

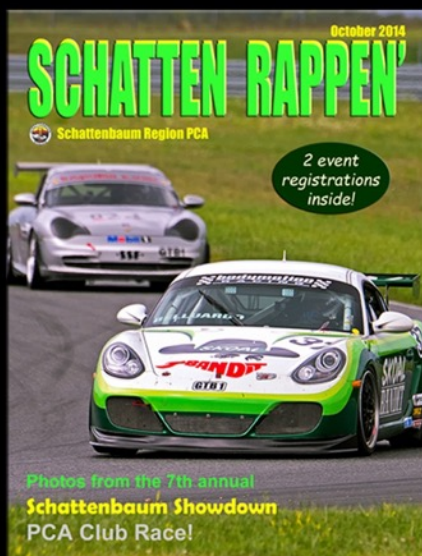
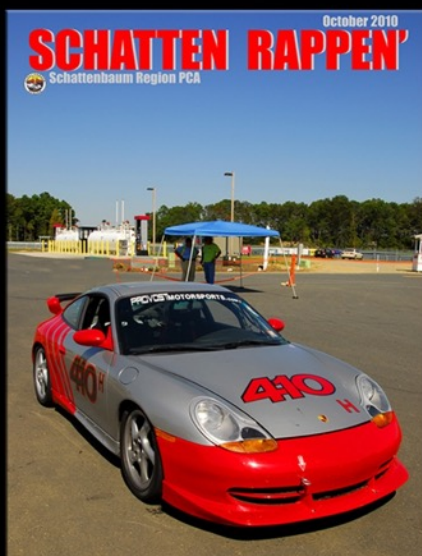
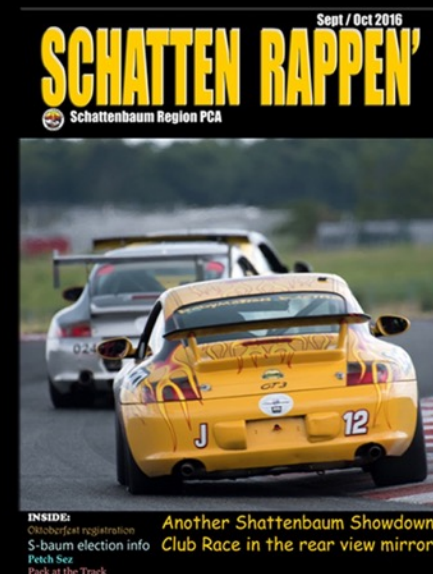
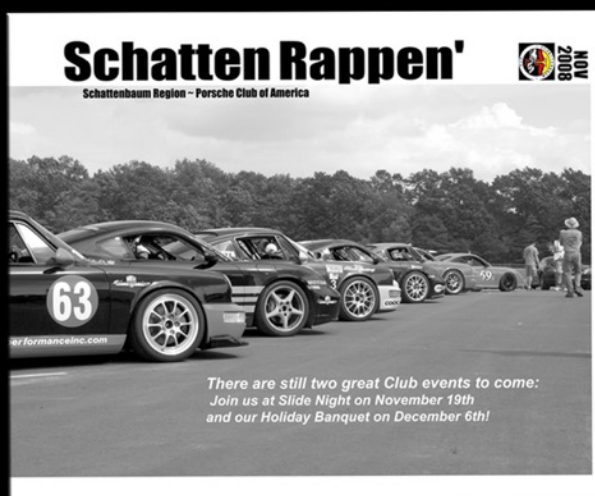
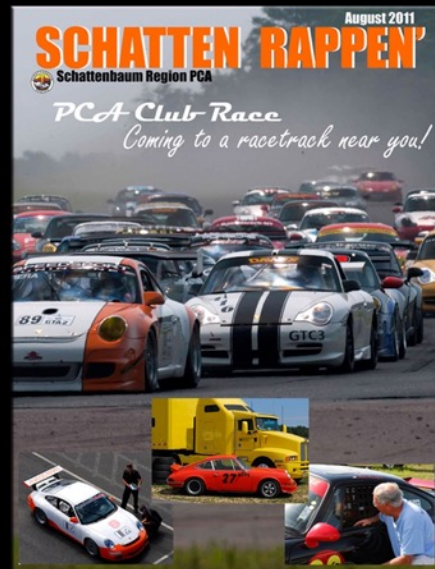
Sept / Oct 2017

SCHATTEN RAPPEN'

Schattenbaum Region PCA



The first
10 years of
Schattenbaum
PCA
Club Racing



Leadership Directory

President

Jack Fowler pres@schattenbaum.org

Vice President

Mike Bono vp@schattenbaum.org

Treasurer

Rob Lerman treasurer@schattenbaum.org

Secretary

Bob Stine secretary@schattenbaum.org

Section Chairs

Autocross

Robbie Provost autocross@schattenbaum.org

Concours

Mike Sokoloff concours@schattenbaum.org

Drivers Education/Chief Instructor

Pete Tremper ci@schattenbaum.org

Drivers Education Registrar

Jon Schepps registrar@schattenbaum.org

Dealer Relations

Dan Petchel track@schattenbaum.org

Goodie Store

John Beidler goodiestore@schattenbaum.org

Membership

Scott G. Crawford membership@schattenbaum.org

Newsletter Editor

Dan Merton newsletter@schattenbaum.org
Byron Veale (*Associate Editor*)

Programs

Mike Bono programs@schattenbaum.org

Social Events

Claudia Debusmann social@schattenbaum.org

Tech Support

Robbie Provost techsupport@schattenbaum.org

Tourmaster

Andres Kriete tour@schattenbaum.org

Track Chair

Dan Petchel track@schattenbaum.org

Track Safety

John Beidler tracksafety@schattenbaum.org

Webmaster

Bill Coulter webmaster@schattenbaum.org

In this Issue

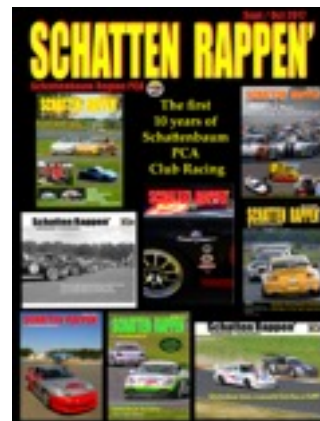
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On the Cover

Celebrating ten years of *Schattenbaum Showdowns* with some of the Club Race themed covers of *Schatten Rappen'* created over the past decade.

Articles and photos are always welcome — send to:
newsletter@schattenbaum.org

Current and past issues of *Schatten Rappen'* are available on the website:
www.schattenbaum.org



Schatten Rappen' is the official newsletter of Schattenbaum Region, Porsche Club of America ("the Club"). Articles published herein are the opinions of the authors and not necessarily shared by the Club or its officers. The Editor reserves the right to edit all materials prior to publication. The Club, its officers, contributors and the Editor do not accept legal responsibility for any errors or omissions that may be made in this publication. Porsche®, the Porsche Crest®, CARRERA® and TARGA® are trademarks of Porsche AG. Contact the Editor for advertising rates and information or visit the website: www.schattenbaum.org. Advertisements in this newsletter do not constitute an endorsement by the Club or its officers.

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Monthly Meetings

September Meeting: Le Mans 2017 Highlights

When: Wednesday, September 20th, 7:00 pm.

Where: Bung's Tavern.

Our guest speaker for our September 20th meeting will be Larry Schmidt. Larry, a long-time Schattenbaum member and avid race photographer, will provide a presentation on the 2017 24 Hours of Le Mans.

Larry will describe the logistics of getting to the race, how to best spectate the race, and the many activities in the days leading up to it. Larry will share short videos and lots of fabulous photos of the race, and things that happen when 258,000 race fans converge on the city of Le Mans. There will be a short quiz afterward with a nice prize for the winner.

We'll be serving complementary pizza and beer.



Larry Schmidt photo



Porsche Media Central photo

October Meeting: Oktoberfest

When: Sunday, October 22nd, 5:30 pm.

Where: Sebastian's Schnitzelhaus

43 Fort Dix St. (Rt.545), Wrightstown, NJ

609-724-9609

Join us at our annual Oktoberfest to enjoy authentic German food and beer with fellow Schattenbaumers.

See the promo in this issue and/or schattenbaum.org for more details!

Schattenbaum's 2017 Drivers Ed Events

Date:	Track:
October 12-13	NJMP: Thursday @ Thunderbolt, Friday @ Lightning
November 4-5	NJMP: Thunderbolt
Registration is open for all events. For more details, visit schattenbaum.org .	

New Members for July 2017

Name	Date Joined	Town	Porsche Year & Model
Randy Franzen	July 3rd	Woodstown, NJ	2004 911
Tucker Brown	July 13th	Pennington, NJ	1996 911
Joshua Leonard	July 17th	Cinnaminson, NJ	2009 Cayman S
Lee Bowers	July 21st	North Wildwood, NJ	2005 Boxster
Richard Weiss <i>(transferred in)</i>	July 26th	Cape May Court House, NJ	1996 911, 2006 Cayenne S

Member Milestones

Name	Anniversary	Town	Porsche Year & Model
Mark Nachmias	5th	Moorestown, NJ	2012 911 Turbo S
Adam Nachmias	5th	Moorestown, NJ	(family member)
Utpal Shah	5th	Plainsboro, NJ	2008 911 Carrera 4S
Ryan Wells	5th	Vineland, NJ	2012 Cayman R
Stacey Wells	5th	Vineland, NJ	(family member)

Are You Up to Date?

Schattenbaum relies on the data that you provide to PCA National to keep in contact.

Please be sure your email and mailing addresses are up to date! Just visit www.pca.org

Old Glory Detailing and PDR
Detailing and Paintless Dent Repair at your location!
609-433-6532
www.oldglorydetailingPDR.com

Mobile service - we come to you!

Paintless Dent Repair

Washing, Polishing, Waxing

Interior Cleaning and Shampooing

Join us...

Our Monthly Meetings are held at Bung's Tavern, 2031 Rt. 130 S, Burlington, NJ. We usually gather for snacks and cocktails at 6:30 pm, and the meetings start at 7:00 pm.

For driving directions, go to: bungstavern.net/

Contact VP and Program Chair Mike Bono if you have an idea for a Monthly Meeting or other event: vp@schattenbaum.org

From the President

Jack Fowler, President

The Schattenbaum Past President Series

Bob Helm: Schattenbaum President, 1976

I started thinking one day about the history of Schattenbaum and wondering what all the previous years were like, and as a result, I became curious to learn more about the past Presidents. I especially wondered where they are today and what they might be doing. I wondered what challenges the Club may have had in its early years compared to the challenges of today. When I thought more about it, I realized that I wasn't even legal to drive until 1977, four years after the founding of the Schattenbaum Region PCA! So, I thought it would be really interesting to hear from some of the Schattenbaum presidents and share with you some of the discussions I have had with past Presidents. I hope you enjoy them as much as I enjoyed speaking with former Club Presidents. I learned a lot about them and about Schattenbaum!

PCA got its start back in 1955, but Schattenbaum Region wasn't founded until 1973. Three years later, in 1976, the Schattenbaum president was someone many of you know very well. Today, we know him as our insurance chair and club photographer, but some of you may not be aware that he was one of the first Presidents of Schattenbaum – his name is Bob Helm! Bob is always ready to lend a hand and has a wealth of knowledge about the history of tracks, drivers and cars – both in Schattenbaum, but also around the world. Even now, Bob can be found traveling the US going to track events taking photographs. I personally love listening to Bob talk annually at our November monthly meeting when we ask our members to share photos. Bob always has some great photos, including some older ones that always come with a great story of the people, cars, and race tracks.

Here are some interesting tidbits I learned from Bob when he was at the “Helm” of Schattenbaum. First, there were around 100-125 Schattenbaum members (today we have around 470 members). Back in 1976 the price of gas was 61 cents for the national average, which



Jack Fowler photo

From the President *(continued)*

meant filling up your Porsche was a lot cheaper back then! Jimmy Carter was the US President, and the Pittsburgh Steelers won the Super Bowl. And maybe a little more relevant, Cherry Hill Porsche was known as Willis Porsche. I asked Bob about his first Porsche, and believe it or not, he bought his first Porsche, a Porsche 914, in Germany in 1971. The 914 was selling for around \$9,000 in 1976 and the Porsche 911 was going for around \$15,000. Bob went on to explain that the first DE was held on April 13, 1976 at Lime Rock Park in CT. Bob remembers that date because it's his daughter's birthday and he had a tough choice to make as to which event he was going to attend! I won't explain which event Bob chose, but it would certainly make some great conversation. Bob told me that DE wasn't as popular back then, but Autocross was – a fact that some of you will find interesting. PCA Club racing didn't start until sometime around 1991. Bob also described the Schattenbaum Monthly Meetings were held at Columbus Inn and Board meetings were held at board members' homes. In addition, there were some social events and Autocross. There were a couple of members that worked at local Porsche dealers that would help maintain dealer relations, but given that there weren't many independent shops, the dealers were more involved than they tend to be today. Overall, member participation was higher than we typically see today, but Bob assumes it was mostly because those were different times and the busy schedules of 1976 don't compare to 2017. I am sure we can all relate to that!

I asked Bob if he thought members joined PCA for the same reasons as today, and he believes that the answer is yes, for the most part. Both eras have interests in Porsches and cars, and in general, like-minded individuals find a club like Schattenbaum an interesting place to spend some time. All in all, he had a great experience leading Schattenbaum, and we can all thank him for paving the way and helping start the successful club we all love today.

It's now 2017 and Bob can still be found actively supporting Schattenbaum. He is very active, always taking pictures, working the grid at our club race, and traveling to many tracks around the country. So, as the saying goes, it's not the cars it's the people. Bob is a true testament to that!

Bob currently owns a Boxster S and a Macan S.

Here are some interesting tidbits I learned from Bob when he was at the "Helm" of Schattenbaum:

- ▶ **back in 1976, the price of gas was 61¢ for the national average**
- ▶ **the 914 was selling for around \$9,000**
- ▶ **the 911 was going for around \$15,000.**

Photographers Wanted

Seen any cool cars lately? If you have recent Porsche-related pictures, from a recent Schattenbaum event or not, please consider submitting them with descriptions for [our website](#) and [our Facebook page](#).

Send full size photos as attachments to webmaster@schattenbaum.org

Schattenbaum on the Web

Keep coming back to our web site (www.schattenbaum.org), it's looking real good these days...!

We're also on Facebook

[Visit us on Facebook](#) and post something.



Schattenbaum's Fall Covered Bridge Tour

Sunday October 8, 2017

Andres Kriete

Schattenbaum's Fall tour will make a large loop through beautiful, historic Bucks County, PA. Our tour will take us over several covered bridges, some of which date back to 1830. This will be a leisurely paced tour, so don't hesitate to bring your older Porsches as well. Lunch will be at the historic Van Sant Airport in Erwinna, PA.

We will meet in the parking lot on River Drive in Titusville, NJ 08560. This parking lot is 300 feet away from the Washington Crossing Bridge. Departure is at 11 am.

It's important for us to have a headcount and communicate to you any changes to this tour.

Please send a brief e-mail to tour@schattenbaum.org if you intend to join us.

What: Fall tour
Where: Bucks County, PA
When: Sunday October 8, 2017



Our Annual Oktoberfest!

Don't miss the food, fun and camaraderie at Schattenbaum's always popular fall social event!

Come Hungry!

Dinner will be served family style with a selection of authentic German entrées to choose from, plus dessert. *The Club will provide German beer.*

If you prefer wine with your meal please feel free to BYO.

Price: \$26.00 per person

To reserve your spot, just go to the Schattenbaum website (schattenbaum.org) and make your payment through Paypal.

Paypal payment must be received before October 16th.

Sorry, reservations via phone or email cannot be accepted.

***What:* Schattenbaum's Annual Oktoberfest**

***Where:* Where: Sebastian's Schnitzelhaus,
43 Fort Dix St. (Rt.545), Wrightstown, NJ
(609) 724-9609**

***When:* Sunday, October 22nd, at 5:30pm**



For more information contact Claudia Debusmann
609-714-9049 or social@schattenbaum.org



10th Annual Schattenbaum Showdown PCA Club Race

Dan Petchel

This year marked the 10th Annual *Schattenbaum Showdown* PCA Club Race at New Jersey Motorsports Park, and was it a race.



The 3-day race weekend in August included sprint races and enduros on NJMP's 2.25 mile *Thunderbolt Raceway*. In all, 110 drivers participated in race groups based on car type and modifications. Also, as part of this weekend, an advanced Drivers Education event was held for 40 drivers who honed their skills trying to keep pace with the big boys.

Clockwise from top: John Pepe working the grid; PCA is welcomed to New Jersey Motorsports Park (NJMP); Bob Carrington and Claudia Debusmann enjoying a water break.

10th Annual Schattenbaum Showdown *(continued)*



Left: John Beidler discussing last minute strategies.

Below: race volunteers enjoying their lunch break.



Jack Fowler photos

Schattenbaum drivers took home many top honors. A few of the members who did well were Steve Smotrich, Pete Debusmann, Bill Coulter, Robbie Provost, John Biedler, Jeff Covert, Pete Tremper, Mike Embler, Sean Gibbons, Howard Altman, Hoyt Ammidon, Michael Emro, Michael Criscito, David Dunigon, Lanie Landstra, and Jeff Muller.



Left: Mike bono working on Pete Tremper's axle so Pete can race again during club race weekend.

Above: a very rare and valuable 2011 911 GT3 RS 4.0 (say *that* ten times fast) staying cool in the garages.

10th Annual Schattenbaum Showdown *(continued)*

Jack Fowler photos



As in the past, Schattenbaum volunteer workers gave their time and had a chance to get up close to the action.

*Many thanks to the twenty-four individuals who helped make the **10th Annual Schattenbaum Showdown Club Race** a success.*



Clockwise from top: Bob stine our Schattenbaum board member (secretary) and Club race volunteer coordinator and our zone 1 Rep mike Bryan and his wife Pam hanging up banners at the race; PCA national folks discussing events of the day; Peter sterns and Claudia Debusmann pace car specialists; Tim Obrien from the Niagara Region and our own joe Druding working scoring and timing during club race.

10th Annual Schattenbaum Showdown

PCA Club Race: Zone 1 coverage

Text and photos by Mike Bryan, Zone 1 PCA Representative

The Schattenbaum Region Club Race was held at New Jersey Motorsports Park August 18-20.



Above, left to right: GTC4 Sprint Race winner Robert Hargesheimer (51), GTC5 Sprint Race winner Brent Asplundh (44) and Sprint Race winner Doug Troutman (427). Below: GTC4 Enduro Race winner Robert Hargesheimer (51) and GTC5 Enduro Race winner Brent Asplundh (44).





VIEW FROM THE RAIL

Text and photos by Bob Helm

It seems like only yesterday that we were preparing for the first *Schattenbaum Showdown* PCA Club race and learning the ways of the paperwork-road to getting things race ready. The first Showdown was held on the Lightning Course at NJMP and consisted of two thirty minute sprint races and a ninety minute Enduro. The Sprint races were divided into three race groups, the Enduro had two race groups. In the Enduro most drivers chose to have a codriver as a five minute pit stop was required. Subsequent races have all been held on the longer more technical Thunderbolt Course, including the races held in conjunction with the Grand Am professional race series. The format has now shifted to three Sprint races and one sixty minute Enduro. Also added for the last several years has been an advanced DE run Group for advanced DE drivers (those not requiring an instructor). The addition of a DE Group allows fuller utilization of track time during times set aside for Drivers meetings and administrative functions. With the addition of the National Championship many drivers chose to drive solo in the Enduro as,

unlike the pro series where drivers share the car's points, in PCA the points are divided between the drivers and can affect the Championship.

Being the host PCA Region, Schattenbaum was well represented, especially in the very popular Spec



John Beidler and Jeff Muller presenting charitable donation to Chief J.Redden of the Millville Rescue Squad that provides emergency services at our Drivers Ed and Club Racing programs



VIEW FROM THE RAIL *(continued)*



Boxster Class. The first Blue race group saw Robbie Provost first in Spec Boxster followed by Hoyt Ammidon and John Beidler in fifth place and Former President Jeff Muller in third place in his SP3 944. Twenty-eight of the thirty-six finishers were on the same lap. That close competition was reflected in all race groups. In the other Race Groups there were fewer Schattenbaum members but many racers from neighboring Regions, all familiar faces from DE and past Club Races. Pete Debusmann and Steven Smotrich brought home Class wins in Yellow and Bill Coulter a second in class. In the Enduro, Jeff Muller finished second in class.

Good close racing with great weather. I'm already looking forward to next year...



Andres Kreite led a tour of Schattenbaumers in a parade down to the track.



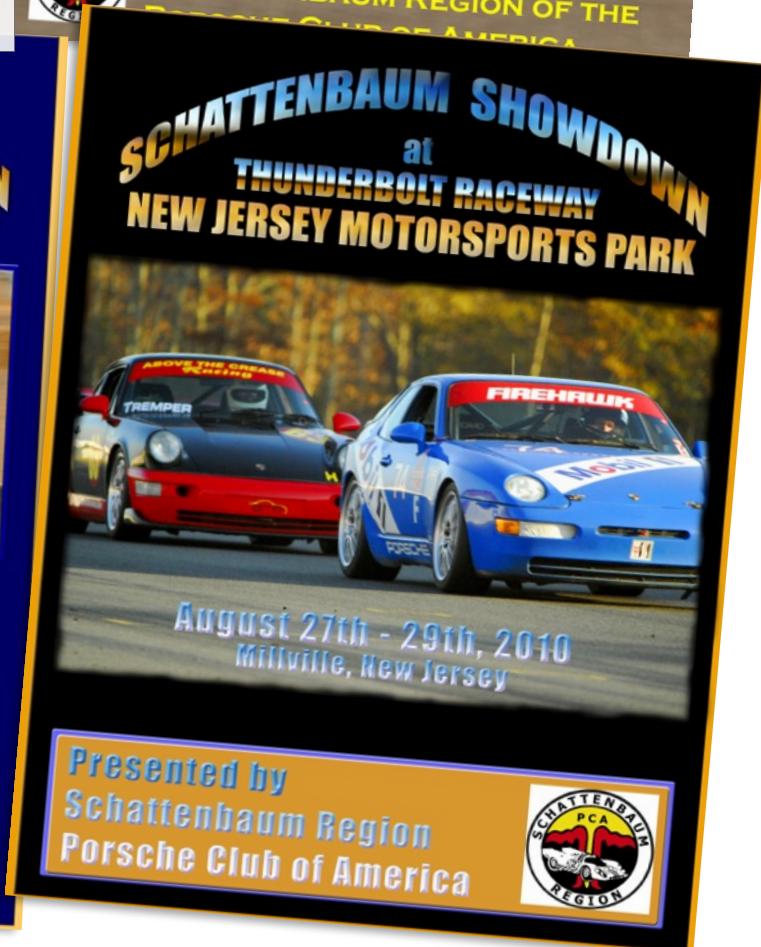
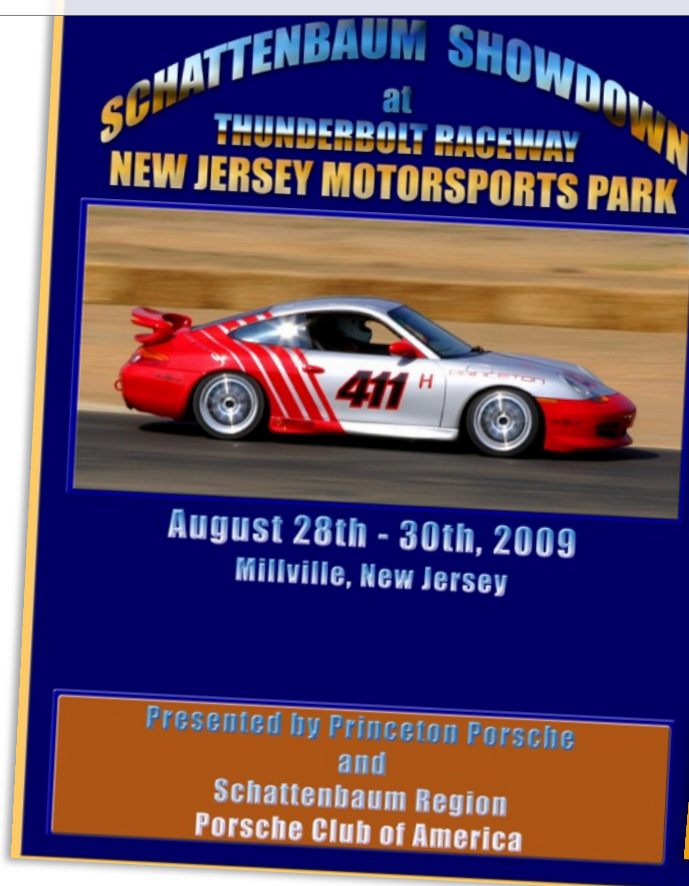
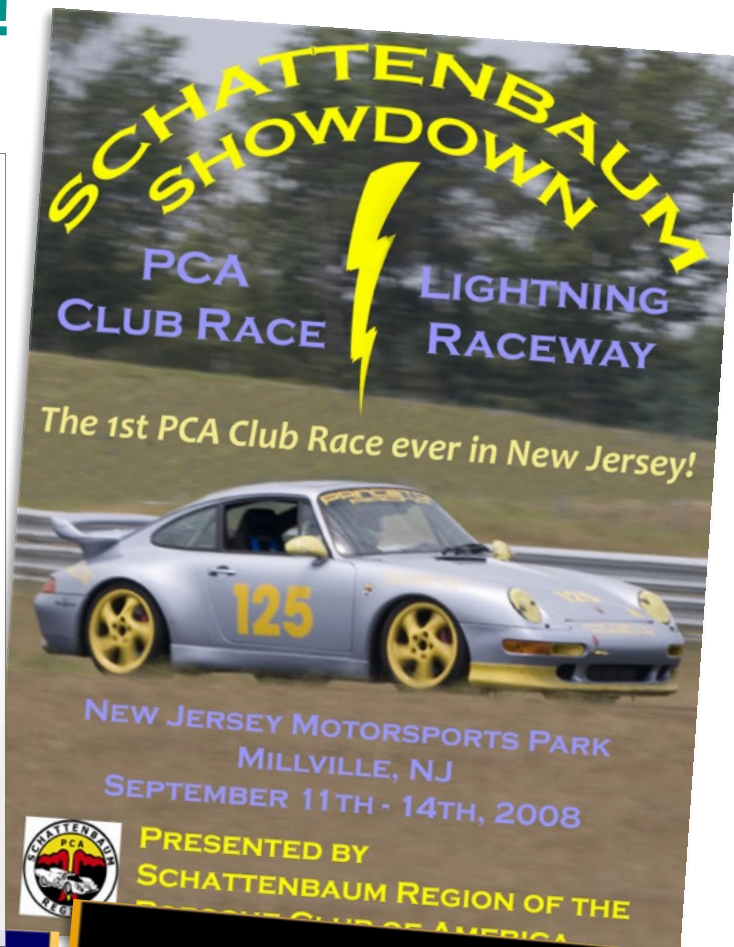
Schattenbaum Region Brings PCA Club Racing to New Jersey!

Text and artwork by Dan Merton

The opening of *New Jersey Motorsports Park* in Millville in 2008 created an opportunity for Schattenbaum Region Porsche Club of America to host the first ever PCA Club Race in the state. Even before the track was officially open, our leadership — led by Dan Petchel and his merry band of track-junkies — began planning a PCA Club Race. It all came together on NJMP's *Lightning Raceway* on a weekend in September 2008. There were 114 drivers registered for the first *Schattenbaum Showdown*.

Schatten Rappen' Editor Dan Merton was tasked with creating a Race Program that listed the drivers, volunteers, the racing schedule for the weekend and track layout maps. After all, it was a new track so everyone was learning the course. Full-color programs were provided to all registered drivers and are now collector items.

In 2009 the Club Race was moved to the larger, faster and more challenging *Thunderbolt Raceway*.



Schattenbaum Region Brings PCA Club Racing to New Jersey! (continued)

SCHATTENBAUM SHOWDOWN
at
THUNDERBOLT RACEWAY
NEW JERSEY MOTORSPORTS PARK



August 26th - 28th, 2011
Millville, New Jersey

Presented by
Schattenbaum Region
Porsche Club of America



5th Annual
SCHATTENBAUM SHOWDOWN
at
THUNDERBOLT RACEWAY
NEW JERSEY MOTORSPORTS PARK



August 24 - 26, 2012
Millville, New Jersey

Presented by
Schattenbaum Region
Porsche Club of America



6th Annual
SCHATTENBAUM SHOWDOWN
at
THUNDERBOLT RACEWAY
NEW JERSEY MOTORSPORTS PARK



August 23 - 25, 2013
Millville, New Jersey

Presented by
Schattenbaum Region
Porsche Club of America



7th Annual
SCHATTENBAUM SHOWDOWN
at
THUNDERBOLT RACEWAY
NEW JERSEY MOTORSPORTS PARK



August 22 - 24, 2014
Millville, New Jersey

Presented by
Schattenbaum Region
Porsche Club of America



Schattenbaum Region Brings PCA Club Racing to New Jersey! (continued)

Beginning in 2010, promos for the *Schattenbaum Showdown Club Race*, which often featured photos by Bob Helm were created by Dan Merton. These promos appeared in the Club's newsletter, on the website and in the PCA Club Racing News newsletter.

Here's to the next 10 years of Schattenbaum Showdown Club Races!

**THE 3rd ANNUAL
SCHATTENBAUM SHOWDOWN**



Presented by
Schattenbaum Region PCA
August 27 - 29, 2010
New Jersey Motorsports Park ~ Thunderbolt Track
Includes Sprint Races and Enduros
Contact Dan Petchel Race Chair: carsinc@comcast.net Ph: 609 351 2068

**THE 4th ANNUAL
SCHATTENBAUM SHOWDOWN**



Presented by
Schattenbaum Region PCA
August 26 - 28, 2011
New Jersey Motorsports Park ~ Thunderbolt Track
Includes 3 Sprint Races and an Enduro!
Contact Dan Petchel Race Chair: carsinc@comcast.net Ph: 609 351 2068

**THE 5th ANNUAL
SCHATTENBAUM SHOWDOWN**



Presented by
Schattenbaum Region PCA
August 24 - 26, 2012
New Jersey Motorsports Park ~ Thunderbolt Track
Sprint Races and Enduros!
Contact Dan Petchel Race Chair: carsinc@comcast.net Ph: 609 351 2068

7th Annual!
SCHATTENBAUM SHOWDOWN



August 22 - 24, 2014
THUNDERBOLT RACEWAY
NEW JERSEY MOTORSPORTS PARK
Registration opens
Monday, July 7th 10:00 pm EDT
<http://register.pca.org>

Presented by
Schattenbaum Region
Porsche Club of America
Find up-dates
and info at:
www.schattenbaum.org

8th Annual!
SCHATTENBAUM SHOWDOWN



August 21 - 23, 2015
THUNDERBOLT RACEWAY
NEW JERSEY MOTORSPORTS PARK
Registration opens
Monday, July 6th 10:00 pm EST
<http://register.pca.org>

Presented by
Schattenbaum Region
Porsche Club of America
Find up-dates
and info at:
www.schattenbaum.org

9th Annual!
SCHATTENBAUM SHOWDOWN



August 19 - 21, 2016
THUNDERBOLT RACEWAY
NEW JERSEY MOTORSPORTS PARK
Registration opens
Monday, July 4th 10:00 pm EDT
<http://register.pca.org>

Presented by
Schattenbaum Region
Porsche Club of America
Find up-dates
and info at:
www.schattenbaum.org

10th Annual!
SCHATTENBAUM SHOWDOWN



August 18 - 20, 2017
THUNDERBOLT RACEWAY
NEW JERSEY MOTORSPORTS PARK
Registration opens
Monday, July 3rd 10:00 pm EDT
<http://register.pca.org>

Presented by
Schattenbaum Region
Porsche Club of America
Find up-dates
and info at:
www.schattenbaum.org

PACK AT THE TRACK

Fred Pack



I'll see you at the track in 2017. You can always contact me at fhp911@gmail.com.

Braking

This column is devoted to brakes and braking. I don't usually delve into the mechanical elements of the car in my columns but I think it is worthwhile for drivers to have an understanding of how their cars' braking systems work.

How brakes work.

Fundamentally, brakes convert the car's kinetic (motion) energy into heat energy, thus reducing the kinetic energy, aka its speed. When you step on the brake pedal you are pushing the brake pads against the rotating brake rotor. The ensuing friction slows the car by creating the heat. Sounds simple – but all that heat can cause problems with the braking system. It can boil the brake fluid and melt the pad material. You should also know that the heat energy arising from braking is proportional to the square of the speed, which means that four times as much heat is created in stopping from 100mph as from 50mph. (Here's the math to back this up: 100 squared is 10,000; 50 squared is 2500.) And on the racetrack, unlike in regular driving, the next braking zone is never far away so there isn't much opportunity for the brakes to cool down.

All that heat must be accommodated or dissipated in one or more ways, or the brake fluid starts to boil, which is very bad.

Accommodating the heat

Track brake pads have a higher 'coefficient of friction' than street pads, which means that they create more friction and are thus more effective when they rub against the rotor (and therefore make more heat) and their materials are more heat-resistant, meaning that they don't melt or chunk off as readily. Contemporary

vented brake rotors are much more massive than the solid ones of years ago, which lets them be a greater 'heat sink', meaning that they can hold more heat, rather than transferring it to the other brake components and the brake fluid. Track-oriented brake fluid has a higher boiling temperature than street fluid. Regular street DOT level 3 fluid has a dry minimum boiling temperature of 401 degrees, while ATE Super Blue (a typical track fluid) boils at 536 degrees; AP Racing fluid at 644.

Dissipating the heat

The main way heat is dissipated from the braking system is by airflow. Vented brake rotors (those with air passages in the inner surfaces) and cross-drilled rotors as used in all late model Porsches allow the heat to be vented to the outside air better than solid rotors. Ducting, which routes air to the brakes, is also very effective. Modern Porsches have such ducts for the front wheels. (The front wheels do the brunt of the braking work.)

What if the brake fluid boils?

Boiling is the process of converting a liquid into a gas. If fluid in a hydraulic system contains boiled fluid (aka gas) the effectiveness of the system drops dramatically. Additionally, as it cools, the gas does not necessarily return to its fluid state. The entire basis of hydraulics is that the fluid must not be compressed, so that when pressure is applied on one end (i.e., at the brake pedal) this pressure, perhaps multiplied by the design of the system, is reliably transmitted to the other end (i.e., to the brake pads.) If gas has entered the fluid column, the column becomes compressible and you can

PACK AT THE TRACK (CONTINUED)

press on the brake pedal but the pads do not receive all (or any) of that pressure. This is the definition of brake fade, where the pedal becomes spongy or worse, falls to the floor. Additionally, brake fluid is “hygroscopic”, which means that it attracts water over time. Water as a liquid is not compressible, but boiled water as steam is very compressible, and water boils at a low 212 degrees Fahrenheit. This means that old brake fluid is a definite hazard for track driving (and is not a good idea for street use either). That is why Schattenbaum PCA recommends an annual complete flush of your car’s brake fluid. For more information see lelandwest.com/brake-fluid-comparison-chart.cfm.

What should I do if my brakes start fading?

If you are on track and you experience brake fade, you should pit right away. Brake fade will not go away by itself even after the fluid has cooled. The gas that was released when the fluid boiled does not fully return to the liquid state, and even a small amount of gas in the system causes serious braking deterioration. You must bleed the brakes before going back on track. (It is probably safe to drive home but you should drive carefully.) The process is not difficult at all and requires very little in the way of tools or equipment. Here is a good video ([youtube.com/watch?v=lPwM2vn3bT0](https://www.youtube.com/watch?v=lPwM2vn3bT0)) which describes the procedure. The only element not covered is that on many Porsches there are two sets of pistons per caliper, so there are two bleed valves per wheel. You must bleed both of them. It is a good idea to bring a jar of brake fluid and the necessary wrenches to every track event.

What steps should I take to improve my car’s braking performance?

If you are only a track dabbler or are in the novice group, I think you can leave your brake system in stock form. But if you are more serious about your track driving there are two simple steps to improve things: install track pads, and use a track-oriented brake fluid. There are numerous brands and types, available from many suppliers. Also, airflow to the brake region can be improved; for example, some owners of 911s and Boxsters use GT3 ducting. Speak to other drivers or track-oriented shops to get advice and search the web for modifications designed to fit your model Porsche.

I leave my track pads on the car all the time, but some drivers swap them in and out for each track event. There is one downside to using track pads on the street; sometimes they squeal. Other times they don’t.

Limited Slip Differential

Most people understand that a limited slip differential (LSD) can improve cornering speeds by giving power to the outside wheel, while an open diff wastes the power by giving it to the largely unweighted inside wheel. Fewer appreciate that the LSD can also improve braking. Here is the reason: LSD’s (of the 1.5 or 2 types) apply limited slip action under braking as well as under throttle, retarding the ability of the rear wheels to operate at different speeds, just as they do under acceleration. In a non-LSD car under serious braking the rear tires are substantially unweighted at the same time that they are dramatically being forced to slow down. If one tire encounters any road condition which affects its grip with the road it is likely to lock up momentarily. ABS will not prevent



Byron Veale photo

PACK AT THE TRACK (CONTINUED)

this. The condition of the two wheels rotating at different speeds makes the rear of the car unstable under braking. A few years ago I replaced the standard Porsche-supplied LSD in my Boxster S with an aftermarket racing unit and immediately noticed a tremendous difference in the car's braking stability.

Brake system maintenance

There are two wear items in the braking system: the pads and the rotors. These components last a very long time in normal street driving (I often see references to the figure 40,000 miles expected for pad life) but not long at all in frequent track use. I only get about five days out of a set of front pads on my Boxster S. Rotors also wear out quickly on the track. They develop cracks which can ultimately cause a catastrophic failure. See the photo of a severely cracked rotor after I removed it from my car.

Pads should be replaced when they have less than half of their original material. The reason for this seeming wastefulness is that the pads not only stop the car, they act as insulation, retarding heat from entering the calipers and then the brake fluid. As the pads wear, there is less material available as insulation, so more heat gets transmitted to the fluid. As discussed above, anything you can do to keep heat out of the fluid is worth doing. This is also why an annual full flush of the brake fluid is very important, to keep the hygroscopically-induced water out of the system.

How should I use the brakes?

In previous columns I suggested an experiment for you to try at your next track outing, since in regular road use we never get the opportunity to probe our brakes' maximum performance. My experience as a track driving instructor has shown me that many drivers are timid in applying the brakes. Here is the experiment: while you are on a straightaway at the track, look in your rear view mirror and make *very, very sure* (along with the instructor if one is onboard) that no other car is nearby behind you. Get the car to at least 80 mph, 100 is better if there is enough room to do so. While there is a long distance before the next turn, apply the brakes initially with only moderate force, and then press hard on the brake pedal and *keep pressing hard*. Do not be worried if the ABS starts engaging. Keep pressing hard. Do not come to a stop! You should stop braking when you slow to 50 mph or so and then proceed through the approaching turn. I imagine you will be astonished at

the power of your Porsche's brakes. Armed with this knowledge you should be able to brake more effectively in the future — meaning later and harder as you approach turns — during your DE day. This type of braking is called “threshold braking” because you keep the tires at their maximum threshold of grip.

The best way to apply the brakes is to moderately press on the pedal for a moment and then push it to the maximum level you want. This gives the car a moment to absorb your instruction. Do not stomp on the brake pedal because the resulting abrupt weight transfer from the rear to the front can overload the fronts and even cause an instantaneous spin-out due to the sudden unloading of the rears. This is particularly true in the rain when you must be delicate with all the controls.

A Tip

If you ever find yourself entering a corner too quickly, here is a remedy: continue braking past your normal turn-in point and turn the steering wheel less sharply than normally. This will let you continue to slow down effectively, since your cornering force will be less than usual. When you have slowed enough, complete the turn safely. You will not have executed a good turn and you'll be going more slowly than usual, but you will have executed the turn safely, which is always the key objective.

I'll see you at the track.

Author note: I want to thank Chuck Edmondson, Chairman of the Physics Department at the US Naval Academy, a friend, racer and author on race car dynamics, for his help in clarifying my thoughts on limited slip differential concepts.



A dangerously cracked rotor. Notice that the crack extends past the front surface and goes fully through the top edge - Disaster only narrowly avoided!

Fred Pack photo



Petch Sez

Dan Petchel

Why Schattenbaum is the best

We have a great little Club; here are some of the reasons...

1. No Class system

We treat members the same way whether they have a 997 Turbo, a 3.2 Carrera or a 944. They could have a \$3500 entry level car or a \$225,000 premium model, it doesn't matter; we welcome everyone.

2. No oversize Egos

Let's face it, anyone who drives a Porsche has a right to be proud. However, we also realize that no matter what we have, someone can have a car that is a little better, cleaner, or more expensive than ours. The diversity of Schattenbaum levels the field.

3. Dedicated motor heads

One thing that Schattenbaum does is accept other Marques at our DE Events. We allow drivers of Corvettes, BMWs and even Hondas to participate in our



Petch Sez

(continued)

popular track events. We recognize that all motor heads want to have fun with their cars, some just haven't found the best brand yet.

4. Membership size

We are a PCA Region of slightly less than 500 members, which is just the right size. We don't get trapped into policies, procedures and the "its the way we have always done it..." syndrome like the larger PCA Regions. We certainly don't have the turmoil of infighting and differences of opinion that comes with larger numbers.

5. Funding

We use our revenue from DE events to enhance other club activities and for charitable contributions. Because of this, each event can be operated not as a revenue generator but to offer what is most desired by members at reasonable costs.

6. Friendly

Being small also helps all of us not to get lost in the masses. Members are open to meeting others, giving advice and offering help.

We have a great little Club, don't we? Please say "Hi" the next time you see me at an event.



Dan Merton photos



2017 Wash n' Shine

Arnie Cohen

The June Monthly Meeting in Bung's parking lot was a very hot night but there was a great turnout for the annual Schattenbaum Wash n' Shine. Club members were treated to beer, pizza and wings. The girls from Bung's/Blue Moon did some of the judging assisted by some board members. Although they didn't know the difference between a 911 and a Boxster, we helped educate them and between their simple "that catches my eye" view of what car they liked and knowledge from various board members we were able to pick out some nice cars, and their drivers were award prizes.

This year we had a *Past President's Award* which called for Jeff Muller to pick a winner. Can anyone guess what Porsche model Jeff chose? You're right, a 944! We had some nice prizes that included wash buckets and gift certificates. Hopefully everyone had a reason to get their car cleaned and polished for the event.



Jack Fowler photos



2017 Wash n' Shine *(continued)*

2017 Wash n' Shine Winners:

911 "Cab" division

- Marc Schwartz, 2017 grey over blue

911 Division

- Tony Rich, 2002 Turbo

Boxster Division

- Scott Crawford, 2000 Red with silver

Cayman Division

- Joe Druding, 2015 Blue GTS

944 Division

- Melanie Bilbow, 1987 Red 944

Prestigious Past President's Personal Choice Award

- Joe Misuraca 1989 Black 944S



Jack Fowler photos



2017 Appraisal Night

Photos and captions by Byron Veale



Left: Dan Petchel going to work appraising my car.



Right: Jack Fowler welcomes a new member.



Left: we had a pretty good turnout for the evening.



Right: this 914 that came was very clean...

Right: the inside was very clean too!



Left: Jack getting the meeting down to business, although for some, the lure of pizza, wings, and beer is just too strong...!



Right: you can understand why 993's are so desirable; just look at this thing!



2017 Appraisal Night *(continued)*



Left and right:
attendees' cars
spanned Porsche's
entire gamut of
models.



Right: Bob Malkin's
1988 Carrera
Cabriolet is just
gorgeous to me
(I may be biased
just a bit).



Left: this 1980
Weissach Edition
911 hid a surprise
under the deck lid...



Right: some modern
muscle for you.



Left: the interior of
that Weissach
Edition hid a bigger
surprise, in that this
rather extroverted
upholstery came
from the factory!



Right: this
upholstery did *not*
come from the
factory!

JULY DRIVERS ED AT NJMP

Text and photos by Byron Veale

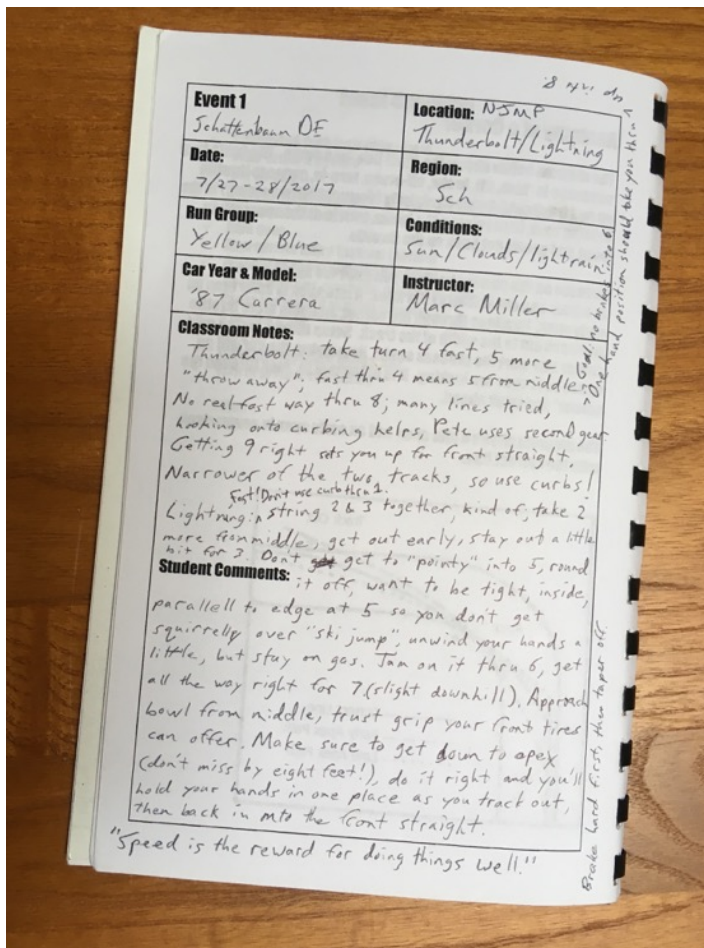
Another month and another track event! Here is another taste of one of Schattenbaum's track events at *New Jersey Motorsports Park*, this time on July 27th and 28th. The weather held up for the most part ... until the downpour on Friday afternoon! But, at one point the weatherman said we were supposed to get *up to eight inches of rain*, so all-in-all it was still a great event.

Clockwise from right: Porsche's mid-engine machines make for great track toys, so you'll see them in various incarnations; this maroon Spec Boxter showed a high level of finish; this Grey-Goose liveried example wasn't exactly falling down on the job either; our lunch run included this surprise traveler, he must've heard we were going to Shannon's...



JULY DRIVERS ED AT NJMP (CONTINUED)

Clockwise from right: I think I already mentioned how I'm a sucker for these later-generation torsion bar cars, especially when set up for the track; hmm, I'm sensing a common graphic theme here, neat that it works on multiple generations; my notes from the event (don't laugh), learned a lot, hopefully I can retain it all...!



JULY DRIVERS ED AT NJMP (CONTINUED)

Clockwise from below right: yellow sure looks great on our P-cars; yet another example of a really well-prepared race car, a Cayman this time; I nearly lost a finger trying to get a shot of this Viper (don't get too close!); NJMP certainly has a "diverse" range of events on offer; after the deluge, the fellow with this NSX was one of the few that stuck around for the later sessions Friday afternoon (big shout-out to my instructor Marc, who almost made it out of the gate before the rains started, and turned around, came back to teach me some wet-weather techniques).



Parting Shots

Byron Veale

True love is always a beautiful thing. And sometimes, as was the case with past-President Jeff Muller's daughter, it has great taste in cars!



Jeff Muller supplied photo



Jack Fowler photo

If you're going to work for hours in a day, without getting paid a penny, you can sit any way you want...