1968. I then raced saloon cars and motorcycles and eventually FF1600 before meeting my wife and stopping in 1975. During those years I was on several car club race committees, devised, started operated and raced in the Production Motorcycle class of racing in South Africa and was a motor sport journalist with a weekly column in two major newspapers and was for a while South African correspondent for Autosport magazine. I was also the motorsports coordinator for Ford Motor Company in 1970.

Q. Do you have any one or two favorite tracks that you have designed and if so, can you tell me what specifically about them make them more special to you?

A. I don't really have a particular favorite because I am proud of all my tracks, but some are obviously more prominent than others. Miller in Utah is the most practical operational facility I have ever seen and has proved very safe. If it was in a major market I think it could be the world's most profitable track facility as it can host so many different activities simultaneously with a minimal management structure. Barber is very challenging and one of the most spectacularly presented facilities anywhere in the world. The track in Hastings in Nebraska cost very little and is extremely profitable; Inje Speedium in Korea is spectacular, very technical with huge grade changes and is a very highly rated FIA2 level international facility that opened last year. NOLA has spectacular buildings, a safe layout and has a very effective master layout that coordinates all its operational facilities very effectively. Mont Tremblant was extremely difficult to bring up to date but is one of the most challenging and beautiful facilities around.

Q. Were there any tracks that you were commissioned to design which were more challenging to design than the others and if so, could you tell me what about them caused them to be more challenging?

A. Mont Tremblant because I had to change everything yet make it look as if

nothing traditional had been altered. Barber because of the elevation changes needed to make the site work and the same with Inje near Seoul where we moved more than 6,500,000 cu meters of earth on a very mountainous site. The new Thermal facility has been a completely different type of challenge, where I have had to make a meaningful Phase One course on a very small piece of property and give it character even though the land is dead flat and desert; NOLA because of extremely difficult soil conditions.

Q. I read on the internet that you had overseen the 2000-2001 redesign of Circuit Mont-Tremblant. Why did it have to be redesigned? Was this basically a “fix” that had to be done? If so, what goes into fixing and changing an already existing track?

A. Tremblant was an old F1 track (St Jovite) that fell out of use in 1962 and was basically abandoned except for small time school use. It was completely out of date with regard to safety, systems, and operational capability. It was purchased as the owner’s private use facility for his Ferrari collection, but he also wanted it to meet all current FIA2 level standards, and be capable of hosting anything from ALMS to IndyCar. He also required that the character, traditions and flow of the old track be retained so that any previous user would think that the old track still existed! Because everything was old and decrepit we had to re-engineer and re-make every single inch of the track, its longitudinal and cross grades, safety areas, safety systems, paddocks, buildings, parking, etc., yet still leave it looking like it did in its prime!

Q. Do you find it more challenging to have to fix a track than to be able to start from scratch? And why?

A. Yes, because you have to work with existing site conditions, track layout, traditions and facilities while a new from scratch venue allows almost complete freedom of design and construction.

Q. Our magazine is running a monthly column called “Keeping It on the Track,” which basically covers the dangers in illegal street racing. So I was intrigued to read on your website about the award you received for safety. What specifically led to that honor?

A. I spent several years leading the SCCA track safety inspection team and was responsible for instituting many upgrades at SCCA licensed tracks around the country. I had also designed several new tracks that had much higher safety standards than most of those already in use.

Q. I’ve read a bit about the controversy of Hermann Tilke sacrificing race excitement for safety and I’ve read that you as well find safety to be an important factor when designing tracks. Is there anything you’d like to say about that controversy?

A. Safety is obviously an essential element of any new race track design and Tilke has done a great job maximizing safety at his new F1 venues. However, the contingencies of F1 have led to his facilities becoming rather bland and characterless because of the very specific needs of F1 cars and the F1 operating

requirements. His designs, of necessity, focus on F1 which limits their appeal to some of the other classes of racing, such as historic, motorcycles, slower production based cars. But safety must be maintained for all of these, so he is a leader in this respect.

Q. I have read that when you design tracks, you take into consideration that the track is not only going to be used for the professional in a race series, but for the average “Joe” with a non-disposable income. How do you balance designing a track for professional race series with the knowledge that most of the time average people will be driving on it?

A. The reality is that professional racing is not available nor profitable for most race track facilities and that the demands for extensive operational, spectator, parking and other services and facilities are inherent costs that do not need to be faced by most race facilities, nor can they be justified by the business levels that track has to live with.

Therefore the true customers for most tracks are the gentleman drivers, everyday car and bike enthusiasts and club and regional level competitors, track day users and their organizing clubs. These users are not pro level drivers and their cars are not the highest technology, so we can expect incidents, off track excursions, accidents and mechanical failures. The track designer needs to recognize this and the fact that accidents will happen. So his responsibility is to minimize the consequences of such situations. (The pro driver simply gets into another car while the amateur has to pack up, go home and find the money to fix his car, and maybe even quit racing altogether, in which case the track loses a customer). My tracks are designed to be safe for cars and bikes and to be able to be used professionally if paddock space and other operational facilities, including spectator parking. Most of all, however, tracks must be designed to meet the business needs of the owner so that they become profitable and sustainable in the long term. Tracks are not short term investments and must be designed to enable operation of a solid business.

Q. The country club track industry is a relatively new exciting thing happening in our hobby of track driving. I see that you have also become involved in that end of the industry. Are there any projects you are currently working on? Any you've completed?

A. I have been at the forefront of this trend, starting with a small initial involvement with Motorsports Ranch in Fort Worth and then with Autobahn where we developed both a practical facility and a dual member/customer business plan that has worked extremely well. I have since helped develop and design the new Thermal club in Palm Springs and am working on a new project called the Badlands Motorsports Club in Alberta, Canada. Behind the scenes I have done a lot of work on trying to build a successful business operating model for this type of facility.

Q. Do you consider different factors when designing a track for a country club than for public use? If so, what are the differences?

A. The main difference is that we need the gentleman driver in a car that is much faster than his driving expertise to have the room in which to have his almost inevitable off-track incident, get his car back under control without damage, return to the pits to go to a clean modern toilet to change his underwear, return to the track and then retire to a clubhouse where he can laugh about his experience with his friends in a great social environment. He must also find the track challenging so that he does not get tired of coming back as a repeat customer.

Q. As a woman (who also drives), I have to admit that I was very intrigued to see that your wife is an accomplished professional driver! I saw that you won an award in 1982 for the best organized Formula One Grand Prix which was at the Brands Hatch Race Circuit. Did your wife also drive in that race? Is that where/when you met or had you already known each other?

A. No, she drove in the 1978, '79 and 1980 British Formula One Championships, in qualifying for the 1980 British Grand Prix and in the 1981 South African Grand Prix. We met in South Africa when she was driving a Formula Vee.

Q. Could you comment about what it has been like to be a man in this industry married to a woman who is a professional racecar driver (good for you!)?

A. It has been a great experience being part of pro-racing around the world with her for so many years but has also been very frustrating watching her struggle to progress without money and in a male dominated sports-world with many other challenges,

including sexism, politics and other challenges not faced by most men. I am very proud of her many successes and the great reputation she earned amongst her peers, right up to the Formula One, Indy Car and World Championship Sports Car worlds. You can read about her in the biography I wrote called *"Desire to Race – The Desire Wilson Story"*, published by Veloce and available from Amazon.

Q. Do you and/or your wife still currently drive on tracks for recreational purposes?

A. Yes, we have a Porsche GT3Cup car which I race in NASA and other races here in Utah. She drives as much as she wants but chooses not to race very much anymore. Instead she coaches three other drivers (and sometimes even me) as part of a large Porsche group here in Salt Lake.

Q. What do you think about the apparent explosion in the popularity of track day driving?

A. This is the fastest growing form of motorsport and is the only economical way for someone with an interest in driving to get into the sport. Cars are so good today that track specific vehicles are no longer required to get into the sport. Track days also allow non-competitive participation that was never available a few years ago when the only way to get track time was to be a competitor in a race.

Q. We often hear tracks described as "technical." How would you define a technical track?

A. Cars today are so good that a simple, flowing track that was typical of earlier facilities no longer represents a real challenge to the driver, and while he (or she) may enjoy driving these tracks thanks to their natural flows, the handling and electronic systems in modern cars tend to allow these to become relatively easy and boring or too fast to be really safe, with the result that accidents tend to be at high speed, with obvious injury and damage consequences. Therefore users tend not to come back once they have learned the course or have scared themselves or damaged their cars. Driving these courses is a bit like skiing the same slopes all day long. So I believe it is necessary to mentally challenge the driver rather than the car. This has to be done with safety in mind, as high speed corners mean that consequences of mistakes can be very serious. So the alternate is to make a track very "technical" with multiple challenges that keep the driver focused, keep him travelling at speeds that give the impression of high speed but are still relatively low and safe. The goal of a technical track is to challenge the driver's skills more than the car's capabilities. So a technical track has complex sequences of turns and turns with multiple challenges in some corners (multiple radii, camber changes, grade changes, etc.). We have to challenge the driver into deciding which of multiple potential lines work to find a true flow through seemingly unconnected sequences of turns and pose challenges that punish even small mistakes with significant lap time penalties. The goal is still to create a track with that "racing flow" that makes driving so much fun, but to make it extremely difficult for the driver to find and eventually get to that flow, and then to tempt him into making minor mistakes that disrupts the flow and makes him want to come back to the track again and again to try to get it right.

Q. What advice do you have for our audience- the track day driver – with respect to how they should tackle a new track they've never driven on before?

Study a map of the track before arriving.

Walk the track before driving if possible. If this is not possible, stand at several corners and watch more experienced drivers find their way around the course.

Use the first few laps to get familiar without trying to go fast (but be safe for other cars on-track).

Do five lap segments, and stop to think about the track and your driving between segments. Just going around and around simply means that

you make the same mistakes over and over again.

Look around the track for safe areas to go off the track and pay special attention to any sequence which seems challenging or scary to you.

Look at the spin marks on the track and take these areas with extra care until you are comfortable.

Talk about the track and your lines with someone more expert who knows the track well.

Do NOT push your limits until you are confident of your lines, braking points and flows.

NEVER get emotional and drive over your head.

Go slow before you go fast!

Enjoy yourself.

Q. You and your wife both have been involved in motorsports. My husband and I seem to have followed the same path, although we don't participate in competitive racing. Any comments you have about couples who participate in this sport together?

A. We are lucky in that we have supported each other in our own different interests in racing through the past forty years together, all of which have been in the motorsport world. The main thing has been to respect each other's goals, provide support during tough times and disappointments (many) and enjoy each other's successes.

You can find more info on Des, myself and our company on *www.wilsonmotorsport.com*