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The most widely read and studied page in the Club Racing News.

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Come Visit Our Web Site: http://www.pca.org/pca/clubrace/

On the Cover:

Frank Celenza at Mosport.

Deadline

The deadline for the next issue is: *February 1, 2007*

Final Lap

by: John Crosby, Chairman PCA Club Racing

It is hard to believe that six years have gone by since I wrote my first Club Racing News article as the Club Race Chairman. Well folks, it is with mixed emotions that I must report that this will be my last. Bruce Boeder will be taking over the chairman position as of the 1st of the year. It has been my privilege to serve PCA in this capacity. The past six years has been a very rewarding and often challenging period. I would first like to thank my wife, Cathy, for her support during my tenure as Chairman as well as my racing hobby. jumped right in and got involved as a Club Racing Time Tech which made our trips to work a race much more enjoyable. As far as her support of our racing, if you have been anywhere near our paddock on a race weekend, you know that her hospitality is legendary. The scrutineers, stewards, time techs, medical committee, newsletter editor, sponsor coordinator, PR coordinator, and advisory committee members, some 50 people which make up the Club Racing National Committee, have been a great team to work with. Of course, the person that really holds the pieces together is the Program Coordinator, Susan Shire. I would also like to thank the PCA Executive Council and the other National Committees for their support of the program.

Over the years, we have attended over 200 PCA Club Races in one capacity or another. The numbers of people involved and the enthusiasm that we have seen from the regions hosting the races and the racers as well is truly amazing. In our travels around the country to work races or to race ourselves, Cathy and I have made friends all over the U.S. and Canada. It is a great feeling to know that I can pick up the phone and call someone that I personally know in just about every state in the country.

Finally, there are some Club Racing national staff changes for 2007. I am retiring from my position as Chair but will continue as a steward. Alan Friedman and Jay Culbertson have retired from their positions as stewards. Harry Hall has also retired as a scrutineer. The program owes a debt of gratitude to Alan, Jay and Harry and obviously would not exist without Alan. Donna Amico will continue as Technical & Rules Chair. If you have any questions about the rules, Donna is the person to

contact. Email is the preferred method since it is expeditious and provides the racer with written documentation. Donna's email address may be found on the Club Racing website. Dick Dobson will continue as Chief National Scrutineer. Bruce Boeder will move into the Chairman's position, with Bryan Henderson taking over as Chief National Steward. It's been a fun six plus years being your Chairman and I look forward to seeing you at the races.

My best for a safe 2007 season. We will still be around though, as I will continue with my racing as well as with the steward duties. See you at the track.

Thanks for a great six years!

John





RACERSEIGE













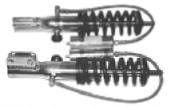




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2007 Rules Change Whys and Wherefores

by: Donna Amico, Technical and Rules Chair

We had a lot to chew on this year, with more than the usual number of rules proposals, and far more than the usual number of comments on those proposals. This article is to provide some of the Technical and Rules Committee's thoughts underlying why some rules were adopted and others were not.

Safety Rules: We all feel that more safety is better than less, but under the principles of PCA Club Racing, we welcome race cars that are also driven on the street. Thus, we continue to recommend strongly that all race cars should have roll cages, but we will not require cages to race in a Also continuing as a strong stock class. recommendation is the use of head and neck restraints. I've worn a HANS device since 2001, and wouldn't consider running without it. It would not surprise me if, 5-10 years from now, we view head and neck restraints to be as essential as helmets. However, at present there are limited options available that meet the SFI or FIA specs, and adoption of a requirement for head and neck restraints has not spread universally through amateur racing.

Our roll bar/cage padding rule is really not changing; instead we will reference the SFI/FIA specs to describe the foam hardness necessary. You must use foam as hard as the specs, but it does not need to be certified to these specifications.

We opted not to require a pull cable for the kill switch for the driver to operate, since the ignition switch should kill just about anything important. However, it is a good idea for the driver to be able to kill all power, so we recommend that, where possible, consider a second pull cable, or routing the cable within reach of the driver (just outside the driver window). Please note that a second kill switch is not necessary.

We will be revising our helmet requirements to accept helmets certified by any of the 3 testing bodies accepted by the FIA. This may improve the helmet choices available to our Canadian drivers.

When addressing safety issues, we also want to make sure that we do not inadvertently prohibit safety modifications. Along those lines, we will allow GTC3/GTC4 cars to modify the cage to add

door bars for additional side impact protection, and we will allow these cars to relocate the battery to a battery box in the passenger footwell. These are safety modifications allowed in the IMSA GT3 Cup Challenge Series.

B, C, and D-classes: There were a number of rule changes proposed for individual cars in these classes, but in the end, we only corrected the weight for the 1995 993, added the new Porsche models, and made the power packages (such as the X-51 and X-50) a "prepared" modification. We freely acknowledge that this is no more than a "patch" for a systemic problem with our upper stock classes. I think (personal view) if we try to make each of these classes as competitive from top to bottom as other stock classes, there are at least 4 classes within the 3 classes of today. Further, as Porsche continues to build faster and generally more capable cars, these classes will (hopefully!) have quite a few competitors at most races. So yes, we recognize that a 996 X-51 and a 997 GT3 or 997 Turbo is probably not a fair fight. And we are sympathetic to the plight of the 3.4 L 996s in C. However, we want to ask the racers to give us another year to sort this out, and we'll come back next year with what we hope will be more equitable classes for the cars currently in B, C, and D. In the meantime, we didn't want the 996 racers investing in an expensive X-51 upgrade in the belief that this is necessary to be competitive.

Weigh Cars with Drivers: The loyal 3 or 4 racers who have proposed this every year for as long as I've been reading rule proposals (7 years) have finally been rewarded for their persistence. We will be adding 150 lbs to all of the weights in the rule book where the car is presently weighed without the driver. This is all of the weights except those in the SP classes, where the weights already included the driver. We ultimately selected 150 lbs instead of 200 as proposed, because we did not want our lightweight drivers to have to add too much ballast to cars that may have quite a bit of ballast already. Many racers will be able to remove ballast. This should be an equalizer for our larger drivers; for those that can remove ballast and run at a lower total weight, it will also put less wear and tear on the brakes, suspension,

and chassis.

Flywheels and Limited Slip Differentials: I'm not usually a fan of allowing any more changes to "stock is stock," but the flywheels have become a safety issue and the ZF limited slip units are close to unobtainable. Walt Fricke thoughtfully supplied us with some spectacular photos of dual mass flywheels failing and slicing completely through G50 transmission cases, removing support from the front of the engine. Porsche thoughtfully has provided a factory one-piece "sport flywheel" that can substitute for these flywheels for the 964s, 968s and 993s. As for the limited slips, we are not allowing Quaiffes or locked differentials, but you may use replacement units from those manufacturers who also make the replacement parts for ZF units.

SP1, SP2, and SP3: It is very rare to get both a lot of comments on a proposal and have all of them in agreement. Every racer who commented on including these classes with PCA was in favor of welcoming these cars into our series.

Tow Hooks: OK, you win, you just have to have front and rear tow hooks, and we won't require them to be a certain height. However, look for the picture in CRN of two cars buried up to the bumpers and rocker panels in a Road America gravel trap, and ask yourself if your tow hook is reachable if you find yourself in that position. Corner workers do not carry shovels, and your fellow racers will be mighty annoyed if the event has to be shut down for a half hour to figure out how to drag you out of there.

GT Classification: Stay tuned, we won't change for 2007, but we're not done with this either. Here's the problem (again, a personal view). Each year, it seems that we have fewer and fewer GT cars. At the same time, we've kicked water-cooled 996/997 based GT cars into GTA, and we will soon need GTA1, GTA2, etc. Furthermore, if someone takes a water-cooled 996/997 engine and puts it in a 993 or earlier chassis, that car goes into GTP. Finally, our "displacement only" classification for GT is simple, but it will forever mean that the ideal GT-car is built from an early 911 or 914 chassis – the lighter the better. Will that truly make sense 10 years from now?

Don't we really want racers to build GT cars from all Porsche chassis? Wouldn't it be great if the

GTA cars, the new GTP cars, and the GT cars could all be part of one uniform set of GT-rules, and we had robust numbers of GT cars again?

That seems like a great vision for GT, but it won't happen until we figure out how to adjust for the basic engine types, and include weight classification. The classification scheme that was "Option 3" was a good start in that direction, and the rules committee believes it has promise. However, we got input during the rules comment period that suggested we really didn't have it quite right yet. This additional data came from engine builders and those applying the formula to their specific cars and coming up with occasionally surprising results. Rather than rush forward with this scheme, it seemed we needed to figure out where these calculations would place more of the existing cars. That should suggest what is needed to get a classification scheme that won't require major changes later so that racers can build cars to the new rules and have confidence these rule will be reasonably stable.

For the record, racer input on the GT-classification rules interesting was and enlightening in several respects, and will help focus our effort. Somewhat surprisingly, only "keep the rules the same" and "revamp completely to include weight and engine type" received significant racer support, and these camps were about equal in size. Simply adjusting the turbo multiplier attracted very little interest, even though this is probably the most common complaint that I hear about specific GT cars. Furthermore, there was no interest whatsoever in establishing minimum weights by car type. Including weight as a factor in classification would remove much of the incentive to see "how low can you go," and that's probably sufficient. Scrutineers who have weighed GT cars report that, as a rule, our current GT-class cars really aren't as light as you think they are, anyway.

<u>In Conclusion:</u> It was a lively year, and it was wonderful to see so many racers take part in the proposal process and the comment process. I've described some of the more stimulating discussions above, but if you have a question about any of the other changes, just drop me an e-mail. Keep up the feedback and we'll continue to have a great racing program.



Why am I so fast on paper?

By: Michael Wingfield, PCA Club Racing Timing & Scoring

You just completed your race and stroll over to the hospitality tent to pick up your copy of the race results. You note your overall finish position, and then check your competition to see where you finished within your class race. Finally, you look at your best lap time and find yourself astounded. Your fastest lap time bests anything you have ever recorded, and seems impossible – and in fact may be impossible. So why does the trackside paper race results show this "impossible" fastest lap time? Should you trust the finish order if your best lap time is obviously in error?

Several factors can influence why a competitor's fast lap time on the race results sheet may not reflect an actual lap time for the competitor. The two most common reasons include a racer who short-cuts the track, and manual scoring of the lap time by the Timing & Scoring (T&S) staff. In either case, the race finish order remains correct.

When a racer short-cuts the track, he travels less than the total distance of the track on a lap. A short-cut distance may be small, such as missing the Bus Stop at Watkins Glen. Another short-cut might skip one-third of the track, such as taking the North Course cross over at VIR, thus skipping the South Course. Finally, the short-cut may be as much as half the track such as at Road America, where a racer may exit at Turn 5, and then reenter the track at Turn 13A or on pit road. In each case, the racer may pass over the scoring loop with an "impossible" lap time after the short-cut. In the first case, the racer may make a visit to the Black Flag station, while in the latter cases the racer may incur time or lap penalties, or get disqualified.

When T&S manually scores a racer, T&S focuses on correct placement of the racer in the running order (track position) and not the actual lap time of the racer. In fact, T&S can place a manually scored racer in the computerized running order after the race completes. Placing a competitor in the running order after the race might occur when a transponder fails during a race. By reviewing the paper tape recorded by the volunteer taping staff, T&S can insert the failed transponder in the proper running order for every lap. Paramount to T&S is the proper placement of the manually scored racer in the proper on-track running order, between the

correct cars on each lap. However, placing the manually scored racer in the proper on-track running order does not take into account the time gaps between the cars ahead or behind the manually scored racer.

For example, a paper tape may show the running order of three cars crossing the Start/Finish line as #14, #25, and #36. What the paper tape does not show is whether #25 was on the rear bumper of #14, or if #25 is 30-seconds behind #14 as the cars crossed the Start/Finish line. When manually scoring #25, T&S ensures that the #25 gets placed between the #14 and #36 cars. This manual scoring makes no reference to the actual time when the racer crosses over the timing loop at the Start/Finish line, nor the time lag behind #14 or the time lead over #36. As a result, the lap times for a manually scored lap can appear impossible for the driver, as the distance between the car ahead and behind change. The relative placement of the manually scored racer remains correct in running order each lap, but the gap between the competitors does not necessarily reflect actual time gaps on the track. However, the actual running order, and thus the finish order remain preserved.

An extreme example of manual scoring combined with a (virtual but acceptable) track short-cut occurred this year at the Club Race at Heartland Park. At the April 2006 Heartland Park race, pit road did not have a computerized scoring loop. Thus, T&S had to manually score every driver that exited pit road. As you know, laps get recorded at the Start/Finish line. However, T&S was located about 1,000 yards down the track from the physical Start/Finish line and thus T&S had a 'delayed' view of cars exiting pit road. Since T&S did not have a visual line of sight to where the Start/Finish line crossed pit road, and had to manually score racers as they exited pit road about 1,000 yards after the racer crossed the Start/Finish line, lap times manually scored as racers exited pit road were delayed, or increased for the lap where the competitor entered pit road. Likewise, the lap where the competitor exited the pit became shortened. Thus, from a scoring perspective, the racers exiting pit road effectively

Continued on Page 10...







'short-cut' the front straight on the racer's pit exit lap - the manually scored lap. Each racer's exit lap time reflected a lap about 1,000 yards shorter than the track and thus listed an "impossible" lap time for many racers (depending upon traffic). These impossible lap times become most evident to the racers after the Enduro, a race where all racers made trips down pit road for the mandatory pit stop. The time to travel the front straight got recorded twice on the previous lap where the competitor entered pit road, and traveled parallel to the front straight.

To provide the racers with timely finish order results, the impossible lap times remained on the paper results sheets distributed at the track. Days after the Heartland race, when racers no longer lined up to receive result sheets and trophies, the race results were corrected to remove any manually scored fastest lap times recorded as a consequence the short-cut pit exit lap. Each racer received credit for the fastest lap the racer actually recorded during the race, without the front straight short-cut, and without manual scoring intervention. These "driver-earned" fastest laps appear published on MyLaps.com and the PCA Club Race results page. Likewise, only

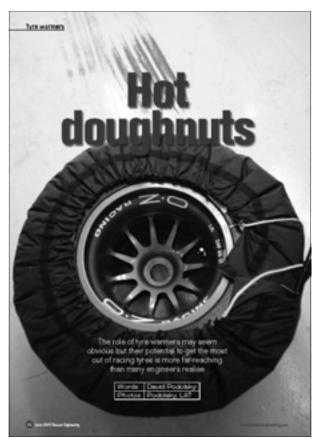
driver-earned fastest laps appear as part of the track records, not laps that include any possible error introduced by manual scoring.



Hot doughnuts...

By: David Podolsky of Chicken Hawk Racing

The three pages that follow are a paid advertisement and are being published in conjunction with the ad below. These pages are a reprint of an article found in the June 2006 issue of Racecar Engineering magazine. Chicken Hawk Racing will be visiting various PCA Club Racing events during 2007. Give the article a read, and feel free to call David Podolsky of Chicken Hawk Racing should you have any questions. (866) HOT-TIRE.





t's fair to say, most race teams would prefer the optimal racecar set-up and the best set of working tyres out on the track to a few per cent of extra horsepower. Set up and grip allow the car to be driven with confidence, remain stable into and through the corners, with a good drive down the next straight. This makes fast laps and happy racers.

Sometimes it can seem that with the myriad options available regarding camber, toe, balance and suspension settings, teams tend to focus on these settings and feel that the tyres are what they are. When it comes to working with tyres, there are usually only a few compound choices available from the supplier suitable for the track and conditions, along with selecting a tyre pressure. Don't despair though, there are still a few things you can do to influence your tyres' performance.

One way to 'manage' tyres and get better use of your available track time is to utilise tyre warmers to their full ability. The following is a review of the ways to work with tyre warmers that could assist your racing efforts.

Going quick from the out lap

The first and most obvious use of tyre warmers is to get the tyres up to operating temperature prior to heading out of the pit. Even on hot days tyres are far below optimum temperature for grip and it will take some time circulating on the track to get the tyres into their operating range. Most race tyres work best at carcass temperatures between 75-100degC (167-212degF), depending on the compound. When the weather and track surfaces are cold the

44 BETTER USE OF PRACTICE SESSIONS OR OFF-SEASON TESTING #

amount of time required to get the tyre 'up to temperature' can take additional laps. Being able to drive at full pace right away makes better use of practice sessions or off-season testing, which is often done in cooler weather. It also saves valuable time on the engine.

Sometimes teams think of this function as the only benefit a tyre warmer affords, but there are more subtle and equally important gains to be had.

Hot pressure

All teams are concerned with competing with the proper hot tyre pressure when out on the circuit. As tyres heat up to operating temperature on the track, the pressure of the tyres increases as well. Depending on the



Tyre warmers also prevent tyres from cold cycling during practice, prolonging tyre life and maximising a team's time at race speed. They also help avoid rapid heat shock which can be detrimental to the tyres' chemical composition







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type of motorsport they are being used for, the increase can be between 15 and 50 per cent of the cold settings, which is significant in the performance and handling of the tyre.

The tyre is the first 'damper', or suspension component, to begin working, as it is in direct contact with the track surface. A tyre at its proper hot pressure will work the suspension properly. The tyre will be stiffer as the cords and belts are under more tension and, when loaded, this results in additional grip. For the tyre to perform as desired under braking, cornering and acceleration, having the hot pressure correct is essential. Hot pressures can be set more accurately by using nitrogen in place of air and by using tyre-drying equipment. These measures ensure the gas in the tyre is as dry as possible and are performed to reduce the amount of pressure increase, making predicting the eventual hot pressure more reliable

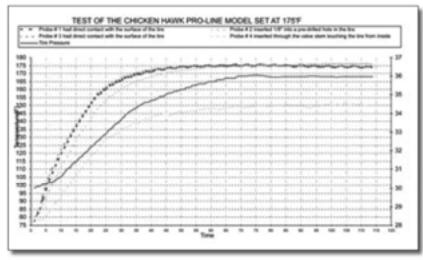
Utilising tyre warmers in the pits is one way to assist in this set-up. A proper tyre warmer not only heats the surface of the rubber, but 'heat soaks' the tyre carcass, resulting in a stable tyre which will not vary once it hits the track. Let's just state that again for clarity - if a tyre warmer is used properly to set the carcass temperature to

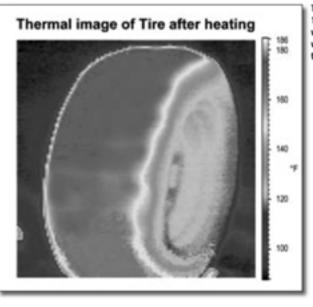
46 A TYRE AT ITS PROPER HOT PRESSURE WILL WORK THE SUSPENSION PROPERLY

match the temperature which will be achieved on the race track, there will be no pressure rise once the car goes out onto the track.

The correct method is to log tyre temperatures using a probe (infrared devices only check superficial tyre temperatures) after each track session and note the hot pressures as well. Remember, ambient air and track surface temperatures will affect this, so be aware that early morning practice will not create the same increase as in the warmer afternoon session or during a race.

If, for example, the tyre were working well at 8odegC (176degF) and a hot pressure of 36psi, you'd want to recreate that condition as close as possible in the pits prior to heading out onto the track. The graph in figure I (above right) shows not only that the surface temperature has come up to optimal, but also that the carcass is heat soaked, duplicating the difference in surface and carcass temperatures seen when the tyre comes off the track. In this way the tyre is stable. Be it three laps composition. Putting the tyre through these or 30, the temperature and pressure remain constant, but only if you've correctly predicted the hot temperature the tyre will actually achieve during the event.





The warmer was using a 175 degree set point and was on for 50 minutes. It was then removed and the thermal image taken

Saving heat cycles

From seat-of-the-pants experience, drivers know that after heating a tyre on the track and then allowing it to cool in the pits, it will lose grip. Not unlike cookies removed from the oven to cool, it is during this cooling process that tyres harden. Tyres are amazingly complex, both mechanically and chemically, so I will not try to take the position of the tyre engineer, but will simply describe the effect and the benefits to be had. As tyres cool, a change occurs that can be seen, measured and felt. On some tyres you can actually see a blue haze form over the tyre as some 'oils' migrate to the surface and oxidation occurs, whilst on others one might observe a drier, grayish haze - it all depends on individual tyre hot-to-cold cycles reduces grip, hardens the rubber and reduces its useful life.

A tyre warmer can keep tyres hot, or simply warm, between track sessions and reduce the

amount of heat cycles a tyre goes through. If the tyre is to see more than one track session it makes sense not to allow that tyre to cool all the way to ambient. This can extend how many sessions the tyre can perform at near maximum grip, therefore increasing the tyre's grip life.

Many professional teams utilising tyre warmers change the temperature set point to about 55degC (ryidegF) if there will be an extended period of time between track sessions. Then, 30 minutes prior to the track session the tyre can be brought back up to operating temperature again. In the USA, the Pro Toyota Atlantic series limits the number of tyres each team is allocated for a season in an effort to reduce the costs incurred. This allocation limit inspired at least one of the top teams to utilise tyre warmers during its private testing sessions. After an enviable season it attributed much of its success to the fact that it made full use of the available track time by starting out with hot tyres that were already

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up to race pressure, therefore avoiding wasting time. It also claimed to be able to get much more use out of its tyre allotment by saving heat cycles between sessions. The effect was to get more valuable testing done than competitors with the same amount of tyres. In addition to increasing valuable test data, a reduction of costs was achieved by limiting wear on other components of the racecar.

Extending grip life

When a tyre hardens from going through heat cycles, some changes are happening to the tyre on a molecular level. The same is true of heating a tyre. Depending on the circuit, vehicle, driver, conditions and type of tyre, the tyre surface can be at temperatures upwards of 175degC (347degF). The tyre will be heated due to the abrasion, deformation and hysteresis of the tyre that occurs during driving, and can be at operating temperature in only a few laps, or as little as three to five minutes.

This rapid heating seems to 'heat shock' the tyre and, during this process, molecular changes occur within the chemical composition of the tyre. These chemicals, which are the 'lifeblood' of the tyre, are released quickly but are also wasted if spent too quickly when heating up the tyres on the track[The term 'lifeblood' is an effort to describe the various chemicals, additives, elastomers, long-link carbon molecules and other components tyre companies use in the process of manufacturing racing rubberl.

This 'feeling' can actually be sensed by professional drivers on the track, who may feel the tyre is at operating temperature, only to realise a few corners later that this rapidly heated, high temperature rubber has been scrubbed off. This is why getting the tyre to full, hot pressure and stable carcass

temperature takes longer than just getting the surface hot.

When tyres are heated with tyre warmers, this sensation is not present and testing has found the grip life of the tyre is extended. Examining the graph in figure 1 you can see how slowly the tyre is brought up to operating temperature on a tyre warmer. The result is that the lifeblood of the tyre is not spent so quickly and grip life is improved.

Safety

Experienced drivers know to take the first few laps on new rubber with caution to get their tyres to operating temperature on the track safely. However, there are those situations where either a lapse of concentration or excessive emotion can take over and an off-track incident due to cold tyres occurs. This can be dangerous to both the

44 A STABLE TYRE WILL NOT VARY ONCE IT HITS THE TRACK #

driver and the racecar. High horsepower vehicles that are also very light can be especially prone to the cold tyre incident but, in almost all cases, it is necessary to 'work' racing tyres first to generate heat.

Racing is also a business though and seeks to have more events each season. This tends to extend the racing season into cooler months of the year where temperatures become more of an issue. Yet in the USA, many professional race series ban the use of tyre warmers, and it can regularly be observed that when cars return to the racetrack with cold tyres after pit stops drivers need to either employ blocking



Formula 1 teams have long been convinced of the benefits of tyre warmers, like Honda at the Malaysian EP

tactics or risk some daring moments sliding on cold tyres, while they wait for their tyres to come up to temperature and to hot pressure. Not only can this be dangerous - with several serious incidents having been attributed to cold tyres - it makes for a less exciting event when cautious drivers choose to use the blocking tactic.

Tuning with compounds

Should a team have a choice of compounds or race in the rain, tyre warmers can be set for the varying conditions. Rain tyres, even though engineered to work well at low temperatures, still experience an increase in both temperature and pressure during use. I have personally seen MotoGP teams use the standard dry tyre temperature of 8 odegC (176degF) on rain tyres, although their own tyre engineer and our experience shows that 55degC (131degF) is enough to get the tyre in the area of correct operating temperature and pressure. This provides first lap confidence and grip even in the wet.

As for dry compound choices, the tyre warmers can open up some further options. For example, a driver may be torn between two compounds, tempted to use a softer one for the grip in the early laps, but concerned it may not make the race distance. By using tyre warmers (perhaps even at a slightly higher than standard temperature ie 90degC or 194degF) the harder of the two choices can be used so that less of a disadvantage is present during the opening laps and the tyre will last the entire session.

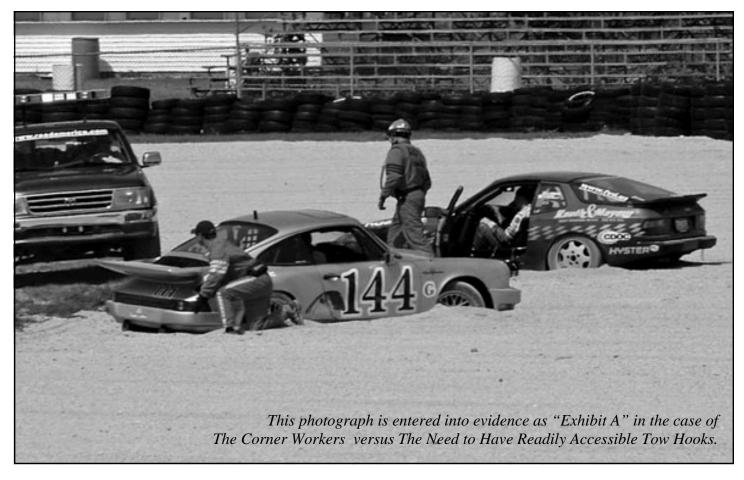
For those experienced with tyre warmers, these issues probably seem like a review of the obvious but the purpose of this overview is to highlight some possibilities of how to manage your race tyres better. One thing that is important to remember is that tyres, once sold to the team, can still be influenced by your use and mis-use of them. If you are not already paying careful attention to cold and hot pressures, cold and hot temperatures, tyre graining and wear patterns, in addition to the standard information on compound and lap times, then start now.

A brand new tyre, if made without defect, is just ready for your input. It is up to you how to store it, pre-heat it, inflate it, drive on it and decide when to allow it to cool down. Moving forward during testing sessions and races begins in the paddock and the treatment of your tyres is one of the most important areas to focus your attention on.

■ David Podolsky founded Chicken Hawk Racing Tyre Warmers (see www. chickenhawkracing.com)



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Club Racing News

By: Andy Jones, CRN Editor

The *Club Racing News* will be going through some minor changes in 2007. One of the changes will be that we will change to a four issue per year format. Thus, the deadlines to submit materials to the *Club Racing News* will be as follows:

February 1st May 1st August 1st November 1st

The aim is to have each issue in your mailbox within about one month of the deadline for submissions. Thus, around March 1st, club racers should see the next issue of the *Club Racing News* arrive in their mailbox.

Specifications for advertising in the *Club Racing News* have essentially remained the same, with the exception that you can advertise four times per year instead of six. It is also noteworthy to mention that text classifieds remain free of charge, while ads with

photographs are a pre-paid venture. And, in keeping with tradition, classified ads are limited to vehicles and trailers.

If you have any questions about advertising in the *Club Racing News*, simply drop me a line or give me a call. Please understand that it may take a couple of days to get back to you as there are times when I am out in the woods or rural areas on a work assignment and may not have access to cell phone coverage, land line coverage, running water, human contact, etc. Believe it or not, there is actually a county in Northern California (the real Nor Cal) that is 3,208 square miles in size and does not have a single stop light. It's not too far from Redding, California. It's a great place to hide.

I appreciate your support and feedback. And whoever sent me the Porsche GT1 models over the holidays, all I can say is, "Thanks!" The models now reside in my office by the Autocourse collection.













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Sponsorship Corner

By: Steve Rashbaum, Sponsor Coordinator

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Werks II Motorsport was established in 1980 in Burbank, California by Galen Bieker. Galen has been a Porsche enthusiast since the late 1960's when he began work in the Porsche business with his father at Bieker Engineering. Galen is a well-known racer with PCA, SCCA and the IMSA GT3 Cup Series and he's been an active member of PCA for over twenty-five years. Galen and his staff provide customer support and participate in many PCA racing events throughout the country. If at the event, we may be available for comment.

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Porsches at Miller Motorsport Park. More information to follow in the next issue. Photo by Chase Birks.





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2007 Club Racing Calendar

Dete	Event	Davis	Contact
<u>Date</u>	Event	Region	Contact
Feb 9/10/11	Sebring International Raceway*	Gold/Sun Coast	Nick Hrycaj 941.697.4621
Mar 10/11	Barber Motorsports Park	Alabama	sebringclubrace@yahoo.com Bill Mitchell 205.251.9263
			eas930@bellsouth.net
Mar 16/17/18	Texas World Speedway*	Lone Star/Hill County	Jim Troxel 713.529.7050 geotrox@aol.com
Mar 30/31 Apr 1	California Speedway*	Zone 8	Vince Knauf 619.287.4334
Mar 30/31 Apr 1	Road Atlanta*	Peachstate	vvvince@aol.com Steve Taft 770.591.1857
			clubrace07@peachstatepca.org
Apr 21/22	Heartland Park Topeka*	Kansas City	Sean Reardon 785.766.7585
			sean@reardonunlimited.com
Apri 27/28	Lime Rock Park*	Conn Valley	Lisa Musante 860.742.6054
10/00			lpmusante@aol.com
May 18/20	Mid Ohio Sports Car Course*	Mid Ohio	Dick Snyder 740.775.3477
15 26/20	M. G. D. L.		dicksnyder@adelphia.net
May 26/28	MotorSport Ranch*	Maverick	John Sandusky 817.777.0421
I 1/2	n C n		clubrace@mavpca.org
June 1/3	Rose Cup Races at	Oregon	Steve Haywood 425/830-5540
	Portland International Raceway	The state of the s	steve_haywood@hotmail.com
June 1/3	Watkins Glen International*	Zone One	Pete Tremper 856.881.7049
June 1/3	watkins Glen International	Zone One	tremper 9146@aol.com
Jun 2/3	Motorsport Park Hastings*	Great Plains	Dave Nelson 402.614.2368
Juli 2/3	Motorsport Fark Hastings	Great Frams	dn15012@cox.net
July 7/8	Gingerman Raceway*	SE Michigan	Gary Ambrus 734.558.7810
July 770	Gingerman Raceway	SE Michigan	gla924sem@juno.com
July 21/22	Putnam Park Road Course	OhioValley	Rich Rosenberg 513.530.9090
July 21/22	Tutham Tark Road Course	Olilo valley	RJROL@aol.com
Jul 27/28/29	Mosport International Raceway*	Upper Canada	Susan Davis 313.506.5659
To a second			spdavis911@msn.com
Aug 4/5	Brainerd International*	Nord Stern	Roger Johnson 763.557.9578
			Rsamerica93@comcast.net
Sep 1/3	Road America*	Chicago	Keith Clark 630.690.3381
			kc_design@sbcglobal.net
Oct 5/6/7	Summit Point*	Potomac	Beth Orletsky 703.229.2347
			clubrace@pcapotomac.org
Sep 15/16	Pueblo Motorsports Park	Rocky Mtn	Kathy Fricke 303.499.6540
			katfricke@msn.com
Sep 29/30	Blackhawk Farms Raceway*	Milwaukee	John Fried 414.453.8653
			clubrace@porschepark.org
Sep 29/30	Miller Motorsports Park*	InterMountain	Mark Boschert 801.596.8245
			mboschert1@comcast.net
Oct 12/13/14	Daytona International Speedway*	Florida Citrus/Florida Crown	Dave Rodenroth 904.251.9552
		~	racer914@earthlink.net
Oct 13/14	Hallett Motor Racing Circuit	Cimarron	Gary Bernard 918.254.1104
N 10/10	AM D	16 11 6	gary@bernarddesign.com
Nov 18/19	NP Raceway*	Mardi Gras	Paul Tellarico 318.487.9874
Dec 1/2	Doobling Dood	Elonido Croven	ptellarico@nbalawfirm.com
Dec 1/2	Roebling Road	Florida Crown	Bob Linville 614.834.2047 cblinville@earthlink.net
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Porsches at Miller Motorsport Park. Photo by Chase Birks.

The Classifieds

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1974 914-6 GT: Current PCA DE car, former stock PCA/vintage race car; recently rebuilt 3.2L Euro Carerra and 901 side shifter with separate remote oil coolers; 930 Turbo brakes, 23mm master, all new rotors and Hawk blue pads; extensive suspension upgrades; custom welded roll cage; fuel cell;\$25,000 OBO; photos and detailed complete spec sheet available from: vanordensc@verizon.net

1970 Porsche 914/6, #9140432646, stock race/ street, Engine rebuilt w/10 hrs total; short & std box, Bremtek brakes, MSD, cage, Schroth belts, zero rust, spares pkg. w/deck lid, rocker panels, spoiler, brakes. \$28k/complete: 12 wheels, 2 trans, Alan Benjamin, P: (303) 996-8114

1973 RSR look alike - GT4R, 1,970 lbs., 6 events on motor - 2.8 early alum case, Haltech inj, Schrick cams, extra wheels, new fuel cell, 3 nozzle fire, MSD, Bremtek, Quaife, full cage, C/F wing, spares, logbooks & open trailer. Photos avail. \$40,000. Gary McNair, Napa, CA . 707 252 2363. gmtrackman@sbcglobal.net

1988, 911 Carrera, F Class, SILVER, Race Car: Race ready with PCA Log Book, street licensed. Engine/transaxle and pre and post race work by Pat Williams Racing. 5 sets of wheels & tires. Multiple race specific mods including suspension. Original street parts included with race related spares. \$33,000 Specification details contact Bays, at (901) 359-6542, erace@bellsouth.net or patwilliamsracing.com

1983 944 COUPE SILVER/ BLACK WPOAA0940EN451334, Pro Built I Class, 1987 2.7 0 hours, Accusump, Koni Coilovers/ Eibach, Turbo Spoiler with Custom Ducts, Custom Cage with Door Bars, Quick Release Momo, Autometer Gauges, Fire System, Transpower Seats, SS LInes, Bushings, KM Camber. None Better \$16,000. OB Chick 2155 Coker Ave. Charleston SC 29412 (843)795-7437 USDRCTRS@AOL.COM 1994 GT1R/S Race Car 964 Turbo chassis, less than 12K miles on chassis.Fresh 3.6 turbo twin plug engine w/ zero hours, (originally built by TPC). 500 rw/hp @ .9 bar boost (dyno sheets available). Motronic DME. 2600lbs w/ ability to remove more weight. NASCAR style cage. JRZs dbl adjustable shocks/struts and ERP spherical bearings and camber plates. 6-speed trans w/ GT2 gears and diffs. 27 gal Fuel Safe cell, carbon wing,Big Red brakes. 335s/275s on Kinesis wheels, Fire suppression system, 1:19 @ Summit Point, 1:17 w/slicks PCA and SCCA log books. Ready to race out of the box \$65,000/OBO. Open trailer w/electric and manual winch (excellent condition) available also. Call Ken Maynor 410-461-4756 or ken.maynor@intel.com for more info and pics.

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1977 EURO 930 Turbo Coupe. PCA CR Prepared Stock Class D or DE and street legal! Podium 2:36 at TRAC, 2,650 lbs., no sunroof. FAB-SON AG engine overhaul 6 hours. Safety Device cage, fuel cell, Quaife, crank-fire, larger '85 turbo brakes, carbon fiber adjustable low drag rear wing. Kevlar and carbon fiber high down force front end with twin oil coolers and 4 brake cooling tubes. Recaro FIA seat, lateral head support. \$29,750. dmatre@wi.rr.com 414-774-2264

1987 930 Turbo Racecar: POC & PCA race ready. Very fast, very clean. 3.4 liter turbo built by 911 Design; Motec M48 engine management; JRZ suspension set up by GAS Motorsport; 2 sets of17" BBS wheels; 27 gal Fuel safe cell; gears, cams, headers; full cage; \$49,000 firm; Contact Jeff Melnik: 805-895-7000 or email: summbeach@aol.com

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1988 944 Turbo S Race Car: Big Reds, Charlie Arms and caster blocks, new top end, hoses, seals and airlines replaced, 17in Fikse FM/10's, 944S2 ring and pinion, suspension points are Delray bushings, Porsche Motorsport suspension, camber adjustments, rear coil overs, additional oil cooler, helmet cooling system, fiberglass intercooler intake and rear European style bumper and much 35K Todd 407-342-0259 or tfosnow@cfl.rr.com

1970 911 Race Car GT4R, w/935 Glass, Fresh 2.7L, 290HP, 901 Trans w/Quaife, Coil Over, Fuel Cell, 10s & 12s, Complete Restoration w/New Roll Cage, w/20' Enclosed Trailer. IMSA, PCA, POC. \$35K Dennis Tholen at dltholen@charter.net 775-972-3257

1969, 911T-Porsche, Full fiberglass 1974 RSR body. PCA-GT4, CVAR, SCCA GT2 orig. logbook from '79, New white/blue paint, 2.8L engine w/only10hrs, w/linebore/shuffle pin, permatune, rev-limiter, carrillo, 46 webers, 930 brakes, coilovers, ATL, aero-quip, fire sys, full cage tied to suspension, 2030 lbs, '74 fiberglass, \$19k David Beauregard, 15622 Sunfish Dr., Willis, TX. 77318, 936-890-8470 (wk),

david@professionalbakeware.com

2002 911 GT3 Cup. Competitive ex Farnbarcher/ Infineon cup car. Race the car that Marco Werner drove to victory in worldwide Michelin Cup races in 2002. Fast, dependable & hot looking in original race trim. Car is updated to 2003/2004 specs with adjustable shocks, new gearbox & clutch, new exhaust, cool suit, race video, brake cooling ducts, etc. Motor is strong. It is a Porsche sealed Cup engine new in 2002 AFTER the series ended. No races on engine. sets wheels, rains, wand, transport hubs incl. \$92,000 obo. Jeffrey Freeman 206.419.7037

1993 RS America 1993 RS America, 27K mi; C Class w/ log book, excellent condition; strong, fast, reliable. All receipts from 1999-2000 race prep. Maintained flawlessly by EPE. Full custom welded cage, Bilstein RSR suspension, Brake upgrades with SS lines, B&B headers, RS motor mounts, 2 Recaro SPG seats, Steel synchros, 3.8 RSR Carbon Fibre/fiberglass wing. \$48,000 obo. For more details and pics; Bruce Hauben; 978.952.8517 or

bmh993@porschenet.com

1987 944 Turbo Cup racecar. Built by Porsche Motorsports in Weissach for Escort series racing Maintained and updated by Steinel's Autowerks in Twinsburg, Ohio. Many safety and performance mods. Many race wins in SCCA-ITE and PCA-GT3. Safety, reliability, performance, and collectibility - this car is the real thing. SCCA and PCA logbooks. 2 sets Fikse wheels, 1 set BBS wheels. \$31,900. Don Velcio 440-886-1660.

1994 968 Street Legal PCA class F stock racer: Midnight Blue, 85k mi \$16.5k. Bodymotion improved and mnt: Quaiff differential, camber plates, solid torsion bars, Bilstein coil-overs, aluminum sway bars, A-arms, and associated steering components, a pair of 5 point harnesses & OMB carbon fiber racing seats, weld-in chrome-moly custom fit roll cage; pinion gear replaced; Includes additional set of wheels, orig seats, bra, car cover, radio. Add a Jeep Grand Cherokee Orvis edition and steel trailer for only \$8k more – an entire track package. 2001 GT3 Turbo Cup Car (GT1R class) for sale. 2001 Kadach Cup car, converted by DeMan Motorsports to twin turbo GT1 style engine. Very fast, upgraded brakes, 996tt intercoolers / plumbing / rear bodywork, hybrid turbos, Haltech EFI, engine data logging. 1.25's at Mosport Zero hour complete engine rebuild by Reiser Technik, now ready to go. Approx 5 hours on trans rebuild. \$120k OBO / interesting trades considered. Some spares available only with car. Competitive in GT1R for overall wins. Featherlite 20' enclosed trailer with nitrogen setup & tire rack available. Would separate car from engine for the right offer. Email issullivan@stny.rr.com or jmreiser@frontiernet.net

1973 RSR look alike - GT4R, 1,970 lbs., 6 events on motor - 2.8 early alum case, Haltech inj, Schrick cams, extra wheels, new fuel cell, 3 nozzle fire, MSD, Bremtek, Quaife,full cage, C/F wing, spares, logbooks & open trailer. Photos avail. \$38,000. Gary McNair, Napa, CA . 707 252 2363. gmtrackman@sbcglobal.net

1973 911 with GT-2 wide body kit and wing. 2.7L 250 HP engine; elgin mod S cams; dual carburetors; turbo brakes; 2.7 lt case with time certs and race head studs, Carrera suspension; bilstein shocks; adjustable sway bars, full cage, G-50 combination transmission; front mounted oil cooler. Weighs approximately 2100 lbs. Built and maintained by RPM. Minimal hours driven. Please contact Mark for more information: msilverman@steptoe.com, 202-429-6450.

1974 RSR Replica built on '86 chassis 2.8L, 915 transaxle, ready to race or be shown. Many new parts including; fuel pump, Wevo shift, 27 gal. FuelSafe, Dual Fluidyne coolers, Aeroquip fuel/oil lines, wheel bearings/ hubs, fire system, serviceable dash, pull cable throttle, composite body panels, (2) sets BBS wheels/Yoko slicks, detachable steering wheel, dual mastercyl, cockpit adj. brake bias, Recaro Hans seat, Willans belts, dyno'd 8100 Penskes, quality wiring harness, \$90,000.00 USDContact: Chris Musante 860-291-9415

chris@musantemotorsports.com

Classified Advertising Classified ads are free to Club Racing members. There is a 60-word limit per ad. Ads may be subject to editing and abbreviation per the requirements of available space. Ads with pictures are being accepted at a prepaid price of \$30 for two issues. (Larger ads can be purchased at our regular advertising rates.) Ads will run for two issues unless renewed, or the notification of sale is received. Submit ads to the CRN editor via mail or email. (Andy Jones, PO Box 990447, Redding, California 96099-0447; clubracing@jps.net) Ads are limited to vehicles and trailers. We do not accept business related ads in the classifieds. Advertisements for parts and accessories will be respectfully refused.

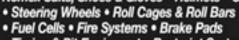


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