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NEWS

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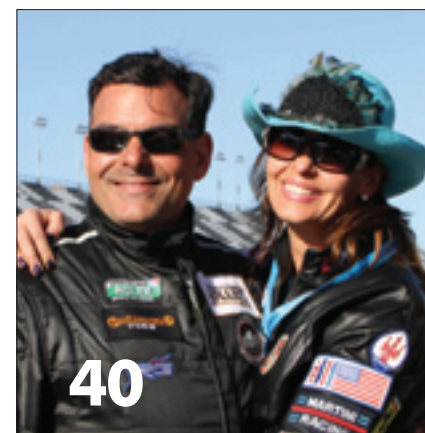
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BUILDING AND RACING THE SPEC CAYMAN: PART 1

STORY BY KEITH FRITZE, PHOTOS BY KEITH TREDER & MIKE KLASKIN

Introduction

In this article I will provide an overview of spec racing and the role of the new Spec Cayman (SPC) as spec classes evolve within PCA. I will compare a number of important issues for selecting the SPC over other popular racing classes. I will provide a cost comparison with one of the most popular spec classes, the Spec Boxster (SPB).

Popularity of Spec Racing

Spec racing within PCA has enjoyed tremendous growth and popularity in recent years. Current classes, such as the 944 SP1 and SP3, and especially the Spec Boxster SPB class, are among the fastest growing classes in PCA. Racing at a number of tracks often exceeds 30 entries

just in SPB, with increased numbers in all of them. Regions recognize and welcome these classes, often with individual run groups created for the SPB class in particular.

Goals & Benefits of Spec Racing

Some of the specific goals of spec racing are:

- To race a platform within a particular class that is built to a standard (spec) build list.
- To contain costs, both fixed (car) and recurring (consumables such as tires, fuel and brakes).
- Allow a limited number of parameters, such as suspension alignment settings and tire pressures, to be determined and selected by the racer.
- To focus on the driver's racing

abilities rather than expensive customization of power train and suspension systems; again emphasizing cost containment for the class.

The ultimate benefit is ability to attract more competitors to the class through racing platform cost containment, platform standardization, and lowered consumables costs.

Another benefit for racers is that these classes use very capable baseline consumer platforms. The SPB's Boxster chassis is one example. On technical road courses the SPB will often compete (in terms of performance) with some of the more traditional legacy 911 and 944 platforms. And all of this can be accomplished using standard



premium pump fuel and spec Toyo race tires! No wonder these classes are achieving such popularity!

The Spec Cayman

The Spec Cayman class, SPC, is the newest addition to PCA spec racing. The specification for this class was completed in the Fall of 2015. Early adopters into this class have started racing this year.

The handling and performance benefits of the Cayman as a racing platform cannot be denied. Its mid-engine platform provides cornering stability and 3.4 liter engine adequate power for the race car. The SPC uses the first generation 987.1 platform with a second generation liquid cooled engine and transmission that can handle the power and

the more stringent demands required in a racing environment.

In the remainder of Part One (the article printed here) I discuss the economics of racing this platform (with comparisons), the reliability of the power train, and features built into the spec to ensure higher reliability. Finally, I provide testimonials of some of the original entrants into this class and those that have driven the Spec Cayman.

Economics of Racing the SPC Acquiring a Donor

The SPC class uses the first generation 3.4L Cayman S (987.1, 2006-2008) chassis as its base platform. For a prepared race car, the Cayman is among the best of Porsche's platforms. It is well

balanced, predictable and easy to drive. The engine provides adequate and smooth power delivery. Modifications to this platform for the SPC are straightforward and relatively easy for a DIYer that chooses to build a car. Additionally, many shops around the U.S. now have extensive experience with the Cayman for those that want to have a car built for them.

A donor car can be found from dealerships, private parties and dismantlers. Prices vary, but can be found from \$10K to \$30K, with many in the mid-teens. I personally found a donor car for \$15K, and was informed of a car with a *rough* interior selling for \$10K. There are also many *base S* models (such as mine with no options) that make the build process easier. Since the interior and much of the suspension will be removed, concentration on a donor with a solid power train and straight chassis are two of the important selection criteria. Donor car prices within this range provide good value, considering the performance level of the end product.

Ease of Building the Car

The specification for the SPC was written to make the build process easy. This allows for the class to grow and for racers to benefit from racing such a great platform.

Each component was scrutinized for cost/benefit to control build cost. Because the SPC platform is higher performance than the SPB platform, build cost is higher, but not significantly. This will be demonstrated in this article.

All of the major components can be purchased from race car component vendors with familiar names to many people within the racing community. Vendors such as Tarett Engineering provide complete SPC suspension kits and many of the other parts directly from their online catalogs.

Also, the overall weight of the car was selected so that builders could meet minimum weight without having to scrutinize every nut, bolt and body panel. The majority of the wiring harnesses can be left *as is*.

A Build Cost Comparison – The SPB and the SPC

There are a number of similarities in terms of components between the SPB and SPC. Both are mid-engine platforms with similar suspensions and power trains. Build costs between the two platforms are also similar. The SPC, however, is a newer platform with more power, performance, and a more modern rigid chassis. The results are significant considering the marginal differences in cost and the superior handling characteristics of the SPC.

Costs

Many of the costs associated with building any race car are similar. They all require a roll cage, safety harnesses, racing seat and fire system. Windshields are of light-weight lexan. They will have race steering wheels with fast removal systems, window safety nets, etc. The build cost of any race car in any class will include these costs.

SPC Component	SPB Component	Qty	Differential Cost-Total	Comment
996 GT3 front sway bar	996 GT3 front sway bar	1	\$0	
Tarett rear sway bar	Tarett rear sway bar	1	\$0	
996 GT3 control arm-outer	996 GT3 control arm-outer		\$0	
996 GT3 control arm-inner & TAB adaptor, litronic brkt	996 GT3 control arm-inner	4	\$335	SPC is solid monoball
Rear thrust bushing	Rear thrust bushing	2	\$200	SPC is solid aluminum
JRZ R5One Kit. Includes shocks, springs and solid topmounts	PSS9 coilovers-set	1	\$1,695	SPB Coilover kit does not include solid topmounts
	Retrofit 450/500 lb-in springs	1	(\$400)	SPB uses retrofit springs
Adjustable toe links w/bump	Adjustable toe links no bump	2	\$50 to \$350	
Total Suspension Differential Cost			\$1,645	

Additionally, the reliability features between the SPB and SPC are very similar. Most SPBs use third radiators, Accusumps and transmission coolers to protect the power train. To create a comparison, the suspension system and donor costs can be used as examples.

Donor Costs

The donor cost is currently the major differentiator in cost between the two platforms. Donors for an SPB can be found for as little as \$5-6K, the average being a little higher. The SPC cost is in the high teens or more, but with careful shopping can be found in the low to mid-teens. These numbers for an SPC donor are similar to those of the Spec Boxster in its earlier adoption phase (circa 2008-2010) upon which many SPB race cars were built.

The other cost differential areas are the suspension system and addition of an LSD. These costs are related to the increase in the car's performance, the increased refinement of the SPC as a race car, and a desire to build safety into the platform.

Suspension Costs

The suspension systems of the SPB and SPC are very similar. As mentioned previously, the SPC is a higher performance racing platform. Suspension components were selected with this difference in mind. Table 1 summarizes costs and component differences between the two suspensions:

As one can see, the differential is not great, especially considering performance and drivability. The JRZ R5One kit uses 700/800 lb-in springs and is a tuned-ready to race package for the SPC.

In addition, the SPC class allows the use of a limited slip differential. The

minimum additional cost for this component is \$1850 (OS Giken). The choice of any mechanical LSD is allowed however, which may further affect costs but is also at the discretion of the race car owner.

An Operating Cost Comparison – The SPC to the SPB

The operating costs of the SPC are higher, but not significantly considering the increased levels of performance. Both cars use spec tires and standard premium pump fuel. Both have stock rotors and calipers, and use racing pads developed for these stock components.

Table 2 demonstrates the differences between the two platforms.

The goal for the SPC spec tire is to have a tire that is durable enough for two race weekends. The Toyo tires in both classes can withstand 30+ heat cycles and can last 6 or more track days depending upon the track and the track conditions. Driving style and how hard they are driven will also affect tire life. Both the Toyo RR and the Toyo RS1 slick use the same rubber compound. The Toyo RS1 racing slick, however, provides more grip than the RR.

The SPC has a 3.4L engine, which provides significantly more power. The car with Toyo RS1 slicks and a better suspension system can generate higher lateral G forces, and has significantly more torque output from the larger displacement engine. Tire life can also be affected by this performance difference.

When drivability and performance are taken into consideration for the SPC, the small cost differential can be easily justified.

SPC Reliability

When developing the specification for the Spec Cayman, significant attention was paid to the reliability of the power train. Heat, in particular, is one of the greatest contribu-

Consumable	SPC	SPB	Differential	Comment
Standard Premium Pump Fuel	Same	Same	SPC-7 to 8MPG, SPB-10MPG	The SPC will consume 20-30% more fuel
Tires	Toyo RS1 Slick F:245/640R18 R:285/650R18	Toyo RR F:255/40R17 R:255/40R17	\$300/set SPC-\$1200, SPB-\$900	Both tires use the same rubber compound
Brake Pads	Different pad sizes front/rear	Same pad size front/rear (initial thickness different)	\$15/set SPC-\$433, SPB-\$418 Type: Hawk SPB-DTC-60 F,DTC-70 R SPC-DTC-70 F, DTC-60 R	SPC and SPB use similar compounds but different pad sizes

tors to power train failures. Lubrication and the oiling system is also extremely important.

The M97 engine is very similar to the M96 used in the SPB. The SPB engine has proven to be reliable with the addition of specific reliability components. The SPC specification allows for incorporation of the same components. The specification also allows front and rear bumper covers to be modified for increased air flow and cooling.

The transmission, when compared to the SPB, is much more raceworthy. Under the severe operating conditions when racing, transmission oil temperatures can approach, and even exceed, 300°F. An external oil cooler is allowed for the SPC to alleviate this condition.

An in-depth discussion of specific components that may be added is discussed in Part Two, offered online at the end of this article.

Driving the Spec Cayman

The SPC class is new for 2016. The SPC (from my perspective) is an awesome platform to drive. It provides the drivability and cornering performance levels approaching those of cars in higher end spec classes at values more similar to lower cost spec car classes. The car is smooth and easy to drive, with adequate power for both technical and longer road courses.

Driving comments from SPC racers and owners:

Luke Oxner, a top racer in the SPB class, recently drove a *still in develop-*

ment SPC at Motorsports Park Hastings. "The Spec Cayman was an absolute blast to drive. The car offers an exhilarating combination of mid-engine cornering agility with loads of usable power and torque throughout the entire RPM range. I got into the car basically expecting a bigger and better Spec Boxster, but in many ways the car provides a driving experience more reminiscent of a GT3 Cup."

Matt Distefano, SPC owner who moved from the GTB class, has this to say: "The LSD, solid thrust arm bushings, and rear bump adjustment really help to improve confidence in the rear end. The SPC is positioned between the SPB and 996-Cup (GTC3) and dynamically performs close to a GTB Cayman with lower running costs. I think it's the best current value proposition in PCA racing".

Steve Anderson, also an SPC driver and one of the first to race a car in this class says: "I have owned and competitively raced a Cayman GTB-1, GTC-4 cup car, a 1987 E class 911, and am now racing an SPC. What is great about the SPC is the ability to race the car at the drop


of the green flag. The spec Toyo tire is so compliant. With proper ducting and cooling, the brakes have been consistent during an entire Enduro, even at VIR this year. Run costs for the SPC are a fraction of what they are for the GTC-4 and GTB-1, which has allowed me to participate in eight club races this year. This is going to be an exciting class to be involved with, and watch grow over the next few years."

Part Two: Build Process Details

Because of the large amount of information in Part Two, we decided that it was too much to try to include in this issue of Club Racing News, so we have made it available to download for any of you who would like to see specifics about the build process.

Please go to <http://tiny.cc/SpecCaymanPart2> to download Part Two.

I explain with detail the actual process of building a Spec Cayman. The explanation demonstrates the process with pictures and additional details about how to build a car. I also provide additional explanations about reliability and why some of the components were selected for the car.

Thanks to everyone who has helped get this Spec class up and running. Let's go have some fun with it! 





WATKINS GLEN ENDURO THRILLING LAST LAP PASS

RENE ROBICHAUD PASSES DAVID BAUM ON THRILLING LAST LAP TO WIN ENDURO

STORY COURTESY OF E-BREAK NEWS, PHOTOS BY BOB MAGEE

WATKINS GLEN, N.Y. (June 5, 2016) — Rene Robichaud used a last-lap pass to win the PCA Club Racing Porsche Cayman GT4 Clubsport Trophy East series endurance race Sunday afternoon at Watkins Glen.

Robichaud, representing the Ohio Valley PCA Region in the No. 89 Kelly-Moss Road and Race Cayman GT4 Clubsport, passed David Baum with three turns to go to earn his first victory. Baum, representing the Western Michigan Region, finished second in the No. 24

Autometrics Motorsports entry.

“David was driving a great race for the last 10 laps, and it took me until the last lap of the race to find a little opening where I could go door-to-door with him,” Robichaud said. “I managed to hang on for a very small lead. It’s the first time I’ve had first place, so I’m delighted by that.”

Russell Walker, representing the Maverick PCA Region, rounded out the podium finishers by placing third in the Number. 28 TOPP Racing entry.

The 80-minute race took place in clearing conditions in the Finger Lakes region of upstate New York after drivers faced torrential rain during the morning warmup. The varying levels of dampness caused by the early rains created an interesting mix of strategic decisions from teams and drivers.

Walker was one of only three drivers to start the race on rain tires. He switched to slick tires during his mandatory pit stop, which aided his charge from 11th starting spot to the final podium position.

“We took a different strategy starting on the rains and made it to fourth after starting 11th, and that was a big track position maneuver,” Walker said. “It was a solid race.”

Polesitter Keith Jensen, representing the Maverick PCA Region, led the first half of the race in the No. 51 NOLAsport Porsche Cayman GT4 Clubsport until he went off track in Turn 8 and hit a tire barrier on Lap 17. He then brought his No. 51 NOLAsport Porsche to pit but was forced to retire from the race.

In the Masters Class, which is designated for drivers ages 57 and older, Robichaud swept the class this weekend after winning both sprint races and the endurance race.

Ed Lane, representing the Florida Crown PCA Region in the No. 66 Autometrics Motorsports Porsche, came in second place, his second podium finish of the weekend.

Rounding out the Masters Class podium in third was Roger Halvorsen in his No. 23 Mustante Motorsports entry, representing the Connecticut Valley Region PCA Region. Halvorsen, who also placed third in Saturday’s Sprint 2 race, was one of the three drivers who started today’s endurance race on rain tires. He switched to slicks at his mandatory stop, like Walker.

The next event for the Cayman GT4 Clubsport Trophy East series is a trip to VIRginia International Raceway in Danville, Virginia on June 24-26. The last two series races will be at Road America on September 3-5 and Daytona October 21-23. The series awards banquet will be held at the Daytona event.

Due to the success of the series, a limited number of Cayman GT4 Clubsport cars have become available for immediate purchase. Interested parties should contact

Allen Shirley, GT4 Clubsport Trophy East series coordinator and PCA national steward, at 904-338-2324 for more information.

Enduro Post-Race Quotes:

RENE ROBICHAUD (No. 89 Kelly-Moss Road and Race, winner, first Masters): “It’s the first time I’ve gotten first place, so I’m delighted by that. David (Baum) was driving a great race for the last 10 laps, and it took me until the last lap of the race to find a little opening where I could go door-to-door with him. Finally I got a little run on him. In that last lap, we got traffic, but I still managed to hang on for a very small lead, and I think that’s all that matters, crossing in first.

I want to thank so many people - the Kelly-Moss team did great, my daughter Nicole came in sixth. For us, top 10 was all we wanted, but she’s knocking on the door of top five. I couldn’t be happier.”

DAVID BAUM (No. 24 Autometrics Motorsports, second): “What a great weekend here at historic Watkins Glen. Great race, me and Rene (Robichaud) battling the whole race. We raced each other clean and then three turns to go, he got me and put me in position two. But hey, it was still a great weekend. I loved it, and I can’t wait for VIR.”

RUSSELL WALKER (No. 28 TOPP Racing, third): “That was a fun one. I did not expect to make it that far up. We took a different strategy starting on the rains and made it to fourth after starting 11th, and that was a big track position maneuver. It was pretty sketchy on the new tires. I think I lost a lot of time, but I gained it back up. It was a solid race.”

ED LANE (No. 66 Autometrics Motorsports, second Masters): “The race was particularly exciting



Enduro podium Russell Walker, Rene Robichaud and David Baum



Masters podium Ed Lane, Rene Robichaud and Roger Halvorsen

because it was in that inbetween state of being dry or wet. Our team went out on slick tires, so at the very beginning it was extremely slippery. But as the race went on, the tires got better and better, so I think we made the right choice.

I had a wonderful drive the second half of the race. The first half was a little unnerving.”

ROGER HALVORSEN (No. 23 Musante Motorsports, third Masters): “We took a gamble and went out on rains (tires), and it gave me an advantage for only about four or five laps. We realized it was a little bit of error in judgment, mostly mine. So I took the earliest pit stop I could possibly get in this race to change tires and then we had to really watch the fuel. We thought I might run out so I had to take it easy the rest of the race, but I got it over the line and we got another podium and I am happy as can be. I want to thank the Musante crew for the whole weekend. Two podiums, so I am pretty happy!”



From the Chair

VICKI EARNSHAW • PCA CLUB RACING CHAIR

ROCKY MOUNTAIN & POTOMAC REGIONS FIRST PCA CLUB RACES. WHY THE CLUBSPORT SERIES HAS THEIR OWN RUN GROUP.

We will be celebrating a couple of 25th year anniversary events this September: the Rocky Mountain Region's first ever PCA Club Race at High Plains and the Potomac region's First Founder Race at Summit. The first PCA Club Racing Vintage group will be included in the Summit celebration. The Intermountain region will run their 25th PCA Club Race at Utah Motorsports Complex (former Miller) race track.

You have now received the third issue of the new design of Club Racing News. We thank Skip Carter as our editor and welcoming this format change. The Panorama Creative Director, Richard Baron, has given Skip guidance with this new concept. We are also thankful to have Ilko Nechev as our marketing manager. Club Racing News is our Porsche Club racing magazine and your contributions of articles or ideas are welcome.

The Clubsport Racing Series has completed four of the six races for 2016 season. We became aware at Virginia International Raceway of a misunderstanding of why this series has their own run group. The question we get is "why is my

run group heavily subscribed and Clubsport may have less than 20 cars." Racers of the larger groups are frustrated when they see fewer cars in the Clubsport group and I want to share the reason that we need to run this format.

The agreement between Porsche Club of America and Porsche Motorsports North America was to organize and deliver this series for two years in this particular format. A stand alone race group was an agreed concept. As the rules were established the contact rules are also slightly different than the other PCA Club Racing groups, which created a need for a separate run group. The rules need to be consistent in the same run group. The expenses to manage this series comes from the Clubsport registration and the Clubsport sponsorship.

In previous articles we explained the reasoning in accepting the Clubsport series. This series has given us an opportunity to learn how we can improve the Club Racing program. We recommend that you utilize the knowledge of David Murry and Joe Hullett at the Clubsport races. David has offered to review your videos when he is not working with the

Clubsport group and Joe is available to help you with Motec and data acquisition questions.

This week we have expanded the LST marketing program to include the Club Racing groups at Road America and Daytona. This will include interviewing of drivers and compose content for press releases and Facebook. Also we will incorporate the Clubsport photographer for pictures for social sites and the Club racing website that is being developed. Our intentions are to include the marketing in at least ten races for the 2017 racing season.

We are now in the process of evaluating rules for 2017. This is a three step process. Starting June 1 racers submitted rule proposals for the rules committee to consider. The rules committee, with Walt Fricke as the lead, reviewed these submissions. If the committee agrees there is validity to the proposal it is presented to the racers for comment, which is the second step.

Just because a proposal reaches this step does not mean that the rules committee agrees. In some cases, we want to hear from the competitors in that class. With

that feedback we have your observations to consider to adopt, negate or table a rule proposal.

In the rules process we will seek advice from the class advocates. We set up the advocate program so that racers have a source of communication in their class. The national team does reach out to these advocates for advice. We thank the advocate committee for their contribution to PCA Club Racing. They have been an avenue for us for feedback, issues and technical information. The third step is that we publish the changes recommended by the Rules Committee and open those for to for final comment.

One of the founding principles of Club Racing is to provide consistent race management and race

format so that every racer knows exactly what to expect at any Club Race. I just returned from the Laguna Seca race. We only had one race group at this SCCA event. Our run group had a wide range of race classes. The request from one class was for a split start. They felt if they had a split start it would give them an opportunity to race within their class the first few laps to sort out the race field. We started split starts when the 944 Cup series was brought into the program. It was agreed a split start would occur if a field of 15 or more cars raced at an event.

The question I have is *where does it stop?* What happens when we have the same request from other classes? A consideration could be if a class registers a certain number of cars (to be determined) the class

may have a split start for the sprint races. Potentially it could stimulate racers to have more cars from that class to attend an event. The stewards will be discussing this possibility. But through this process we should remember that PCA Club racing is a multi-class program and that we want to have consistent management.

Your participation does make a difference to PCA Club Racing. It could be contributing to Club Racing News, submitting proposal and comments to the rules committee, racing at events, volunteering on the national team or bringing your suggestions forward to us — this is your club and we are listening!

Enjoy the 25th Race Year. ❏

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View From the Tower

BRYAN HENDERSEN • CHIEF STEWARD

WHAT EXACTLY ARE THE STAFF RESPONSIBILITIES?

I have heard lots of folks recently saying that they did not truly understand how our operating staff is organized at a race, or what the different responsibilities are for each personnel group. I will discuss our Stewards and Scrutineers in the issue of Club Racing News, and go into our Time Techs (who are also operational) along with the non-operational staff next time.

Our program has ten stewards. Stewards function as the chief operating officer at races. They are responsible for all racing activities from the time the Event Application is received, reviewed and approved by the assigned steward until well after the event is over when the steward reports are filed and any 13 decisions are appealed.

The general requirements to become a Steward are that you need to have been the local Chair of at least one club racing event. You need to have raced a ton, preferably also with other sanctioning bodies. You need to be *with the program* in terms of attitude and loyalty to the basis behind the program, have the correct demeanor and ability to interact with racers, staff, volunteers, etc. and, perhaps most importantly have *that certain something*. The stewards interact with Susan Shire, the event chair, the event registrar, the corner

workers, race control, the EV dispatcher and crew, racers, crew, spectators, sponsors, etc. The *stuff* flows uphill and ends up in the steward's lap. The steward is ultimately responsible for everything that happens at a race, good and bad. Included in the responsibilities is making sure that cars are compliant for their class and interpreting the rules.

We have almost 30 Scrutineers. They are selected for their experience and knowledge and, like the Stewards, their ability to be *with the program* in terms of attitude and loyalty to the basis behind the program. They must have the correct demeanor and ability to interact with racers, staff, volunteers, etc.

Scruts have a physically taxing job being on their feet all the time and crawling under cars while dealing with happy and unhappy drivers, crew, etc. They function as the eyes and ears for the Steward. They are the program's *boots on the ground*. They also function as the Steward's wing man, protecting them even in some circumstances from drivers who are angry, or calming down drivers who are upset. They look out for the Steward and give him/her information that they may or may not be aware of. They carry messages from the Steward to

individual drivers and often times have to deliver difficult messages such as when a driver is DQ'd or sent back to the paddock. They also are responsible for inspecting cars relative to compliance with PCA CR's safety and general compliance rules and reporting any variance to the Steward. They interview the drivers involved in incidents immediately as they come off the track. They perform investigations of incidents post-race and give their factual findings to the Steward. Frankly, the Scruts have a very difficult and demanding job. However, they do not make all decisions. The ultimate decision for essentially everything that happens at a race is the assigned Steward's.

The physical job of the Steward is actually pretty easy. They get to sit in nice air conditioned rooms and get coffee and food often delivered to them. They aren't out in the sun, rain and wind. However, the mental aspect of the job can be difficult. Their role when the track is hot has been likened to being like an air traffic control supervisor, letting the various radio and other reports flow over them with their duty to be picking out what is truly important and acting on it. In essence, they need to be paying attention at all times as to what is going on and anticipating what is going to happen while taking into account

their experience and training. Incidents are often times self-cleaning. Some corner workers get excited about a car dropping a wheel off, some workers could stay calm with an atomic bomb being dropped. The Steward needs to figure out which are which in the first run session.

Scrutineers deal with the drivers mostly in *one on one* situations. They get to listen to crew chiefs explain why their car being out of compliance with the class rules is in the interest of safety (although it makes the car faster). They get to hear that everyone does it, or that we have done this for many races and no one has complained.

The Scruit does not have to respond with a decision (and they should not). They have the responsibility to give the team's information and other facts from their investigation to the Steward, who makes a decision. The Steward's job is to enforce the rules. The rule book is very clear — cars cannot race in a class while in a non compliant condition for that class.

Together the Stewards and Scrutineers make a strong team. Most of the decisions are the Stewards since it is much easier to keep ten people on the same page than 40 or 60. This helps PCA Club Racing to put on consistently managed races with consistent decisions concerning on-track procedures, incidents and class compliance.

Much of the information above has been plagiarized from Bruce Boeder's writing.

We have had a couple of incidents on straights in the last few months. Passing rules on the straight are mostly common sense with the added rule of no blocking and leaving racing room providing order. *"The car making the pass must make a safe pass"* rule is in



The physical job of the Steward is actually pretty easy. They get to sit in nice air conditioned rooms and get coffee and food

play, but there are other responsibilities for the cars being passed. For the purpose of this discussion we will include those slight bends in the track where cars are at full throttle with no braking after the previous corner and where cars can easily go through side by side at full speed as straights. Basically, on the tracks where we race, a car will take up much less than 1/3 of the track width available. Therefore, we could

easily travel through this area three wide if it became necessary.

On a straight, if a car moves in front of another car who is going to pass him simply to keep that car from passing, it is blocking. In our world, blocking is when you move off of your line or change lines in reaction to a car behind you who is trying to pass. If a car is attempting to block another car and there is



A Scruit at Road America watching for fuel spills during an Enduro Pit Stop

contact, the car doing the blocking is most likely at fault.

On a straight, what about when a driver makes that move but was unaware of the car attempting to pass? Being unaware of traffic is not a defense that holds up. As a racer, you are required to be aware of traffic around you at all times (situational awareness) especially if you move into a space that is (or very soon will be) occupied by an overtaking car. This comes under the headings of being predictable and leaving racing room.

What about when three cars are moving down the straight and the second car in line is passing the first car while the third car is passing both of them. The lead car in this scenario is on the left side of the track, the second car is in the middle and the third car, who is passing both of the other cars, is on the right. As long as everyone stays in their lane, this should be just fine. The second car (in the middle) must be aware of both cars and hold his course in the center of the track. Both the car on the right and the car on the left must stay on their respective sides of the track.

If any of the three cars move out of their lane before these respective passes are completed and there is contact, that car is likely at fault. If the outside car moves toward the center and there is contact involving him, or even just the other two cars as a result of that movement, he is likely at fault. This comes under the headings of common sense, being predictable and leaving racing room. On wider tracks we could expand this to four or, in some cases, five cars. I have seen that work at The Glen.

We have had a recurring unsafe situation at a few tracks like Watkins Glen over the last several years that surprises some people. We can't pass the pace car while the pace car

is still on the racing surface. The driver and communicator in that car are not wearing any safety gear and the car is a street car with no cage, harness or fire system. The starter should not display the green flag until the pace car is out of harm's way. In the situations I am discussing here, he did not.

The Steward controls the pace car from the tower via radio. Normally the pace car will go out slowly to allow everyone to get off of the grid, then accelerate to a quick but safe speed for the pace car to allow cars to get some heat in their brakes, etc., before slowing again to gather the field. The pace car will establish the pace speed and hold that for a bit before picking up speed to pull away from the field so that the pace car has plenty of room to be clear of the track before the field passes.

The problem is that the pole setter, who is supposed to maintain pace speed until the green flag is displayed, will sometimes speed up with the pace car or worse, he may decide he has the right to start racing whenever he wants, which he doesn't.

The idea is for all to have a fair start. The pole setter should hold the pace speed without slowing except to negotiate a turn or accelerating until the green flag is displayed from the starter.

At tracks like The Glen, where the pit lane lines on the track begin before the last turn and the pit entry is actually quite a bit past the last turn, a car that starts accelerating before the last turn or even just past it will have a very good chance of passing the pace car prior to its entry into the hot pit, which begins at the pit wall.

If a car passes the pace car without being signaled to do so, it will be brought in to the Scrutineers at the Black Flag station for a discussion.

If you are on the pole, please act like you have been there before.

We have had a few drivers who forgot to report to Black Flag immediately after the race when they chose to finish the race after being involved in an incident on track. They were disqualified from that session. It would be sad to be DQ'd for not reporting and then be found not at fault in the incident since the reason for the rule change was to not harm the driver not at fault any more than necessary.

Having the Clubsport series has helped in a few more ways. Recently we were able to use the Clubsport tech equipment to scrutineer the Spec Boxsters at VIR. The wheel-base was the same and the equipment was set up for ride height checks. The SPB Spec has a minimum ride height. Cars really can't run below that ride height since the shocks will bottom out. However, I have seen pictures of an SPB shock that had been modified with a shorter shaft to allow a lowered ride height. At VIR, all were legal.

In addition, Joe Hullett, our series MOTEC expert, is available for Motec software and device help for all of our racers in any class at races where Clubsport is run. Likewise, David Murry, who most of you are familiar with, and who is our official PCA Driving Coach and who is our Pro advisor at Clubsport events, is available to other drivers. This includes coaching at test and tune days when he is not working with Clubsport.

At VIR, with Clubsport, we had heard a rumor that some of our cars may not have been using the specified shock valving. We set up a shock dyno and tested five cars. I am pretty sure that is something no one thought we could/would do. Don't be surprised down the road. We are working hard to make the playing field level for everyone. ❏

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DATES	EVENT	REGION	REGION CONTACT	PHONE	E-MAIL
Oct 1 - 2	Hallett Motor Racing Circuit	Cimarron	Jon Jones	918.740.7951	jonesjon843@gmail.com
Oct 21 - 23	Daytona International Speedway*	Zone 12	Steve Williamson	407.435.0344	steve@stevewilliamson.com
Nov 12 - 13	Buttonwillow*	San Diego	Greg Phillips	619.395.7506	phigreg@gmail.com
Nov 12-13	Motorsports Ranch*	Maverick	Pat Heptig	214.649.7909	pheptig@heptiglaw.com

* Indicates an Enduro

2017 CLUB RACING SCHEDULE TENTATIVE

Feb 3-5	Sebring International Raceway	Suncoast Florida/ Gold Coast	Dan Smithyman	954.224.4717	dansmithyman@bellsouth.net
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The event includes a Fun Race, Sprints, and a 60-minute Enduro. The Drivers' Education is for solo drivers only. Saturday night we'll have a Texas-style dinner for everyone.

For more information, contact our Co-Chairs at cr@mavpca.org or visit <http://mav.pca.org> for all the details.

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SKIP CARTER • CLUB RACING NEWS EDITOR

IF YOU EVER NEED A SHOP IN DENVER...

In early September, Suesan and I left for a two week road trip from San Diego to High Plains Raceway to Utah Motorsports Campus and back. We are pulling the Spec 944 on an open trailer with our Cayenne diesel (love that Cayenne).

This was my first trip to High Plains. I've been hearing what a great job the Rocky Mountain Region does at this track and I was really looking forward to it. I was to say that all of my expectations were met or exceeded... EXCEPT for a few problems which had nothing to do with the event.

The 2500 mile route took us through some really beautiful country, including the Virgin River Gorge, Glenwood Springs and much more. We found some great places to eat along the way, like the West Winds restaurant in Green River, Colorado. It's a funky old diner, but they've got a chili to be proud of. The area is known for the quality of the melons they grow, and the samples we tasted at lunch confirmed the quality... The sweetest cantalope and watermelon I've tasted in a long time.

This was my first pull through Utah and Colorado. I had not realized that there were no trailer restrictions in those states. 80 mph speed limit in Utah and 75 in Colorado. Now

that's how to pull a trailer. The Cayenne averaged just under 20mpg at 80-85 mph climbing into Denver.

High Plains is about 50 miles east of Denver and built in a place that I don't expect will ever bother anyone. There is a lot of elevation change on this 2.55 mile track. It was very fun and more technical than I expected. Unfortunately I had a series of mechanical problems, including a pin hole on the inside of a wheel.

Unfortunately, stupidity on my part forced me out of the club race for the weekend. Dropping into DE, I still got to drive and enjoy learning that rack... Up until the last session on Sunday when there was an oil explosion from under the hood as I approached Turn 6. I coasted to the next corner worker station to await the tow truck. By the time I got back it was 5 o'clock and there probably weren't thirty people left. Tim Meyer, SP1 driver from Las Vegas, had been very helpful all weekend with my mechanical issues. He saw what was going on and before I could starting thinking about my options he walked up and pointed to Dave Banacek across the pits saying that Dave owned a shop in Denver and to go talk with him.

Tim helped pull the 944 onto the trailer using his Touareg and my tie down straps (some people just know

how to operate in a crisis). We followed Dave to his shop, Dart Auto. Once the car was pushed into his shop (nice looking shop, by the way) it took a bout five minutes for Dave to find a blown out oil filter gasket. Whew!

Dave found a new other problems related to my earlier issues, so we left the car and trailer there for two days, checked into a hotel and just relaxed. It was not hard to find good food and fun things to do there.

When we picked up the car, Dave had cleaned up the and fixed the problems. When I went to pay the bill I was surprised at how reasonable it was. When I tried to get the office manager to add a hundred onto it as a thank you, she replied that Dave would not be very happy if she let me do that. She said that he liked helping people.

So I've got to tell you, just when I start thinking "It's not just the cars, it's the people" might be getting old, here is another example of why it is the foundation of this club.

We left Denver for UMC, enjoying the scenery and weather (great heavy rain). The trip was fun. I'm sure this is not the last time I drive either of these tracks.



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MAKING SENSE OF SQUIGGLY LINES

6.2 G FORCE LONGITUDINAL — BRAKING

FROM THE BOOK "MAKING SENSE OF SQUIGGLY LINES"

BY CHRIS BROWN (REPRINTED WITH PERMISSION)
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When a driver is braking the G Force Long channel, acceleration in the direction of the vehicle, moves into the negative values. The quicker the vehicle slows down, the more negative G Force Long becomes. Therefore G Force Long is great at determining the forces of braking. While Brake Pressure traces are preferred for driver analysis, the G Force Long channel can still provide lots of information about the car's ability or the driver's ability to use it. Note there is a direct relationship between the decrease in speed and the G Force Long channel. Either of these channels can be used to verify the other's validity. Therefore it helps to graph both on the same screen.

Low Downforce Braking

Once weight transfer has occurred in the transition to straight line braking, a relatively flat plateau of G Force Long should appear depending on the length of the brake zone. Hopefully at the vehicle's maximum rather than the driver's maximum! See #3 in Figure 6.11 below. Then at the turn in point, steering angle is added as the driver starts to trail brake. Because the front tires will be forced to give up some braking grip to steer the car, the negative value of G Force Long should rise back up.

Warning: The maximum amount of G Force from one corner to another will not always be the same due to many influencing factors.

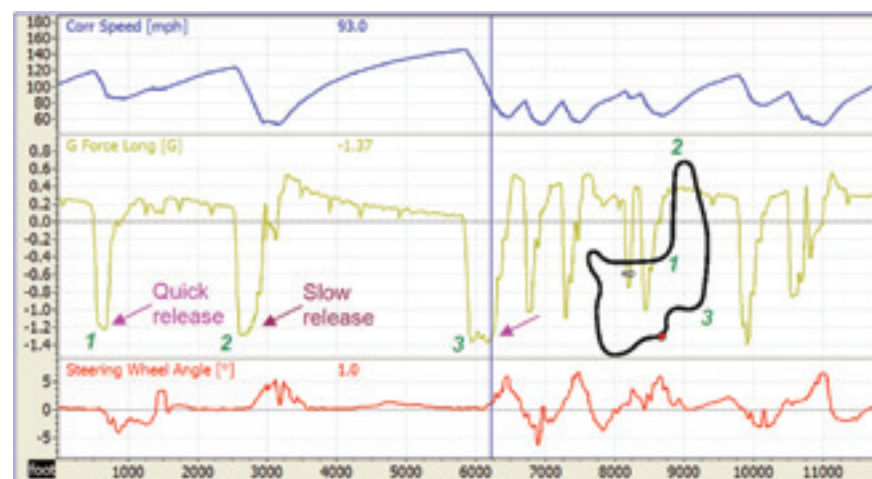


Figure 6.11 Graph for a sedan type low downforce race car at Mid-Ohio showing the braking forces from the G Force Long channel

A summary of the graph above in Figure 6.11:

- This vehicle can brake around a maximum of -1.3 G's.
- Typical for low downforce cars, G Force Long for Turns 2 and 3 are similar, yet the entry speed into Turn 3 is much higher than Turn 2.
- The cursor (vertical blue line) sits at the point where turn in begins for Turn 3. Turns 1 and 3 have very little trail braking as the trace goes up sharply. Turn 2 has some trail braking and the trace curves up while the pedal is released slowly.

High Downforce Braking

Race cars with high amounts of downforce won't have a flat plateau

of G Force Long when braking. Rather they will have a varying amount of G's even while braking in a straight line. Aerodynamic downforce increases with vehicle speed. The faster a car travels the more downforce it creates. Because downforce increases the grip level of tires, higher speeds will allow drivers to brake harder. Then as the speed decreases, so does downforce and the braking ability of the race car. Hence a rise in G Force Long during the braking zone. The start of any trail braking will be signaled by the trace rising up more sharply. When analyzing Figure 6.12, notice the following:

- The cursor location sitting in Turn 1 points to the moment in the braking zone where straight line braking ends and trail braking

begins. Notice how the slope of the trace directly after the cursor rises more quickly than before the cursor. This knee in the slope can be used to identify the start of trail braking and should correspond to when the steering wheel starts to move. The Steering Wheel Angle trace is on the bottom for reference.

- The maximum G's in each braking zone is a function of the entry speed. The first and last braking zones which are Turns 1 and 5 have the greatest negative G forces because they have the greatest top speeds before braking.

- The entry speed of Turns 3 and 4 are similar as pointed out by the green arrows, but the maximum G was slightly less in Turn 4. Many factors are at play here. The speed in Turn 4 is higher, meaning a shorter braking zone. But the main factor here in Turn 4 is the trail braking, where by less tire grip is available for braking due to the added steering input.

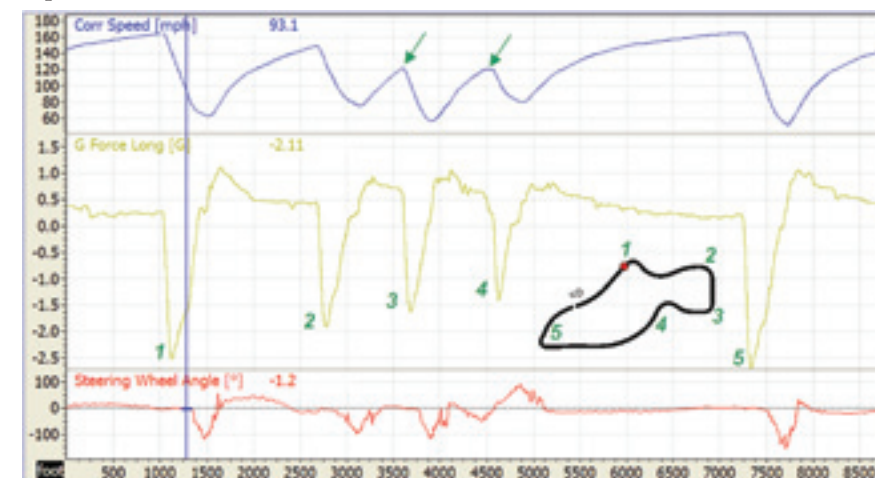


Figure 6.12 Maximum braking forces achieved before each corner varies with speed on this high downforce formula car on the short Sebring course

Braking Point

The trace of G Force Long is great for comparing and measuring the braking points between laps. Remember to verify the graph is in distance mode first. Then use the

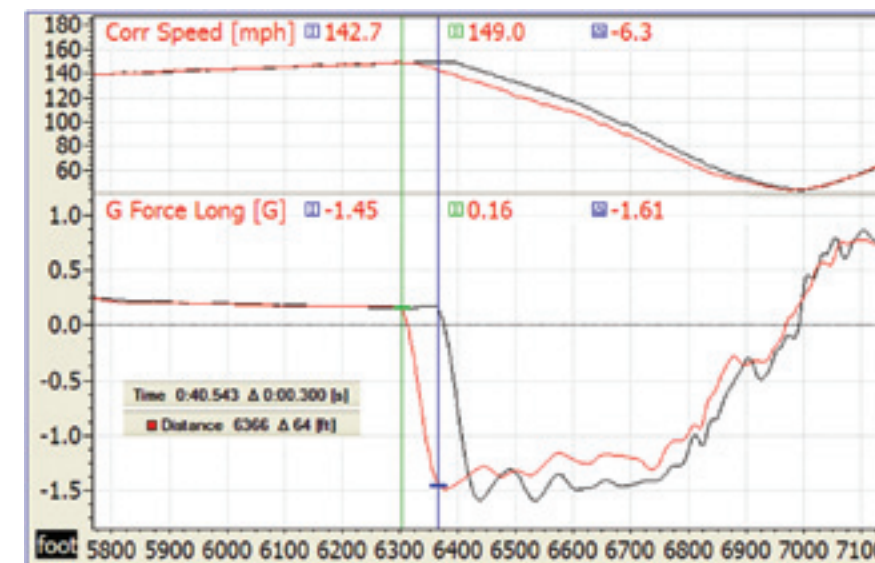


Figure 6.13 Braking points are easy to see with G Force Long. Distance can be measured where the traces drop to find the difference in braking points.

cursor to measure differences in the lap distance where the G Force Long trace first takes a sudden drop. The distance in Figure 6.13 is found to be 64 feet or about three car lengths. This might seem like a large

difference, but to the driver in the car it's not. Remember when traveling at 140 mph, braking 64 feet later corresponds to only 0.3 seconds. Hardly more than a blink of an eye!

More importantly the variance channel can be used to find how much time is gained by this later braking. While the act of braking later can produce faster lap times, it's the increase in speed throughout the entire braking zone which lowers the lap time, not the faster speed between the two points of braking. The graph in Figure 6.14 is an expanded view of the brake zone in Figure 6.13. The two cursors which surround the first braking zone, show a net time gain of 0.371 seconds from the mere 64 feet of braking later. Notice the variance channel moves down throughout the entire braking zone, not during the actual 64 feet of braking later.

Warning: Trying to brake later can cause driver error. Often a driver is overwhelmed by the increase in speed when entering a corner. Because it feels too fast, some drivers will mistakenly over slow for the corner. Other times drivers will over shoot the corner, removing any advantage gained from braking later. Over shoots can also cause the lap of data to shift over in distance, resulting in the rest of the lap not lining up.

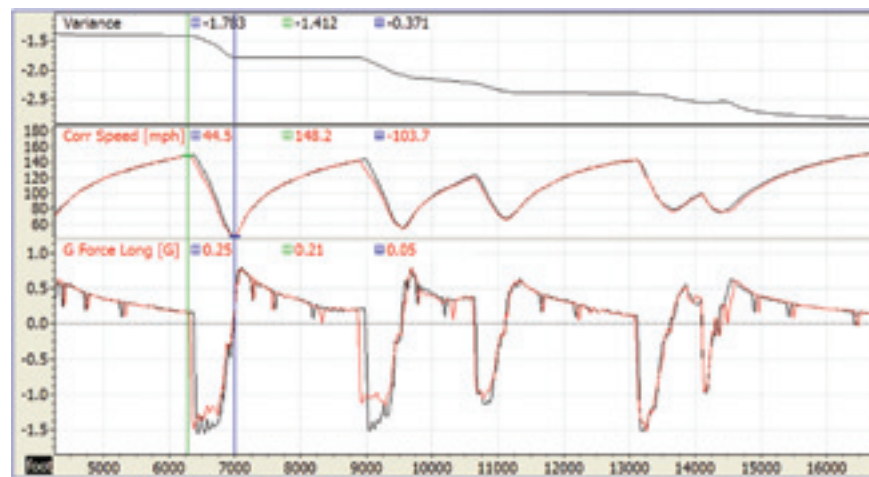


Figure 6.14 The Variance channel allows for time gained or lost in the braking zone to be accurately measured.

In Figure 6.15, when braking for Turn 1 the red trace brakes 70 feet deeper, but then the car over slows by 8.4 mph. This results in a slower exit and the time gained by braking later was lost when exiting the corner. Always use the variance and compare braking zones, corners and their following straight sections together. Such differences could be

the result of driving a different line or over slowing for the corner. Verifying with video and GPS are the only ways to be sure that we know the reason.

Looking at Turns 2 & 3, the red trace does exactly the opposite from Turn 1 and brakes early yet carries more speed through and exiting the

corner. Obvious from the G Force Long trace, we see the black lap which was faster out of Turn 1 might have been too fast entering Turn 3. There is a major lift right before the turn where the black trace drops off. It could be caused from the driver feeling unstable or running out of talent. Notice the driver lifting off the throttle, then back on when he or she realized their braking point was further ahead. Giving the driver the benefit of the doubt, perhaps there was another car in their way causing the lift? Or they were trying a different line through the corner? Verify with video and GPS.

Turn 5 looks similar between both laps and shows good consistency.

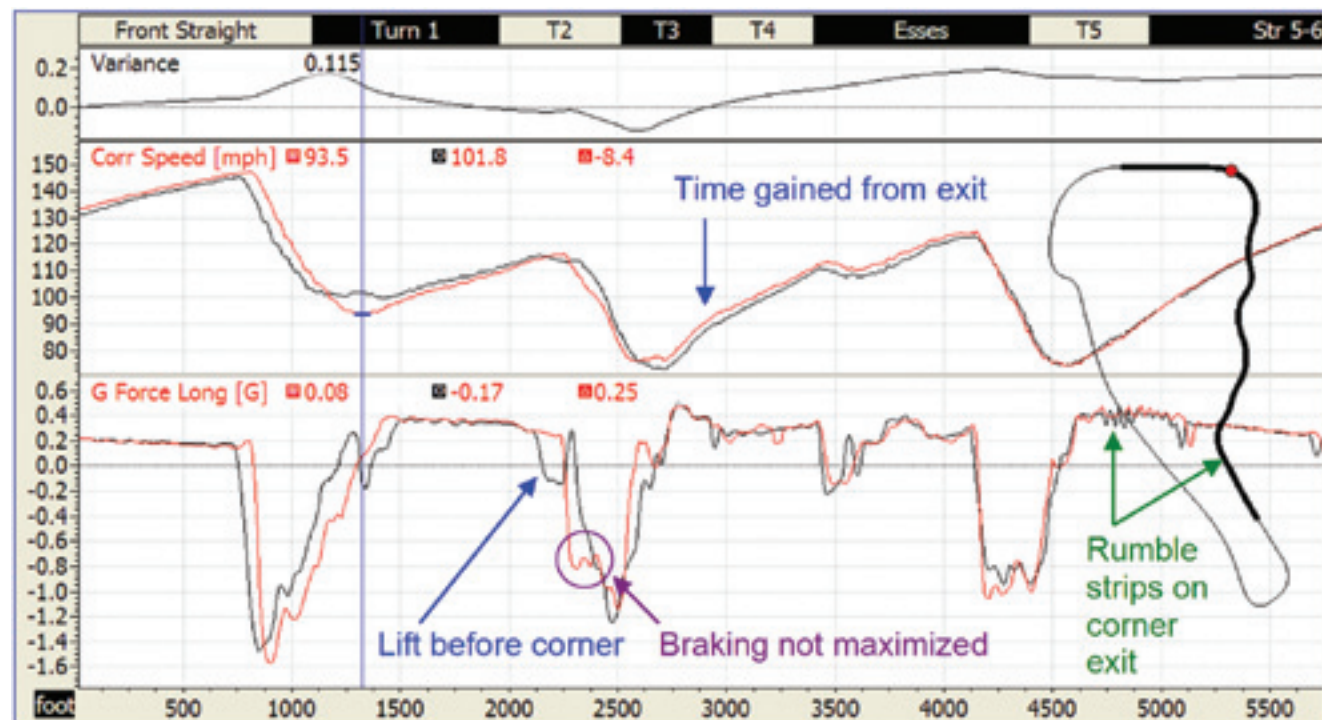


Figure 6.15 Three corners where the first two have different braking points between the laps while the last braking point is the same.



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Thinking About Rules

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RULE CHANGE COMMENT PROCESS

Here are some rules issues affecting one or more classes which may be of interest, based on observations in 2016.

In SP2, the stock fuel rail may be replaced with an aftermarket piece. The allowance for this is found in the Stock engine rules for 944s. SP2 starts with the rules governing Stock B 944s, to which are then added a number of additional allowed modifications, plus a limitation on tire width. But the Stock rule says that the factory fuel pressure regulator and damper must be retained, so that requirement applies to SP2 and Stock.

SP2 front splitters/spoilers: only in the Stock rules is there an allowance applicable to SP2 for anything other than a stock front spoiler. The Stock rules make spoilers free, but not unlimited: they can't exceed the maximum factory body length by more than one inch, so this is the authorization for aftermarket spoiler/splitters, but also the limitation on them (they can't exceed the body width, either)

Dive planes: Dive planes are not spoilers, or parts of a spoiler. Other than GT and GTA (where they can't stick out beyond the bodywork), or the special cases of the GTP cars, they are not allowed

unless they came from Porsche that way, like the GTC6s. GTB cars which can run a dive plane in some other venue must take them off to run in GTB.

Scoops: The Cayman GT4 comes with scoop extensions for the ducts on each side of the body behind the B pillar. This means that Cayman GT4s in GTB or a Stock class can run these. It does not mean that other cars, like Boxsters (Spec or otherwise) or other Caymans can add a scoop to the duct. Boxster owners who want to duct cooling air into the cockpit or a helmet can install a NACA or other duct in the window opening just in front of the passenger side B pillar within the footprint of the bodywork.

Wings: except for GT or GTA, where a wing is allowed, that means one wing. No dual plane or multiple element wings. For that matter, from time to time someone wants to know if something they would like to add is a wing. If air can flow under as well as over it, it is a wing (not the whole car, of course).

Diffusers: except in GT and GTA, this sort of under car air flow smoothing device is not allowed. To the extent that the stock rear spoiler has a diffuser effect, that is

all right, but it cannot be improved upon.

Throttle bodies: in stock, and most of the various spec classes (including SP1 and SP2, GTC and GTB) you have to leave the throttle body alone except where some non-stock TB is allowed. Disallowed modifications include (in addition to obvious infraction of increasing the bore) some which might seem harmless (like sanding, smoothing and polishing throats). You have to leave these pieces alone, just as you have to leave the insides of manifolds alone.

SPB Shocks: It appears that some Boxster owners have shortened the shocks, allowing the cars to sit lower without affecting suspension characteristics as much as doing this with spring perches. This is easily seen when the rear wheels are jacked up off the ground, as in checking gear ratios. The wheels won't drop as far as they should, so it is easy to check. It is almost as easy as checking for the forbidden LSD in this class. Neither is anything an SPB racer who values the respect of his colleagues and competitors ought to contemplate doing, however much it might improve performance.

Safety - a driver was burned this year by a fire which got past the

firewall. This has led to close inspection of the various openings which exist in firewalls when parts are removed, or which are made to pass wires and lines through.

Liquid lines can use bulkhead fittings to get through a fire wall. Wires can sometimes be closely grommeted, and there are commercial closers which can fit around a line whose hole had to be made oversized to pass some part through. Small holes can be sealed with high temperature caulk, but larger openings, for instance those left when air conditioning vents or components are removed, should be closed with sheet steel or thick aluminum, fastened with screws, bolts, or rivets.

Duct or silver metallic tape just isn't going to withstand the solvent

effects of a raw gasoline spray, or hold back flame long enough to get a car stopped and for the driver to get out.

Along these lines the scrutins have, for several years, been persuading 944 racers to place a cover over the fuel tank sender round access hole in the rear of the passenger compartment. Come 2017, do not be surprised if the stock plastic cover, taped or otherwise held in place, will no longer be acceptable, just as mere tape is not, and that a metal cover fixed with metal fasteners will be a requirement, and not just something scrutins try to persuade you to do. ❑

SP1 fuel tank sender cover (right) is often seen with duct tape covering the opening



Sp1 holes in firewall and floor (top photo). An cracked exhaust manifold had exhaust entering the driver's compartment



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EVENT ADS

PAGE	EVENT	DATE
16	Oktober Fast at Daytona International Speedway	October 21-23
16	Buttonwillow Double Crown	November 12-13
18	Texas Showdown Club Race at Motorsport Ranch	November 12-13
48	24th Annual 48 Hours of Sebring	February 2-5



Joe Bank sent this photo of the race start at COTA (left)



Scruit John Poor working the hot pits at Road America Club Race

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PS86-002	PORSCHE 911S 2.5L 10.3:1
PS98-005	PORSCHE 911 3.0-3.2 CIS 9.8:1 (Wedge Dome Max Moritz Style)
PS98-009	PORSCHE 930 TURBO 3.4L 7.5:1 (3.3-3.4)
PS98-010	PORSCHE CARRERA 3.2-3.4L 9.8:1 (3.2- 3.4 Motronic inj.)
PS102-017	PORSCHE 964 NA 3.8L 12.3:1 (107mm slip-in cyl 3.6-3.8)
PS102-018	PORSCHE 964 NA 3.8L 12.3:1 (bore in 109mm cyl 3.6-3.8)
PS102-019	PORSCHE 993 TWINTURBO 3.8L 8:1 (109mm bore in cyl 3.6 TO 3.8)
PS102-020	PORSCHE 993T 3.8L 8.5:1 PP102- 013 (107mm slip-in cyl 3.6-3.8 NA to Turbo conversion)
PS102-021	PORSCHE 993T 3.8L 8.5:1 PP102-01 (109mm cyl bore in 3.6 TO 3.8)
PS102-02	MMS 993 RSR 3.6L 11.4:1 (107mm slip in cyl 3.6 TO 3.8)
PS102-023	MMS 993 RSR 3.6L 11.4:1 (109mm bore in cyl 3.6 TO 3.8)
996 103 915 3.8 MA	PORSCHE 996TT 3.8 liter (102mm 23mm pin 9.4:1CR 3.6-3.8)
996 103 942 3.8 MA	PORSCHE 996 GT3 3.8 late (102mm 21mm pin 12:1CR 3.6-3.8)
996 103 942 4.0 MA	PORSCHE 996 GT3 4.0 late (105.4mm 21mm pin 12:1CR 3.6-4.0)
997 103 915 3.8 MA	PORSCHE 997TT 3.8 liter (102mm 23mm pin 9.4:1CR 3.6-3.8)
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Coaching Perspective

DAVID MURRY • CLUB RACING DRIVING COACH

IS IT ME OR THE CAR?

Mario Andretti once said that the most dangerous time for a driver is when they are not fast and think it is them and not the car.

I have coached many drivers over the years. There have been many times when I have been in the passenger seat, giving instructions to the driver. Then we switch seats, I drive and thought “wow, it wasn’t the driver at all, it was the car behaving poorly.”

So how do we know if it is the car or us as a driver that is not optimizing our results? Without extended experience setting up cars it’s hard to know that the car is not performing as it should, so we try to make up for it with our driving. That is when things could get a bit dangerous; trying to drive a car faster than it is capable of being driven.

Even if we are driving a car exactly like our competitor, that doesn’t mean that our car is just as capable as the other. Cars have so many adjustments that make a big difference in the grip level and ability. When driving in a series with another professional driver you get a clear indication if we are driving as well as we should by comparing lap times with our co-driver. We can overlay our data to see where that time difference is.

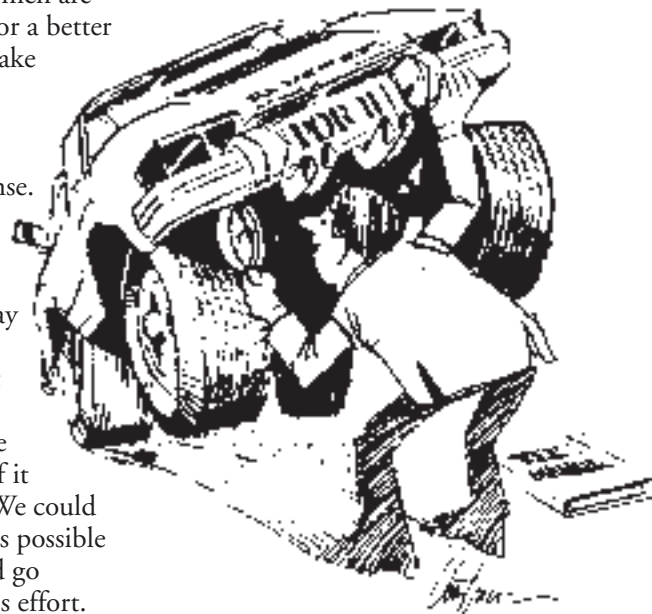
Even if our lap times are the same, we can see in the data if we could improve in different areas. If you don’t have the luxury of co-driving with a pro driver, it is more difficult.

Write down all of the setup information for your car (spring rates, shock settings, toe, camber, caster, ride heights, wing angle, etc). Now you know where your car is and can make changes. If they don’t work you can always go back to your original setup. Try changing something and see if it helps or hurts. Take notes of what the response to the change was so you can begin to develop a pattern of what type of changes are positive and which are negative. That will allow for a better idea of what changes to make next.

Don’t be afraid to make changes and see the response. We all tend to just drive around problems, sometimes not even realizing they exist. We may not like the way the car handles, but shortly forget as we adapt our driving to it. There is no way to drive the car as fast as we need if it simply isn’t capable of it. We could drive as hard and perfect as possible but make a car change and go significantly faster with less effort.

We don’t want to always assume it is us, the driver, but we also don’t always want to use the car’s performance as a crutch or excuse. Be honest in your evaluation, but never stop working to improve both driver and car. The car’s performance can be made faster in setup and also in development, two separate areas. It can also be made easier to drive and better to race without really making it faster which is very important in executing consistent laps.

Both driver and car performance matter. Evaluate and maximize both.



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From Start to Finish

MICHAEL WINGFIELD • CHIEF OF TIMING & SCORING

WHO IS IN YOUR CAR?

Occasionally, two (or more) drivers will share a car during a race weekend. The most common reasons for the shared car include:

- Enduro primary driver and co-driver
- Full time shared car with one driver competing in class in one group and the second driver competing in a different class or exhibition class in a separate group
- Part time shared car where the car remains in the same class and group, but drivers alternate on track sessions
- One driver has a car issue and another driver offers his car as a replacement, thus allowing the first driver to continue competing during the weekend

Before addressing the shared car types listed above, it helps first to understand some basic event registration practices. When you register for an event, you also register a car. For example, if you use ClubRegistration.net for event entry, the primary car associated with your profile becomes the car registered with you for the event. Thus, you should ensure your ClubRegistration.net profile contains accurate car information and

you select the correct car from your stable with your event entry. Your car selection during the registration process places you and the car in the event. Similarly, ClubRegistration.net allows you to enter a co-driver and car for sprint and Enduro races during the race weekend.

During a race weekend, you may add a co-driver to your car by completing a Change Form. The Change Form allows you to specify a co-driver for the Enduro or sprint races when you did not specify a co-driver during event registration.

The Change Form requires the requesting driver's signature, the event registrar's signature, and the race steward's signature before delivering the completed form to Timing & Scoring (T&S).

Each of the signatures mentioned here must appear whenever presenting a Change Form to T&S. T&S will then add the co-driver to the car in the appropriate class, group, and session.

When adding a co-driver to an Enduro, T&S will include both the primary driver and co-driver names to the car for each session applicable to the Enduro. This includes the Enduro, Enduro qualifying (if applicable), and any Enduro

warm-up sessions. These sessions allow either registered driver to pilot the vehicle on track and thus the competitor information includes both driver names. T&S will list both names on the results from these sessions as T&S has no mechanism to know which driver pilots the car during the session. In particular, driver changes allow each driver to pilot the car during these sessions, but T&S will not specify which driver drove first or second during the session.

When a co-driver shares a car full time, each driver has the car in an assigned class and group. Each T&S result sheet from the differing group sessions will specify each individual driver in the appropriate group and class. As with the Enduro, if you do not specify the full time co-driver (sprint and/or Enduro) during registration, you may add the co-driver at the event. The Change Form also serves to specify the driver, class, and group, for a full time shared car.

The part time shared car requires a slightly different approach. Since in this scenario the car remains in one class and in one group, with only the driver changing between different on track sessions, the Change Form requires additional information. In this case, not only



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must you provide the co-driver information, but you must also identify the specific sessions for the co-driver. T&S will alter the driver name for each session as specified on the Change Form. Note: T&S must have the completed Change Form BEFORE the run session actually occurs. Else, only the registered driver name will appear on the results from the session.


Also, note that as a part time shared car, one driver's best lap time may not set a qualifying time for the next driver. In this scenario, the next driver will appear at the back of the grid since the car effectively has a "driver change" for the next session. This consequence often appears when a co-driver participates in Practice #3, but the original driver will drive in the following race for which Practice #3 sets the grid. Likewise, if the original driver participates in Sprint #1, the fastest lap of that race may set the grid for Sprint #2. If the co-driver participates in Sprint #2 the co-driver will appear at the back of the grid for Sprint #2 as a driver change and may not use the lap time set in Sprint #1 by the primary driver.

Finally, when one driver offers his car to a fellow competitor, the new driver of the car must complete the Change Form. The new driver requests the change and enters the car information of the original or primary driver for the car, in effect requesting a car change for the new driver. In this scenario, the new driver may become either a full or a part time co-driver for the car offered by the primary driver, depending on whether the primary driver continues to race in his car. The intent of the two drivers, primary and co-driver, must appear on the Change Form. T&S will then enter the new driver (co-driver) information in the appropriate class, group, and session as identified on the Change Form.

The Change Form is a critical tool for T&S. It identifies any driver changes within a specific car, class, group or session. Each driver and co-driver must ensure the properly completed Change Form reaches T&S before the on track session occurs to which the Change Form applies. Proper driver identification in each timed session is a goal of T&S as the proper identification affects grid positions, possible track records (NOTE: PCA does not compile or verify track records), and certainly the Points Championship. Changes to driver information after a session and specifically after a race weekend do not routinely occur.

Thus, each driver has the responsibility to ensure that results appear correctly at the track and that the Change Form gets completed and applied before any session where a driver change occurs.

If you have questions about the applicability of the Change Form at a race, stop by T&S and we will gladly help you get your specific situation resolved.

We want to ensure all drivers receive proper credit for their on track accomplishments. 

Club Racing
2016 CHANGE REQUEST FORM

EVENT: _____ DATE: _____
 RACER requesting change: _____ Region _____
 PCA Membership/Club Race License #: _____ Pre-registered? Y N

Please check the desired box for the requested change and fill in the appropriate information

<input type="checkbox"/> ADD	<input type="checkbox"/> check one	<input type="checkbox"/> SPRINT	<input type="checkbox"/> ENDURO	Assigned Car # _____
Run Group _____	Class _____	APPROVED: REGISTRAR		

ADD NEW CAR OR CHANGE REGISTERED CAR INFORMATION

OLD CAR Run Group _____	Class _____	Car # _____	Color _____
S P GT Year/Model _____	Transponder # _____		
NEW CAR Run Group _____	Class _____	Car # _____	Color _____
S P GT Year/Model _____	Transponder # _____		

CHANGE CAR # Assigned Car # _____ Run Group _____ Class _____
 NEW CAR # _____ Run Group _____ Class _____

CHANGE TRANSPONDER # Assigned Car # _____ Class _____
 Old Transponder # _____ NEW TRANSPONDER # _____

ADD CO-DRIVER (to) check one SPRINT ENDURO
 (in) Car # _____ Run Group _____ Class _____
 Added Racer's Name: _____
 Added Racer's PCA Membership/Club Race License # _____ Region _____
 APPROVED: REGISTRAR

OTHER REQUESTED CHANGE _____

RACER requesting change: _____ Signature _____
 APPROVED: STEWARD _____ Name/Date/Time _____
 TIME TECH _____ Name/Date/Time _____

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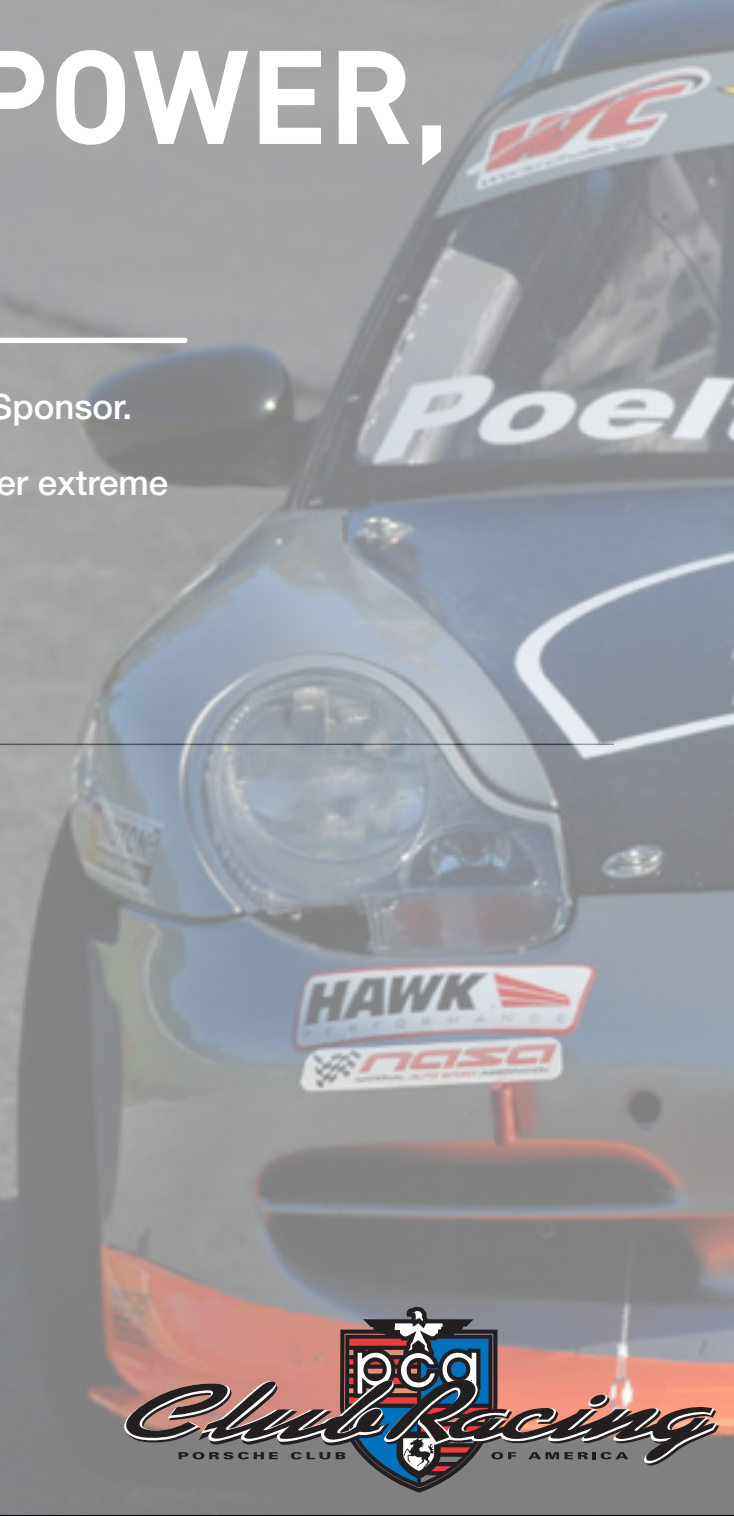
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SIGHTS & SOUNDS OF SPEED

24 HOURS OF LE MANS AND THE ISLE OF MAN TT

STORY & PHOTOS BY GLENN BILLINGS

Editor: When I read Glenn's story I said to myself: "Too bad this doesn't tie in better with PCA Club Racing." Then I read it again. My second question was: "What Club Racer wouldn't like to read this! It is written by a fellow Porsche enthusiast who just completed two things that are probably on more Club Racers bucket lists than any other items. If this doesn't get your blood flowing, go see a doctor.

So, here it is...

We're two days back from the two most epic motorsport events on the planet, and my eyes are still blood-shot and my ears are still ringing.

Our first week was spent on the Isle of Man for the fastest and most dangerous motorcycle race in the world. A 37.73 mile circuit around the island with virtually no run off area, doing 130 mph laps. Nowhere on earth can you place yourself on this race course, this close to the action. You dangle your feet over this grass strewn rock wall, with the thousands of other spectators, and watch

and listen to these two wheel rockets fly past you, doing 160 mph, down a public two lane road, inches from curbs, brick walls, trees and yes, spectators.

A tiny shockwave hits you (and almost sucks you onto the racing surface) as dust and leaves scatter in their wake. As rider and machine disappear around the corner you can still hear the engine straining every last rpm out of it, still going flat out until the sound subsides and the next rider/riders appear.



We saw four races with one sidecar race as well, with the senior TT the climax of the two week event. It was a flawless five days we spent on the Island.

Our second week was spent meandering around England with stops at Bath, Stonehenge, and a lot of London sights as well. Despite the horrendous time delays boarding the ferries to France, our tour bus got us to the famous circuit at La Sarthe for the vingt quatre heures. The 84th running of the 24 hours of Lemans was the culmination of our two and a half week trip. We positioned ourselves at the Lagash grandstand, about 300 yards from the start/finish line (Perfect viewing for the start and pit action).

Brad Pitt had the honorary duties of starter, but not even a Hollywood script could match what was to take place a day later. If you have ever seen the Steve McQueen movie "Le Mans", all the drama takes place on the last lap. You look at that and imagine to yourself "Yeah, right, that would never happen." It happened.

The start of the race, 3 pm, was slowed behind the pace car due to an earlier rain, so after 5 laps, the 60 cars were unleashed and a great blast of sound and color eventually ebbs as they make their way over the Dunlop bridge, to Tetre Rouge, and down the Mulsanne straight. On the enormous video screens along pit straight we see them entering the Mulsanne corner, go up to 200 mph again and enter Indianapolis corner which brings them to Arnage, the slow right hander, which heads them back to the start-finish straight, after negotiating the Porsche Curves and the Ford Chicane. It's back to complete one lap in front of 264,000 spectators. About 370 more laps to go.

It was toward evening when the Audis suffered some time delays in the pits and were pretty much out of the running, when it appeared that Toyota and Porsche were going to do battle. For hour after hour the two Toyota V6 turbocharged Hybrids and the Porsche V4 turbocharged Hybrid exchanged the lead every time one team would do their pit stop. The three maintained a steady pace and were on the same lap all the way through the next day — Unheard of at Lemans.

Unbeknownst to us the highlight of our trip was about to commence. It was around one o'clock in the morning. We made our way out to Arnage by bus. In the cool darkness of the night, with a full moon, you could see thousands of spectators up on a half mile long mound. Slightly below them on the other side was the glorious fireworks show we were about to witness. Prototypes and GT cars braking hard for the slowest turn on the track. Discs glowing, exhausts spewing white flame, headlights glaring and flashing. And the noise was



incredible. The squeel of the brakes, the pow of the exhaust, the crackle of the cars under deceleration, and the shotgun blasts of the gear changes. And as you exit the turn and accelerate up through the gears, it's all repeated, and then another batch of cars come in and perform the same sounds. And it's noisy. Crackle, crackle, pow, crackle, crackle, bang. That's what all the people came to hear. It was so rhythmic after a while, constant, euphoric, powerful.

At 3:30 in the morning we made our way back to the empty grandstands, where I enjoyed a Cohiba cigar and just watched and listened. The haze of dust and smoke, visible in the well lit pit area, is the only scene you see against the blackness of the night. The sound level changes as well, now with a lot of spectators gone, the echoing of the cars off the grandstands and pit wall reaches new decibel levels. It is

extremely loud. Earplugs can't soften the noise. But you pick up the individual cars with their distinctive tones. The Audis V6 TDI Diesel Hybrids sound like vacuum cleaners going by. Corvettes and Aston Martins with their bone shaking, piston slapping, ground pounding growl. The Porsches were about an octave higher, with a more low-throated hollow roar to them. And the Ferraris with their siren, high pitched scream. Most all of the P2 cars had Nissan engines. They had a nice hollowed groan to them as well, with that shotgun blast as they shifted gears. As dawn moved into the morning sun, the grandstands start to swell once again as the people started getting their second wind. It was nirvana.

The ending couldn't have been more epic. With about a half hour to go it was apparent Toyota was holding on to a 30 second advantage over the Porsche (which is close

by Le Mans standards) with the other Toyota team car on the same lap as well. Other team managers were down in the Toyota pit congratulating them, and with six minutes to go it was vanquished.

The leading Number 5 Toyota slowed on the Mulsanne and pulled to a stop right after the start-finish line in front of 200,000 very confused and anxious patrons. The team could hear the driver say "I've lost power." Everyone was aghast at what they were seeing. The Number 2 Porsche snatched victory from the jaws of defeat. And Toyota, having tried for decades to win this event, lapsed into catatonic shock. This was unreal. It was surreal.

It was nice to see the Chip Ganassi Ford GTs win the class after a mighty struggle with Ferrari. It harkens back to the grand saga of those two companies rivalry back in the sixties.

Don't get me wrong, I am a Porsche guy, but it was sad to see Toyota miss out once again on something they dearly want. But my uneasiness soon waned when, at the airport, heading home, I mentioned to a older gentlemen wearing a red and white Team Porsche jacket, that it was a shame about Toyota, when he replied with a smile on his face: "It's not called the LeMans 23 hour and 54 minutes."

Having returned, my body clock is all out of kilter, and yes, my eyes are still bloodshot and my ears are still ringing. But I'd go again! 🏁



Porsche #2 LeMans winning drivers: Marc Lieb, Neel Jani and Romain Dumas





Cayman built at Spencer's shop, Speedsport, and campaigned in PCA Club Racing by Spencer

SPENCER COX

IS IT NATURE OR NURTURE THAT ATTRACTS A PERSON TO CARS?

STORY BY SEAN SMITH, PHOTOS BY KEN HILLS & SEAN SMITH

Is it nature or nurture that attracts a person to cars? Does it take a village to create a race-driver, or is it the commitment of an individual to go out and become the best hot shoe he can be?

As a kid under the age of ten, Spencer Cox watched his father track his 356 at Lime Rock and later his Norton motorcycle at Bridgehampton. On Sunday nights before heading back to the city, if Spencer hadn't tortured his sister too badly, he was taken to the local go-kart track for some laps as a reward.

From there it was a 5-horsepower Tecumseh mini bike. Spencer would

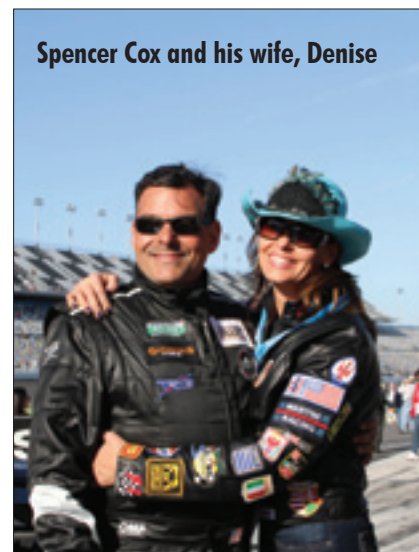
tinker with it trying to get as much power out of it as possible. To go faster, he would point it downhill.

That morphed into a Honda mini trail 50 and that begat, at 15 years old, a YZ125.

By the age of 18 Spencer was on the west coast working for Klaus Holthaus at NARW (North American Racing Werks). He came into a \$5000 inheritance from his grandfather, and bought a 1966 912 from Klaus. It had a piston and cylinder kit bringing it up to 1750cc, plus Webers, wider tires, and sway bars. With the 911 tub and light motor, it handled wonderfully for the time.

When Spencer hit the track for his first DE day he had already been street racing heavily on Mulholland drive (downhill) and he had done a lot of winning.

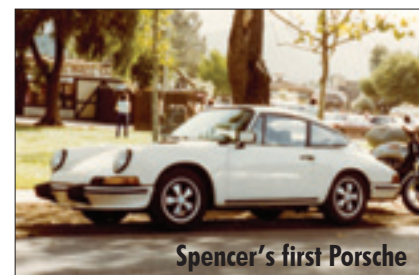
In those days, there weren't the type of instructors we have today. They would just tell you what you should do and point you at the track. There were no intercoms or people sitting in the right seat pointing and using hand gestures to show you the line. You figured it out on your own. From his time on Mulholland (where it was risk reward - you had to get it yourself or wind up in someone's living room... or down a cliff) Spencer learned how to read a



Spencer Cox and his wife, Denise



Spencer in his dad's Porsche



Spencer's first Porsche

road. His motorcycle riding and skiing were a big help in car control. On a bike you feel balance, and that directly relates to a car. The skis also teach you balance, fore and aft. He spent his time running the 912 on track days at Riverside, Ontario, and Willow Springs.

Coming East again in 1987 there was a marked increase in horsepower. He was now running a Slant Nose 930 Turbo, care of his association with DP Motorsports. Unofficially, Spencer started running with PCA at Bridgehampton, back to open track DE events. There was no green flag; there was no checkered flag, but you were racing!

Spencer's first serious racing was with EMRA (Eastern Motor Racing Association) and NASA.

Business changes (as well as location changes) put Spencer in the pits for almost a decade. In the mid 1990s people started getting much more serious about their racing. It became more of a sport than just a hobby. They were no longer driving their race car to the track and back home; transporters started appearing, along with mechanics.

By 2000 people were buying ex-factory Cup cars or having cars shipped from Germany. Everyone was upping their game, training and

working on their technique to make them the best possible.

Spencer started again with PCA, Club Racing in '99 in a 944. Right out of the box, he was competitive and winning. He still had no formal training, just his many miles behind the wheel on the track.

Many people will go out and start driving a Cayman, get quick and move up to a Cup car, then start hiring a pro driver to coach them in the hopes that they'll be able to download some of their essence. They can be told where their eyes should be and where the car should be, but nothing replaces laps and experience. It's just like the driving directions for getting to Carnegie Hall: practice, practice, practice.

This is to do with something else you can only learn through years of experience: racecraft.

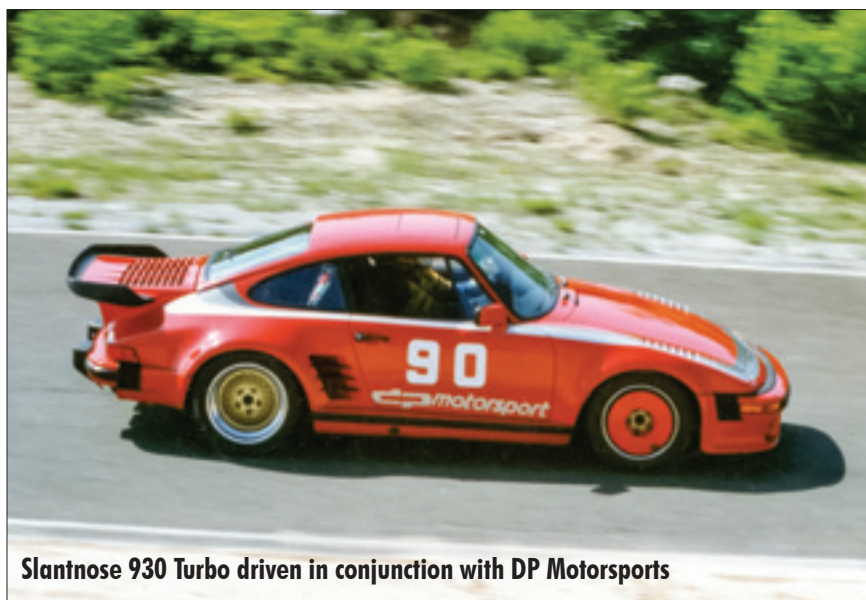
For Spencer, driving is like a waltz. There is a rhythm to it, and there is a different one for each track. So you get in a groove and have to keep that cadence. Every corner, every braking point, every throttle point. Everything has to be precise, perfect and your timing can't miss a beat or your whole lap is off.

Then you have to adjust your dance according to fuel consumption, tire degradation and the other machines on the dance floor.

Instead of the red mist, you have to start seeing everything around you and be aware of how everyone else is driving. You don't have spotters, so you have to train yourself to do this on your own. Just like getting used to speed; it's all in the experience.

Since 1999 Spencer has been behind the wheel of every type of GT3 Cup car that's been built, along with multi-million dollar 962s and 908s. He ran, for himself, an old IMSA 924 GTU named *The Turkey*





Slantnose 930 Turbo driven in conjunction with DP Motorsports



Ibex car



The Turkey — 924 GTU

because of the sound coming from the waste gate fitted from a 935. That antiquated little machine still holds a class lap record at Lime Rock Park.

While running Porsche for Farnbacher Loles, Spencer was allowed to drive one of the company's IMSA GT3 cars, also driven by Dominick Farnbacher and Wolf Hensler (some heady company.) This car was named *Kermit*, and was known for winning with all three drivers. After *Kermit* there was another dry spell. He no longer had his own ride, but that didn't keep him off the track. He was co-driving, coaching... Putting on the miles.

In 2012 he was asked by a team of his customers to anchor their effort at the 24 hours of Daytona. The group chipped in, paying for his seat, so much was their faith in his racing ability. This was his heady taste of big time racing.

For the last two seasons, Spencer has been back behind the wheel of his own Cayman, prepared by his company, Speedsport Tuning, out of Danbury, CT. His racecraft and car preparation are quite evident with 18 out of 20 races won, and an 82 point lead in the championship (as this was written).

In February of this year Spencer celebrated his overall victory with the Cayman in Florida.

But now what? What was he going to do for the coming season? Get himself a Cup Car! He knew of a factory '08 that had been for sale for about a year, and the price kept dropping. So, with the proceeds from selling his winning Cayman, Spencer had his very own Cup Car.

This was the dream come true machine. He had co-driven in many Cup cars and loved them, now this one was his. The car had seen battle in the British Carrera Cup series,

even winning Spa, so Spencer decided to keep the winning livery with the car.

Like with the Cayman, Spencer went out and started winning races. There have been a few hiccups along the way, being knocked out of a race by a back marker while in a commanding lead and another time being passed under a yellow flag. He missed a big race due to the death of his father, but as of now Spencer is still in the points lead. And he will take the fight to the other drivers right to the end of the season.

Does Spencer see himself as a pro driver? No. Does he feel he could mix it up with the big boys and come out on top? No. He admits he's a big fish in a small pond. But the helmet comes off after a race and there is a big smile stretched across his mug.

For others with less natural ability, there is a way to get a taste of what Spencer has been experiencing for the last 35 years.

Most PCA regions have Drivers Ed programs that get you started. Connecticut Valley has a formula for getting drivers into racing. Your first track day starts in the green run group. You are assigned an instructor who gets in the right hand seat and teaches you the line, apexes and break points. You continue this way for 5 to 10 track days before moving up to yellow run group. You will have an instructor until they feel you have a good sense of the car and what is happening around you. They then sign off to run solo. In these groups there is no passing in the corners and no passing unless you are given a *point-by* from the car ahead of you. As you develop you have the opportunity to move into

more advanced run groups, depending on your ability.

Now it's up to you. How far do you want to go? Stick with DE or perhaps advance to Club Racing. One way or another, you're going to have fun. You will be driving one of the world's best cars on some of the best race tracks, testing yourself and your machine, smiling all the way. When you're out of the car you will be surrounded by a fantastic bunch of people who, no matter where they come from in their lives, speak the same language you do.

And, if you're at a Connecticut Valley region event, you're even luckier because Spencer Cox is the head driving instructor.

You never know; something might rub off! 

ABOUT THE AUTHOR — SEAN SMITH



shown pictures of various exotic cars by guests consisting of famous artists, photographers and race drivers of the time... They were consistently amazed to discover that he already knew the names of every machine!

Fireman? Policeman? Far too boring! From day one Sean always knew he wanted to be a photographer. He started taking pictures at age ten and continued through high school, shooting anyone and anything willing to get in front of his camera.

He continued on to the School of Visual Arts on a full merit scholarship, while running his father's fashion photography studio.

Hey, what about career plans? A no-brainer: follow in dad's footsteps, and start shooting fashion and

beauty! After a number of years Sean married his two great loves and began incorporating cars into the shots. The automotive draw, however, was just too strong. Ultimately, to the amazement of many friends, he announced: "Get the women away from the cars!" Well, most of them, anyway.

Sean now shoots and writes for numerous prestigious American and European automotive magazines as well as all the top auction houses and a number of private commissions. And you still won't be able to stump him with any car. And his '87 Carrera will be with him for life.

You can see his photography at motorgrafix.com and read some of his stories at passionatspeed.blogspot.com.



2016 HARD CHARGERS

BY MICHAEL WINGFIELD, CHIEF OF NATIONAL TIMING & SCORING

Name	Region	Class	Description	Start	Finish	Index	Race
BRainerd International — July 23-24							
KEITH ERICKSON	NST	GT1	GT 01 996TT	10	4	6	SPRINT GROUP 1
KEVIN MAXXIM	STL	GTB1	GT 12 CAYMAN	23	17	6	SPRINT GROUP 1
PAUL INGEBRIGTSEN	NST	E	S 92 968	31	25	6	SPRINT GROUP 1
MATT HOKE	NST	D	S 80 911SC	30	21	9	SPRINT GROUP 2
MATT HOKE/MIKE HOKE	NST	D	S 80 911SC	21	14	7	ENDURO

Canadian Tire Motorsport Park — August 5-7							
JAMES CLEMENS	NNJ	F	S 04 BOXSTER	13	9	4	YELLOW SPRINT 1
CHIP HENDERSON	MOH	E	S 86 951	18	13	5	YELLOW SPRINT 2
FRANK OSBORN	NE	E	P 04 BOXSTER	12	7	5	YELLOW SPRINT 2
MICHAEL MAMMANO	NIA	GRB1	GT 09 CAYMAN S	16	11	5	RED SPRINT 1
TOM HASSETT	NNJ	J	S 03 996 CARRERA	18	13	5	RED SPRINT 1
PAUL AMICO	POT	GTC2	GT 97 993 CUP	19	14	5	RED SPRINT 1
JEFF MCCARTHY	NE	SP996	P 99 996	20	15	5	RED SPRINT 1
TOM HASSETT	NNJ	J	S 03 996 CARRERA	17	14	3	RED SPRINT 2
STEVE ERICKSON	CHO	J	S 04 911 GT3	19	16	3	RED SPRINT 2
JEFF PAWLOWSKI	CHO	SP3	P 89 968	36	22	14	ENDURO

Mazda Laguna Seca — July 22-24							
MARK BOSCHERT	INT	SPB	P 99 BOXSTER	49	37	12	SPRINT RACE 1
BOB JONES	INT	F	S 87 911	53	41	12	SPRINT RACE 1
BRANIMIR KOVAC	SGB	SPB	P 99 BOXSTER	44	38	6	SPRINT RACE 2
BOB JONES	INT	F	S 87 911	43	33	10	SPRINT RACE 3

Mid Ohio Sports Car Course — May 13-15							
MATT DISTEFANO	UPC	SPC	P 07 CAYMAN S	19	10	9	PURPLE SPRINT 1
CHED CROUSE	BGS	SP996	P 99 CARRERA	22	13	9	PURPLE SPRINT 1
DUKE LARDON	CTV	GTC3	GT 05 GT3 CUP	17	9	8	PURPLE SPRINT 2
DENIS BOULLE	MAV	SPB	P 99 BOXSTER	19	5	14	RED SPRINT 1
RANDY ALEXANDER	CHO	E	S 82 911SC	14	3	11	RED SPRINT 2
DENNIS HIFFMAN	CHO	SP3	P 95 968 FIREHAWK	21	10	11	RED SPRINT 2
MARK STEINGAS	NST	GTC3	GT 05 GT3 CUP	20	4	16	ENDURO

Monticello Motor Club — Jul 8-10							
CHARLIE CRAIG	CTV	GTB2	GT 14 CAYMAN S	14	11	3	BLACK SPRINT 1
JAMES BEIRNE	NNJ	SP2	P 88 924S	23	20	3	WHITE SPRINT 1
BILL RUDTNER	MNY	SPB	P 98 BOXSTER	32	26	6	BLACK/WHITE SPRINT 2
MICHAEL DELUCA	CNY	F	P 86 911	28	22	6	BLACK/WHITE SPRINT 3
R TIETJEN/S WILLIAMS	CTV	G	S 89 951	30	18	12	ENDURO

Motorsport Park Hastings — June 4-5							
CHRIS AMOND	MAV	SPB	98 BOXSTER	8	4	4	BLUE SPRINT 1

MICHAEL HEMINGWAY	RMT	SPB	98 BOXSTER	10	6	4	BLUE SPRINT 1
ADAM JASPERS	RMT	SPB	99 BOXSTER	10	4	9	BLUE SPRINT 2
MICHAEL STEWART	NST	J	05 GT3	10	6	4	RED SPRINT 1
MICHAEL SABERS	NST	SP1	84 944	20	16	4	RED SPRINT 1
KEITH FRITZE	NST	SPC	06 CAYMAN S	11	6	5	RED SPRINT 2
MIKE COURTNEY	NST	GTC3	05 GT3 CUP	7	5	2	RED SPRINT 3
MICHAEL STEWART	NST	J	05 GT3	9	7	2	RED SPRINT 3
STEVE COOMES	MAV	SP1	86 944	14	12	2	RED SPRINT 3
JULIE BAILEY	WIC	SP1	86 944	16	14	2	RED SPRINT 3
MICHAEL STEINBERG	NST	GT5	67 911	19	17	2	RED SPRINT 3
LISA HUNSICKER	RMT	E	85 911	20	18	2	RED SPRINT 3

New Jersey Motorsport Park — August 19-21							
JAMES ROTHENBERGER	RTR	SP2	P 85 944	26	13	13	BLUE SPRINT 1
DAVID MANN	CHS	SP2	P 86 944	20	9	11	BLUE SPRINT 2
SCOTT BELLES	RTR	SPB	P 99 BOXSTER	23	9	14	BLUE SPRINT 3
BOB KIM	NNJ	GTB1	GT 09 CAYMAN S	20	15	5	RED SPRINT 1
CHARLIE CRAIG	CTV	GTB2	GT 12 CAYMAN S	29	22	7	RED SPRINT 2
MICHAEL EMBLER	SCH	GTB1	GT 12 CAYMAN S	16	11	5	RED SPRINT 3
PATRICK JAMES	POT	F	S 08 CAYMAN	27	18	9	YELLOW SPRINT 1
LEE LASBERG	CTV	F	S 90 964	7	3	4	YELLOW SPRINT 2
PETER DEBUSMANN	SCH	H	P 96 996	10	5	5	YELLOW SPRINT 3
PHILIP KIM	CTV	F	S 01 BOXSTER S	16	11	5	YELLOW SPRINT 3
SCOTT BELLES	RTR	SPB	P 99 BOXSTER	28	16	12	ORANGE ENDURO
TOM HASSETT	NNJ	J	S 03 996 CARRERA	25	18	7	WHITE ENDURO

Virginia International Raceway — June 24-26							
TJ LARSEN	CAR	H	P 99 BOXSTER	33	12	21	WHITE SPRINT 1
CLAUDE REED	CHO	SP911	P 84 911 CARRERA	41	34	7	WHITE SPRINT 2
LESLIE SHREM	NNJ	GT1	GT 03 GT2	31	16	15	RED SPRINT 1
JACK MCCARTHY	CTV	GTB3	GT 14 CAYMAN	33	23	10	RED SPRINT 2
ROBERT CIMLER	JSH	SPB	P 97 BOXSTER	33	17	16	WHITE CHECKER ENDURO
BOB KLASKIN	CHO	GTC4	GT 07 997 GT3 CUP	39	25	14	RED CHECKER ENDURO

Watkins Glen International — June 3-5							
HUNTER ALLEN	BRI	E	88 911	32	22	10	BLUE SPRINT 1
ARIEL JURMANN	MNY	F	03 BOXSTER S	30	17	13	BLUE SPRINT 2
PAOLO INCAMPO	CTV	SPB	98 BOXSTER	19	14	5	GREEN SPRINT 1
ANDREW GUCCIARDI	UPR	GTC5	12 997 GT3 CUP	37	27	10	RED SPRINT 1
VICTOR GOMEZ-DONATO	PR1	GTA2	16 991 GT3 CUP	35	22	13	RED SPRINT 2
ANGUS ROGERS	SFL	GT4	76 911R RSR	38	21	17	YELLOW SPRINT 1
ZACK HILLMAN	CHO	GT4	87 944 S	48	32	16	YELLOW SPRINT 2
DAVID BAUM	WMI	GT4CS	16 GT4CS	7	2	5	BLACK ENDURO
KEVIN PALMER	HV	SP1	85 944	20	10	10	ORANGE ENDURO
HUNTER ALLEN	BRI	E	88 911	29	11	18	PURPLE ENDURO
ARIEL JURMANN	MNY	F	03 BOXSTER S	31	13	18	PURPLE ENDURO
PERRY BORTOLOTTI	REN	GTC5	10 GT5 CUP	10	5	5	WHITE ENDURO
DWAYNE MOSES	POT	GTC3	04 GT3 CUP	14	9	5	WHITE ENDURO

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