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NORTHLANDER

NORTH COUNTRY REGION Volume 32 Number 5

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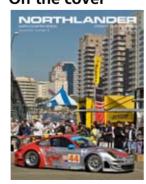
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On the cover



Toyota Grand Prix of Long Beach 2009

The LMP Porsches were not there but the Lizards were flying.

An interesting event ... and more an event than a race. But, still some great photo ops.

Photo by David Churcher

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2 9 1218 2330

May 2009 AT A GLANCE

Date/Time	Event Information	Contact
May 2 8am	NER AX - Devens	www.porschenet.com
May 9 9am	Spring Rally	vice-president@ncr-pca.org
May 12 6pm	Board Meeting	president@ncr-pca.org
May 18 7am	Drivers Ed # 1 - NHMS	de@ncr-pca.org
May 23 8am	NCR AX # 1 - Devens	autocross@ncr-pca.org
May 30 8am	Car Control Clinic - NHMS	barenstem@metrocast.net
June 9 6pm	Board Meeting	president@ncr-pca.org
June 19 8am	Zone 1 DE - 48 hrs Watkins Glen	http://zone1.pca.org/
June 20 8am	NCR AX # 2 - Devens	autocross@ncr-pca.org
June 29 8am	PCA National Parade - Keystone, CO	www.pca.org
July 6 8am	DE - Mt Tremblant	de@ncr-pca.org
July 10 8am	DE - Calabogie	de@ncr-pca.org
July 11 8am	NER AX - Devens	autocross@ncr-pca.org
July 14 6pm	Board Meeting	president@ncr-pca.org
July 19 8 am	NCR AX # 3 - Devens	autocross@ncr-pca.org
July 27 8am	DE - NER at NHMS	de@ncr-pca.org

Please note: calendar information is correct at the time of Northlander going to press but for the latest information you should check our web site: www.ncr-pca.org

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Ivy Leonard



Have you all been waking up in the morning lately hearing the birds chirping and enjoying that smell of spring in the air. The white of winter has been changed to beautifully brilliant spring colors. The green grass, colorful flowers, and the buds on trees are all indicators that we have reached that most special time of year in New England: spring! Yes, spring is finally here.

Now I certainly would not argue with anyone that those signs of spring are obvious to all. I have heard the birds, seen the ducks floating in the now unfrozen water, and noticed the green grass. All evidence that spring is on the way. But for me, I yearn for more proof, real proof that spring really has arrived, and it came just a couple of days ago when I noticed a Porsche cabriolet driving northbound on Route 16 - with the top down. Now it may be a little early for that but what a sight. The sleek shape of that Porsche in a most spring-like color...yes you guessed it...yellow! This is what made me think spring is really here. That little rush of 'O yeeaah' knowing that IT IS TIME.

Since that day I have seen many other Porsches out and about, many car owners finally convinced it is safe to take their prize possession out of storage, getting them all shined up, oil changed, ready for spring driving.

I too am getting a bit ancy to get my car out on the road as well, although I have fallen just a bit behind the curve. Mine will probably be out a little later than most as both have suffered end of season issues: 9ELOVIN's alternator gave up the ghost, and upon examination a couple of cracks were noticed in the fan housing, and TURBOMA's oil leak and electrical goblins have continued. Both were forced

to come off the road in the same week, but I am optimistic that you will see them on the road again soon.

The birds chirping, nice weather, green grass, and even noticing beautiful sleek pieces of machinery on the road. Whatever you recognize as true harbingers of spring, it is time to notice NCR's spring calendar of upcoming events. Come out and try something...a rally, an autocross, maybe driver's ed...even an ice-cream run. There really is something for everyone, something for you!

NCR takes great pride in our membership, and openly welcomes participation by all. We really look forward to seeing all of you at one event or another, expanding on our circle of friends in this remarkable region. Yes, I know that there is a natural reticence to try something for the first time, that little inertia thing that makes it hard to take in your first event: what will the people be like? Are they like me? Are they too stuffy, too laid back? Are their cars better than mine? It is often the same little insecurities that keep people from attending class reunions. When they finally do go they have a great time and wonder why they hadn't gone before. It's all about the people... the class is the catalyst, but it's all about the people. At an NCR event, the cars are the catalyst, but it's still all about the people. As Mikey's brother said in the old Life cereal commercial, 'Try it, you'll like it!' You will!

To see what we have on our calendar of events pop onto our website http://www.ncr-pca.org/. On the right side of the home page you will see the list of upcoming events, or at the bottom click on the complete calendar. Matt and Jay's "Most Excellent Rally and Adventure" is

continued on page 38 ...



David Churcher

when I asked if he would win at Le Mans he responded with a smile and said: "yes." He is a very nice person, a gentleman ... just like his dad. It's May already? Is it spring yet?

As I begin here it is mid-April and it is not spring. For that reason, and a few others, I am going to California next week. I hope to finish this editorial with some comments on good weather and some great racing at the Grand Prix of Long Beach. I had thought I would bring back a cover photo for the May issue of *Northlander* but my colleague (Tracey) did a tut tut and reminded me we had a racing photograph on the March and April covers. We need something different. A spring theme perhaps.

So now we have dealt with the weather issues. What's next? I would like to mention racing (again) because there seems to be a very full calendar around the world at the moment. And even though we are in bad times financially these days the world of racing is not suffering too much. Well, not yet. I did hear NASCAR is about to suffer because the big three are not able to take bail out money and go racing. I am no fan of NASCAR (!) but it would be a shame to see this happen. It means to me the bean counters are in control and this should not happen. I am no fan of bean counters ... those who own a Porsche are excluded from this comment.

Reflecting on Sebring and looking forward to next week the ALMS races seem to be in good shape. Porsche's LMP cars are not there but this tends to focus (me at least) on the GT Porsches. So I will be shooting lots of 911 Porsches next week. But I can't put one on the cover ... you will have to look inside the magazine and see what I did shoot.

This leads me to talk ... ah, write ... about some recent photographic events. My daughter recently returned from a trip where she had spent some time with a mutual friend. It turns out our friend has a brother who is a "hot" photographer and he shoots famous film stars. My

daughter proposes I should contact our mutual friend's brother and strike up conversation. I of course scoffed at that idea ... photographers are, I said, mostly a jealous lot who share nothing. I had to think about my own comment.

Reflecting on photography and the recent few months I have had a wow of a time. One of the Sebring photos seems to have caught a lot of attention. I actually like it a lot myself. A colleague who is an excellent printer and recently bought a new Epson will print it for me to frame and hang on my limited wall space. The lab that does most of my printing also got excited about this photo. Something in it captures attention. But the most interesting reaction came from a colleague who is an excellent photographer. He shoots whales and birds and landscapes and makes me jealous. I can't do what he does. He made such a fuss about my Ferrari in the pits at night in Sebring he went as far as to pay me the supreme Australian compliment (a word I can't use in a US publication, but it implies my parents were not married) and made me go red in the face. So, of course, I gave him a print.

Photographers. An interesting bunch. And if Olivier comes through with his promise we will have some of his shots of Sebring in this issue. I think I am risking another tut tut here. But this is the last issue of *Northlander* before our season starts. The June issue will certainly be into spring and we will be covering NCR events. June is just a few weeks in front of July and in July NCR goes north to Canada ... we plan a coverage of events at LCMT and Calabogie.

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Lisa Roche

New Members:

Mark Chessick Pat Cullen Nashua, NH - 2000 Boxster

Kenneth L. Peterson Laura Peterson Portsmouth, NH – 1980 911SC

Member Anniversaries:

1 Year:

Mike J. Bacigalupo Paul Jaques South Burlington, VT – 1991 964

Ryan M. Hunt Amanda Caren Dover, NH – 1974 914

Joe Leweck Wendie Leweck Hampton, NH – 1964 356

Keith D. Newell Alekzander H. Newell Dover, NH – 2008 Carrera

David P. Parkhurst Derry, NH – 1988 924S

Tracy R. Pillsbury Jane Pillsbury Gilford, NH – 2007 977

Lawrence D. Richards Toni Richards Nashua, NH – 2003 911

Jeff Stillson Kim Kojak Merrimack, NH – 2002 Boxster

Arthur P. Young Patricia Young Durham, NH – 2008 Boxster RS

2 Years:

David C. Boyle Atkinson, NH – 1991 911

Bob J. Charlebois Pittsfield, VT – 2007 Cayman

Jim H. Graham, IV Concord, NH – 1972 911T

David E. Livingston Laconia, NH – 2004 911 Turbo

Jim H. Messenger, Jr. Carol Messenger New London, NH – Unknown

Jonathan W. Sobel Valerie Sobel Portsmouth, NH – 1996 993C4S

James Trenz Greenfield, NH – 1993 968

5 Years:

Brian J. Arenstam Kathleen Arenstam Gilford, NH – 1970 911S

Greg K. Bryant Spiro Bryant Bow, NH – 1986 911

Hank T. Cowles Dover, NH – 1993 911 Steve Gapp Pat Gapp

Peterborough, NH - 2003 911

Russell Jeter Kimberly Jeter

Anacortes, WA – Unknown

David Pichette Deborahanne Pichette Bedford, NH – 1973 911

10 Years:

Mark W. Ettinger Kennebunk, ME – 1986 911

15 Years:

Robert J. Berthelette Suzan F. Berthelette Meredith, NH – 1978 911SC

Frank V. Sapareto Frank V. Sapareto, III Derry, NH – 1986 951

20 Years:

Steven Dahlin Richard Dahlin Holden, MA – 1971 911T

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Please notify the membership chair: membership@ncr-pca.org if you have changed your address.



Jay Gratton

maybe it was Ellen Beck's company that put me to sleep ...

The Rolling Chicane - May 2009

Back on Easter Sunday Jaime and I were on our way to Hart's Turkey Farm in Meredith and happened to pass through Gilford on our way. As we drove up Rt. 11 we passed a Citgo gas station that made me think back to the first time I ever drove on public roads. My parents and I were up in the Lakes Region at Motorsport Weekend that NCR used to have where we would rally on Saturday and AX on Sunday. I had rallied with then newbie Ellen Beck and although we had a good time rallying together we didn't do very well. In fact, we did so poorly that I fell asleep along the way. Come to think of it, maybe it was Ellen Beck's company that put me to sleep.

After arriving back at the hotel following the rally I met up with my dad who was on his way to fill the 944 with gas. I asked if I could go with him and I jumped in with him. We headed down to the local Citgo and filled up the 944 with 93 octane that probably cost something around a \$1.35 at the time. This particular Saturday was also the day I turned fifteen and a half and in NH that means you can drive with someone over the age of 25. After my dad finished topping off the 944 he gave me a "look," a quick smile and tossed me the keys and asked if I wanted to drive. I nervously agreed!

All of the people who had finished the rally were meeting for ice cream back by the hotel near Gunstock Mountain and it was only about 5 miles from the gas station. After getting the mirrors and sport seat all adjusted for my long and wiry frame, I fired up the ol' 944. I was so nervous that I almost stalled it as I eased off the clutch, but regardless we were underway. I launched the 944 out onto the public roads and I cranked down the road as I raced the 944 to red line in gear after gear I looked over at my dad and winked at him. Okay, actually

none of that is true except for the part where I pulled out onto public roads. If I remember correctly I think my dad had to encourage me to actually step on the gas a little, but of course my first version sounds much cooler.

All was going well on the maiden voyage. I was driving smoothly down with my hands at 3 and 9 while checking my gauges and mirrors and maintaining the speed limit. When all of a sudden a truck pulled up on my bumper and proceeded to ride my tail. As soon as we reached a passing zone the truck decided he had enough and pulled out to pass me. My dad all of a sudden started laughing out loud and as I looked over at the truck passing me I figured out why. Passing me in the 944 was a little old pick up truck driven by an older man who had to be in his 70's or 80's who could barely see over the wheel. I couldn't help but laugh at myself as well.

I pulled into the ice cream stand parking lot to a standing ovation from NCR members. I emerged from the 944 all smiles and of course I had to share the story of the impatient pick up truck driver. As you can imagine people enjoyed teasing me about that for the weekend. I wrote in one of my previous articles about how we remember the firsts in our lives and this certainly was one of those first moments I will always remember. I also want to thank my dad for bravely riding shotgun with me that day. I am sure he was much more nervous than he let on. I only hope I can be as cool as you someday if I ever have to go through that with one of my kids.



Judy Hendrickson

Christmas came very early this year, on May 8th to be exact ...

LOOKING BACK

This month's feature recalls a great sales technique PCNA offered in the past. They might well consider resurrecting such a program to attract prospective buyers to the marque in these suppressed economic times. Hey, Harry Robinson, anything like this happening these days? I'm a ready volunteer and promise a great write up!

From May/June 1989, Volume 12, Number 3

Yes, Virginia, There is a Santa Claus

by Don Osborne

Christmas came very early this year, on May 8th to be exact. Or, at least it seemed that way to me! It was not. however, ushered in with the typical card depicting a snowy New England scene with horse-drawn sleigh or carolers. Instead, I learned of its premature arrival through a brief letter ... on Porsche Cars North America stationary. . . that began, "You are cordially invited to the Porsche Ride & Drive, a unique invitation to experience Porsche automobiles." So it wasn't dreams of sugarplums that danced inmy head on the evening of May 7th, but visions of sparkling new 944 S2s, 928 S4s, and 911 Carreras, lined up with their motors purring and awaiting my eager arrival the next afternoon.

Brainchild of the folks at PCNA, in Reno, and headed by Paul Metzger, their MobilePromotions Specialist, the event was staged at Sullivan Stadium Harness Raceway inFoxboro, Massachusetts. Just one of 20 locations scheduled for the groups 1989 tour,the event ran from May 6-8. Paul's support team included, among others, John Strom, and Bruce Barkis from Porsche's Marketing Department in Reno. Joining them forthe 3-day event was District Sales Manager Mike McMain, District Parts & Service Manager Roger Marlowe and Field Service Manager Greg Stinson.

The "Ride and Drive" program, quite simply was designed to allow a select group of individuals the opportunity to experience the "Porsche Mystique" by driving anexciting collection of new models in various performance-related events. (I should clarify "select group" because thanks to Steve Kaplan, my name was one submitted to PCNA.) I, along with Don Barnes, Rob Morse and Dick Minesinger, wasted no time in accepting PCNA's kind invitation for the May 8th session.

Upon arrival at noon on the 8th, we were offered beverages and snacks and received a welcome by Paul Metzger and his team. We were shown a special videotape that covered Porsche's comprehensive engineering & design facilities at their famed Weissach Center, their vast U.S. dealer support network (located in Charleston, SC) where new cars are prepped and fine tuned prior to delivery by special Porsche enclosed transporters, and an overview of PCNA's organization including their computerized parts distribution centers, advertising, promotional and sales support groups. Added to the end of the tape, was a spectacular clip of Jürgen Barth driving a Porsche 936 race car (at considerable speed, I might add) around one lap of the LeMans racecourse. At times, with speeds reaching well over 200 mph, he passed 911Carreras as though they were moving backwards!

The video was followed by a short brief on the afternoon's activities. Paul enthusiastically outlined the three carefully planned events incorporating an "acceleration & braking" course, a "slalom" course and a short road course, designed so that we could test the marvelous handling and performance of the various Porsche models they had on hand. Trucked in from Reno was a 911 Carrera Coupe, a 928 S4 (5-spd.),a 928 S4 (auto), and the fabulous new 944 S2. Added to this formidable group was a 944 Turbo (on loan from one of the Regional Sales Representatives), and much to our surprise, a bright red 911 Carrera 4 (trucked up from Charleston the previous day).

With 30 or so eager enthusiasts in attendance for our session, we were

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Paul Frucci

Well, things have changed a bit. We were having some difficulty working out details with CVR on some pretty basic operational issues on how the event should be run ... Well, I'm back from South Carolina and it is actually starting to feel like spring. Towing for 12 hours on 195 in wind and rain on the home stretch was not a lot of fun. It's amazing how much air a tractor trailer can move as it goes blowing past you at 70 miles per hour!

First order of business is to report to you on some updated information on our September event at Lime Rock Park. This was originally planned to be a two day event, partnering with Connecticut Valley Region (CVR). The theory was that we had an allocation of one track day at LRP and if we could somehow make it a two day event by partnering with another region and "sharing", everyone would win and we'd have two days at Lime Rock.

Well, things have changed a bit. We were having some difficulty working out details with CVR on some pretty basic operational issues on how the event should be run, specifically on how run group assignments should be made given a perceived disparity in relative speeds between NCR and CVR drivers. Two reasons for this: 1) Lime Rock is CVR's home track and they certainly have much more experience than we do. especially in light of the fact that we lost our event last year due to track paving and have not been there as a club since 2007, and 2) CVR has a disproportionately high number of horsepower cars (GT3's and Cup Cars). In addition, our sense was that they don't like to be held up by mere mortals in old 911's, 944's and God forbid, 914's! So while the CVR track chair (who drives an '84 911 and is a good guy) and I fundamentally agreed that this is not racing and is a Drivers' Education event, there was some grumbling within the CVR ranks. So to be honest, I just decided, with the support of the DE Committee, that life is way too short to deal with this and NCR runs DE events for our members to have fun and not to stress out your DE chair ②. Fact is, there is going to be a speed disparity, so it was agreed that we'd be much better off taking our one DE day rather than trying to share it over two days with CVR, and to have our own traditional "Lime Rock Fun Day" on September 21st and run it our way as an NCR event. And that's what we did. So there! I can sleep at night.

If you have an interest in running two days at LRP, CVR registration for September 22nd will open on July 25th and it is on a first come first served basis. Registration for our event on the 21st is open now. Don't delay in registering because it will most certainly sell out.

As you read this our "Season Opener" should be under our belts, and I hope many of you will be joining us at the Zone 1 48 Hours at Watkins Glen in June, closely followed by what is now becoming an annual week long outing in Canada at Mont Tremblant and Calabogie starting July 6th. If you haven't done this trip and there is any way you can, do it. It is a blast!

So here is our updated schedule for the rest of the season:

July 6th, 7th, and 8th, Mont Tremblant (NER hosted. Register with NER at http://www.clubregistration.net)

July 10th, 11th, and 12th, Calabogie (NCR and NER co-hosted. Register with NER at http://www.clubregistration.net)

July 27th and 28th, NHMS (NER hosted. Register with NER at http://www.clubregistration.net)

August 7th NHMS DE (NCR hosted. Register with NCR at http://ncr-pca.motorsportreg.com)

September 2nd and 3rd, Watkins Glen (NER hosted. Register with NER at http://www.clubregistration.net)

September 10th, NHMS (NER hosted. Register with NER at http://www.clubregistration.net)

September 21st, "Lime Rock Fun Day" Lime Rock Club. (NCR hosted. Register with NCR at http://ncr-pca.motorsportreg.com)

October 10th, 11th, 12th, NHMS. (NCR hosted. Register with NCR at http://ncr-pca.motorsportreg.com). Note: This will also be our annual Make-a-Wish weekend with Charity Laps offered on Saturday.

That's it for now. Welcome to the 2009 DE season and as always, we welcome your comments and feedback. Feel free to email me at de@ncr-pca.org

TECH DISCUSSION: GAS TURBINES AND AUTOMOBILES

David Churcher and Jack Saunders

In this first part of a two part article we will cover some of the history and attempts at using a gas turbine engine in an automobile.

Our June issue of Northlander will carry the second part with a discussion of how a turbine works, how it has been developed, and perhaps some insight in to its future as an automobile power plant.



The Howmet TX with Allison turbine. Small, hot, a lot of torque. A lot of potential ... perhaps. Photo by "The 359"

The mother of invention is necessity. Well, so they say. But I think engineers tend to invent because they feel a need to improve things (they are known to psychologists as "fixers") and, I believe, because they have a built in need to see things run smoothly and make nice noises. A "hum" or "whiiiirrr", or even a "woosh" is much more satisfying than a "wuppita wupitta" sound. Jets (turbines, please) make nice sounds. With all due deference to modern reciprocating engines .. they are of the "wuppita wupitta" class. Reciprocation has its place, with steam engines perhaps, but not in machines which are intended for high speed continuous motion.

In my college days I had a course named: "Heat Engines" and our prof was a gentleman well in to his 60's and not a fan of modern engines. The Australian air force (RAAF) had donated a Rolls Royce

Derwent 8 turbine engine to the college. I was so excited. Our prof would not look at it but preferred his "high speed diesel" which ran at 350 RPM and made those "wuppita" noises I mentioned. Our prof got Goosebumps from that diesel. I still get Goosebumps when I hear a turbine spool up. Oh, I do get Goosebumps when I hear a racing Porsche too.

Who "invented" the gas turbine? Sir Frank Whittle ... or as I recently learned: perhaps someone in Germany preceded him. Just like Calculus ... two like minds who never met, in lands far apart, came to the same conclusions. But, whatever, Sir Frank and his Brit colleagues had the first operative aeroplane with a turbine engine. The Meteor (Meat Box) was up and away before the Me 262. But this is aeroplanes .. what about cars?

It would not take long before some gear head decided a nice smooth rotating engine which could burn anything other than waste paper and chunks of wood would have a place in the automobile. Rover made an honest attempt. I recall the newsreels of the Rover and two Brit gentlemen (in suits) demonstrating the black smoke exhaust and quick acceleration. I thought at that time the turbine car was on its way. Indeed, Rover did pursue the concept and partnered with BRM to run a car at Le Mans.

Who amongst the major car manufacturers would make a success of the turbine? Chrysler made an attempt, GM made a series of concept cars called Firebird in the late 1950s, Chrysler built a series of cars and actually put them in the hands of "test customers". They had some beautiful examples styled by Ghia in

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1963. Examples still tour car shows in the USA today. Chrysler were quite serious as the following quote indicates: Chrysler wrote: "The present performance and economy of the Turbine are comparable to a conventional car with a standard V-8 engine. The engine will operate satisfactorily on diesel fuel, kerosene, unleaded gasoline, JP-4 (jet fuel), and mixtures thereof. And, even more interesting, it is possible to change from one of these fuels to another without any changes or adjustments to the engine."

FIAT made the Turbina in 1953 ... a radical variation on the turbine engine with three "parts" ... Volvo tried tucks with turbines. Ford did too. But that final commercial design for the street and the average consumer did not come as anticipated.

And race cars? A Boeing engine was installed in an Indianapolis race car in the early 1960's. It was called the John Zink Track Burner. The car was not a great success but it did get the attention of Andy Granatelli who then proceeded in secret to build a turbine race car for Indianapolis. It was almost a great success and almost won the 1967 race with Parnelli Jones driving. Colin Chapman of LOTUS built the Lotus 56 and had Graham Hill drive it at Indy. Things went wrong with the fuel delivery system and there was some politics involved too because the Brits did not reveal all the engineering to the Americans on the team. There was also some hassles over how the drivers would be paid. Politics ... The Good ol' Boys of Indy did not like the challenges of the turbine cars and set about to have them banned. The same attitude later prevailed when the Porsche Interscope threatened them, and, later again when a 100 lb driver (Danica Patrick) threatened them. But, oops, I digress.

Innovation thrives in the USA and some gear heads continued. The Howmet company manufactured components for turbine engines and became a sponsor for a racing turbine car. The Howmet TX used an Allison turbine in a McKee chassis and made very respectable showings at races. Two cars were entered at Le Mans but did not do very well ... one had mechanical



The Howmet TX turbine (McKee chassis) car was a serious race car and ran at Le Mans. Photograph by "The 359"

failure, the other was disqualified after 24 hours for not covering enough distance. Work continued on the cars to solve problems such as a lack of engine braking and turbine lag. But it all came to an end ... other than today you can see a Howmet car at shows around the USA.

We should mention Craig Breedlove's attempts at a land speed record with his turbine cars. But these cars were pure thrust and there was not any drive through the wheels. Interesting, but not relative to this article.

So, it would appear, the turbine concept for a road car is a dead issue. The reciprocating engine prevails. Other alternatives to the recip came along ... the Wankel for example. This was (is) a great concept and it has been developed to a high degree by Mazda. And raced at Le mans too. But it has not challenged the reciprocating engine. The recip concept has been developed to a point where 20,000 RPM has become possible and more perhaps was to come until the FIA put a rev limit on F1 engines. It all defies the logic as set down by Ricardo. The "bible" of engine design states some

speeds, piston accelerations, gas velocities, etc. are not possible. But the F1 designers did not know that and went ahead with their "high speed" engines. Not 350 RPM and no "wuppita" sounds.

But back to the turbine. Is it dead? Why did the development not continue? Did it fail in the market place because the infrastructure of mechanics to service it were (are) not available? High cost of materials and tooling doomed it perhaps?

What is needed to develop a turbine engine?

For the answer to this question you'll have to read part 2 next month when my colleague (Jack) explains how he developed a turbine

continued on page 16

Announcing the NCR Car Control Clinic

Mark your calendars: Saturday, May 30, 2009 the PCA North Country Region will hold a car control clinic on the parking lot of New Hampshire Motor Speedway. There will be two sessions. The morning sessions (8:30-12:30) and an afternoon session (12:30-4:30).

This clinic is designed for all drivers, **including ages 16 & 17**, with a valid driver's license (sorry, no driver permits). **Participants must be a PCA member or affiliate member.** The intent of the clinic is to help drivers become safer and more confident through knowledge and experience

The clinic will cover the following:



Lecture Topics

Seating position

Hand position

Vision

Mental preparation

Car dynamics & theory

Car maintenance check

Driving Exercises

Skidpad

Emergency Braking

Slalom/Swerve



Each student will get in-car instruction from an experienced NCR instructor.

The emphasis of this clinic is car control, not racing or competition. In that spirit, most car makes and models will be allowed to participate. No trucks, SUVs, or vans allowed. Cayennes welcome. If you are uncertain, please email the event Chairmen beforehand, their decision will be final. The event is limited to 32 students.

Registration Procedure

Registration is open at this time. The registration fee is \$30. Registration will be handled online via the MotorsportReg Online Driving Event Registration website (www.Motorsportreg.com). If you do not have an account, you will need to create one. This single account will allow you to register for PCA and other car club events

If you are between the ages of 16-18, please print out the following form, have parent and student sign it, and mail it to Brian Arenstam or bring it the morning of the event. Without this form, you will not be allowed to drive and there will be no refund.

www.ncr-pca.org/autocross/minor-assump.pdf Event Chair: Brian Arenstam (barenstam@metrocast.net).



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TURBINES ...continued from page 14



The FIAT Turbina

A concept car but it displayed the enthusiasm and anticipation of the engineers of the time.

Photo by FIAT



The Rover (BRM) ... it showed potential and indicated turbines in automobiles were not just sci-fi stuff.

GM made a brochure describing the potential of the turbine and described their plans ... brochure cover shown here is a GM publication.

The turbine from Indy ... which almost made it. The problem was not with the concept nor with the turbine ... a transmission bearing failed.

The LOTUS 56 turbine which was driven by the late Graham Hill.

The photographs are from unknown enthusiasts who share their experiences and pictures on the web.







May 2009 17 Northlander

TOYOTA GRAND PRIX OF LONG BEACH 2009

David Churcher

This year the event did not provide the visual feast for photographers as we had in 2008. More wire fences and fewer spots for shots took away some of the fun. But it was still a spectacle worth seeing. The following pages are a photo essay of the event and they include David Brabham discussing the Acura with Scott Sharp, candids of Patrick Long, and our alternative cover for this issue.













Photography at a motor race. Is that a chance to make "art" or to do a series of "record" shots. ...?

It can be difficult to do record shots and even more difficult to do art shots.

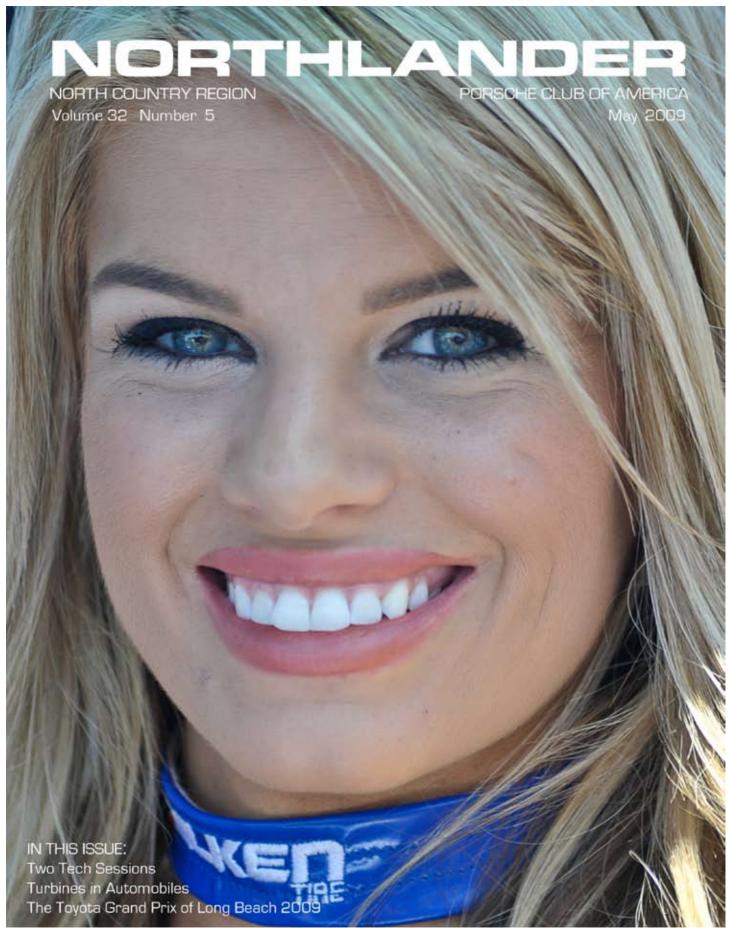
Photographs here:

an "artsie" shot taken in the paddock, Patrick Long, and another Flying Lizard with a bit of wire fence.





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Our alternative cover. A photograph from the ALMS paddock at the Grand Prix of Long Beach.





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SPRING HAS ARRIVED! SEASON OPENER AT NHMS

It has been a long winter but the grass is turning green, the flowers are up, the birds are chirping ... and the Porsches are out.

This two page spread of photographs by Matt Romanowski clearly says the season is open. You can't see the photographer in these pics but you can sense he is smiling.

Nice photographs. More? Turn the page.









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It has been a long winter. Cameras and the eye behind the camera have been preoccupied. But come April 18 Matt Romanowski and his P



entax went to NHMS for a season opener. These photographs say: SPRING!

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TECH SESSION: HOW TO MAKE YOUR PORSCHE HANDLE BETTER

Jack Saunders

How To Make Your Porsche Handle Better ...Tech Talk by Will DiGiovanni



This invaluable "tour de force," so professionally hosted by Porsche of Nashua on March 28, 2009, of the details and principles of the set-up and prep of your Porsches for improved performance driving on street or track, was both too detailed and wide-ranging for me to recapture and attempt to replay for you here in detail. Instead, I'll share with you some of the basic practices that Will employs in setting up his racing customers' cars for club and pro racing. Over 35 PCA members from NCR and NER got the detailed answers to their specific questions. The next time we're lucky enough to have true racing professionals address us, I will spread the word so you'll have the opportunity to personally pose your auestions.

Will starts out in a matter-of-fact manner, "What do you want from your car that it's not delivering?" Obviously,

unless its handling is unsatisfactory or you're not seeking performance beyond the great ride that is designed into factory production models, don't tamper with it. Just maintain it and participate in the tech inspection process (while it's up on the lift) and have the technician explain the key points in the linkages and joints -- especially the few adjustable ones.

However, if you're seeking improvements for DE and AX performance, again you want to start by asking this practical question: Am I looking for modest improvements in lap times, etc., and tailoring the set-up for my style of driving but looking for a wider comfort zone (more forgiving), or is my intent to drive the car to its new, improved limits and get marked lap time improvements? If your goal is to drive the car to its new, improved limits, Will cautions that you should first learn to drive

your car to its existing limits (and that's not easy, without occasional violation of the car's limits and losing control) before investing time and money into improving the car's set-up providing higher performance capability, which exceeds your skill level.

Once you've defined your goals, Will suggests the following step-by-step sequence to get the best "bang for your buck:"

(1) Get a professional alignment and try to increase camber. Normal factory camber is about 0.5 to 1.0 degree. If you want about 3 degrees, you'll have to go to camber plates. Note: ordinary garage machines and techniques don't hack it. Use shops with precision alignment equipment like USA-made Hunter and the German Weisbarth (that Will uses in his New Jersey shops)

and the competent personnel to tailor the alignment to your needs, such as Porsche of Nashua as well as a very few independent shops like Blair Talbot's in Dover and Dick Horan at Precision Imports in Manchester.

- (2) Change to stiffer sway bars. Note: (a) H & R has good packages -- with 3 adjustment points. (b) GT-3 bars are good but pricey.
- (3) Shocks. Note: (a) You can dial in shock spring rate adjustments on the PSI system. (b) H & R Spring Plates. (c) Traditional types -- Bilsteins, Konis vs. Penskes and JRZ's.
- (4) Tires. Experiment with pressures and verify the hot pressure you want after the tires warm up following several laps. Note: (a) Get the right compound rubber for the purpose. (b) To avoid unpredictable grip, avoid running track type tires like Hoosiers

in the rain and on the highway.

During the show-and-tell, Will answered many specific questions. For example, Ron Mann got some good advice on squeezing the maximum performance out of his old 1970 911 chassis (which weighs only about 2000 lbs). Ron went to special shocks, the Small Advances Leda (SAL), specifically the 24 click model. Will suggested that rear sway bar stiffening, might be helpful to balance the setup and improve grip.

Ron mentioned that incorporating limited slip differential made a big improvement in lap times at the Glen with its many wider type turns.

Ron Mann's quest to upgrade his venerable 911 brings to mind the options we have to satisfy our changing performance goals as economically as possible. In my case my 944 S2 had served me well while I was using it primarily for DE and AX events. As I aged (not very gracefully) I decided to stop denying myself the pleasure of driving my Porsche 365 days a year. including snowy ones in the White Mountains where I live and ski. So I did the obvious, I started looking for a 993 C4. Then I found out from Steve Robbins (a C4 aficionado) that C4s were designed to understeer (utilizing Porsche Dynamic All Wheel Drive, PDAD, which is supposed to reduce spin-out accidents). Now, that's comforting to know. Safety is paramount! But I'm not a good enough AX'er to give away a few seconds in tight turns. I'd rather drive more carefully/safely on the highway (which I do anyway to avoid cops) in a hot C2 or 944 and maximize my AX performance.

continued on page 31 ...

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Editor

...continued from page 7

The following paragraphs will reflect on recent events and perhaps say more about future events that will be, by then, closer. Let's hope by then we do have better weather and the financial gloom is lifting. As the Brits say in tough times: keep your pecker up. Can I write that in a US publication? He paused in conversation so I could take a few shots, and, when I asked if he would win at Le Mans he responded with a smile and said "yes." He is a very nice person, a gentleman ... just like his dad.

And, now ... it is spring and the NCR season is beginning. Woohoo.



After the Long Beach GP:

Motor racing as I knew it, and as many of us did, is drifting away. It is a comment my friend Ray made as I noted the crowd's enthusiasm for the drifting. A shocking waste of material in my mind. The crowd shows almost as much enthusiasm for IRL and the TV gives IRL coverage with lap times and driver's name. For the ALMS there is a distinct difference. This year I had my own "diminished interest" in ALMS because AUDI and Porsche were not there. Nor was Aston Martin. A much reduced spectacle. But what was increased was the security, the cost of getting in to the IRL paddock (was free, now \$20) and the amount of wire fence. Spots for shots are not what they were last year.

While I continue in my disappointed tone I will add one more comment in the same theme. Motor racing is not a spectator sport at Long Beach ... not if you want to watch and know what is happening in the race. It is a spectator sport if you head to one of the many bars and watch on the many screens and have a few beers. You can not hear the cars over the sound of the music and the crowd. But you get a great visual experience.

In a better mood I will describe how friendly the people are in the ALMS paddock. Pretty girls pose willingly and smile for the photographers. While taking pictures of the T-Mobile Porsche I was invited inside. I watched Patrick Long chat with fans and go down on his knees and chat with a five year old. But the big thrill for me was to chat with David Brabham.

MEMBERSHIP ...continued from page 9

Jim Hamblin Carrie Hamblin Franconia, NH – 1989 930

30 Years:

William Rienecke Josh Rienecke Middlesex, VT - 1962 356B

35 Years:

Robert Gilbert Sally Ann Gilbert Wolfeboro, NH – 1962 356B



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Rainer Cooney - Jerry Dascoli

Tech ...continued from page 27

So, I need advice from pros like Will DiGiovanni and Blair Talbot and other experienced NCR drivers on the following choices, considering performance and cost trade-offs:

- (1) Keep my 1990 S2 (with 167,000 miles, which runs well) and retrofit it with either (a) an AOT designation, limited slip differential (suggested by Will) or (b) a Guard Transmission Torque Biasing Differential (suggested by Ron Mann), or should I:
- (2) Replace my trusty 944 S2 I love, with a 1992 or 1993 911 C2, equip it with the best snow tires, then test it under winter conditions before modifying it while preserving its very good AX performance.

In addition to many admonitions to avoid the pitfalls that lay in the path toward the improvement in your performance driving, Will cited the following in closing:

- --Be careful not to exceed the ability of the suspension design to tolerate the 3 degree camber target adjustment for racing, because it could lead to a catastrophic wheel spindle failure.
- --Make sure there's no binding or dragging in sway bar or steering linkage -- or you could break a link or a joint or brackets.
- --Brake life can be extended with costly special compound brake pads like KSP's. A better solution for Weekend Warriors would be to improvise a simple system to duct cooling air to the pads/rotors.
- --To avoid seizing of hot and/or potentially corrosive action, use special anti-seizing compounds containing copper and other additives like zinc when bolting flanges or connecting parts together.

--Finally, make sure you follow factory manual instructions on lubricating threaded fasteners (especially wheel lugs) including the bearing surfaces on nuts and torquing them to correct levels. Also don't abuse the torque wrench & reset it to zero when done. Check calibration occasionally.

In closing, if you miss our Tech Talks, be reminded that regardless of which Porsche model you enjoy as a PCA member, all your questions may be answered by Tech Chairs like Will DiGiovanni (who covers Cayman/Boxsters). So just go to the Tech Question/Answer page in *Pano* and email your problems to the pertinent Tech Chair.

And NCR wants to recognize Porsche of Nashua's important contribution to the success of this event by providing its immaculate facility and support of service manager Phillip LaFlamme and supervisor Mike Cote, as well as the welcome refreshments courtesy of sales manager, Ray Sousa. Let's return the favor by thinking PoN whenever you need help keeping your Porsche fit or looking for a good deal in upgrading to your dream model.





Photographs of Will DiGiovanni page 26 and page 31 by Jack Saunders. Photographs above by David Churcher.



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TECH SESSION: Dick Horan's Fun Tech Talk

Jack Saunders

Though billed as a straight-laced, nononsense tech session explaining the vagaries of auto electronics and OBDII diagnostic techniques, Dick surprised us (pleasantly) with a wide-ranging expose from mundane, garage layout and disposal of dangerous waste to challenges in tracking down check engine light faults.

Held at his shop, Precision Imports in Manchester, NH on April 18, from the outset Dick starts the session as a social by serving hot dogs in buns with all the fixin's and hot/soft drinks followed by donuts and coffee. And, immediately he relaxes and entertains the group of about 15-20 enthusiasts.

However, though I don't believe it was his intent, Dick began listing some of the more mundane and less obvious components of the shop hourly rate that you pay when you bring your car in for work

Being a good citizen Dick goes the extra mile to conserve energy and takes no short cuts in disposing of waste/contaminants.

For starters, he built his shop with in-floor hot water heating and maximum wall/ window insulation. Once heat is started up, the furnace (thermostat controlled) stays on because the concrete floors retain the heat so the furnace just cycles on and off as required. The system is so efficient that when the big garage doors are opened, normally heated garages get uncomfortably cold, but here, shop people and customers remain toasty.

Another unique feature which is indicative of how customer-friendly this shop is, is the in-ground heating system he incorporated in the asphalt parking area in front of his shop to prevent icing in winter, keeping customers safe from falls.

Regarding disposal of waste oil, Dick used to burn it to conserve energy, but since it still caused air pollution, he now sells it to recyclers in the winter but pays for disposal in the summer when it's less in demand for heating.

The waste oil tanks have wheels to roll under cars to catch oil which is then pumped into a holding tank for pickup by the recycler.

Cleanliness is key to reliable precision automotive work. He starts with keeping the computers and test equipment clean and dust-free. A "sand" blaster is used to clean used parts before re-assembly. The "sand" used is not sand. It could be glass beads, or "black beauty" -- burnt coal particles. A large industrial dishwasher is used for certain parts.

Back to recycling that we all have to support to conserve energy and resources, I was surprised to learn that scrapped catalytic converters aren't simply crushed into scrap metal. The reason is, that converters do their job of cleaning up the exhaust gases by having them flow over and "scrub" surfaces containing rare elements which can be efficiently reclaimed by reprocessing. So, check with Precision Imports before throwing out failed converters.

Then, our attention was refocused to some interesting aspects of the more technical side of Precision Imports. Counterfeit parts are a growing problem. Despite your care in procuring parts, it's easy to get fooled by counterfeits. For example: oil filters are disguised as Bosch or Mahl by false logos and fake boxes but fail because they're made of inferior, poor quality materials and will deform under pressure and leak/fail ultimately causing engine failure.

Also, the replaceable oil filters in Europe are mostly of the "paper" filter element type rather than the typical metal canisters used in the U.S., partly because when the "paper" filter is crushed to be disposed of, it weighs less, reducing the cost of disposal in Europe. Maybe, to conserve materials and reduce shop overhead, the U.S. should opt for filter housing design which contains the replaceable filter element that's disposable.

Before moving on to Dick's new, modern alignment and balancing center he informed us of another interesting interaction between our environmental protection policies and driving our Porsches -- namely wheel balancing weights are soon changing from lead to a new, yet to be specified non-contaminating but still dense material. Lead sinkers for fishing are banned for the same reasons, namely contaminated water and fish that get into the food chain damaging health, especially in children.

Precision Imports recently invested in upgrading its alignment and balancing center by installing a top-of-the-line Hunter system, consisting of an alignment platform, a high-speed balancer, and a tire changer.

The Hunter Alignment Machine is on a very stable platform (mounted on a special parallelogram linked lift) which allows alignment adjustments to be measured and made at any height convenient for the technician. Lasers afford the precision required for high performance race and AX cars.

For example, most Porsches come from the factory with 1/2 to 1 degree of camber whereas a performance car may require 2-1/2 to 3 degrees. However, it's important to understand how extreme camber increases the loads on parts like the wheel spindles, before requesting extreme adjustments. Expert set-up technicians can advise you on how best to meet your needs and do the alignment quickly because shops with this equipment have shortened the time to set-up and lock your car firmly in place to just 3 minutes. Of course if you want to go to extremes, like corner weighting, the process of measurement and adjustment takes longer.

The new high speed Hunter Balancer is unique in that it has a separate free wheel (it looks like a grinding wheel but is simply an idler wheel) against which the tire being balanced presses, to simulate the effects of the ground forces being fed into the tire's flexible structure thereby distorting it, affecting the dynamic balance (which of course is different than a static or low speed wheel balance, just spinning freely in air). Before a first class

shop will balance your wheel/tire assembly they will carefully visually inspect the tire bead, sidewalls and tread for defects.

The new Hunter Tire/Wheel Changer Machine is designed to protect the tire from excessive stress/damage during removal/assembly. This machine has a feature that's important to most Porsche people who insist on cosmetic perfection, down to the wheels. It avoids scuffing/damaging the wheel rim by not touching it.

An interesting aspect of the tire/wheel assembly is that, depending on the tire application, a tire will slip on its wheel, depending on how aggressively it's accelerated. For normal driving and modest acceleration, it's negligible, but for "funny cars" the tire has to be screwed down to the wheel.

Before moving into the final phase of this automotive tour-de-force, Dick reminded us that the original 2-wheel drive dynamometer stands have to be replaced by new 4-wheel drive dyno's to handle all-wheel drive cars.

Precision Imports' forte is in (1) NH StateInspection, (2) performance testing and (3) especially in diagnosing engine/ control systems problems employing OBDII which requires serious financial capital (\$'s) investment as well as continued technical training to properly apply these complex and sensitive testers to diagnosing the problems in your computer-controlled car.

Starting with NH State Inspectors, they have a new system that only allows the operator to change the ink and paper in the state-provided and maintained test system. This makes it tamper-proof

and prevents any cheating. Also when the car being tested has computerized control systems, NH allows a max of 2 out of 5 OBDII test factors to fall out of limits before the car is failed and the owner is forced to go to the expense of tracking down and fixing the problem. Now this is where these sophisticated diagnostic measurement systems break down. Let's say OBDII and its computer system pinpoint a component that's defective/needs maintenance. When you finally access that part (after expensive disassembly labor) there's a real chance that you'll find the part is okay but the sensor is defective. So we have a new concern in the car repair business, namely, the sensor reliability problem, i.e. it's iust as likely that the sensor is defective. as the part. So we've spawned a new car care specialty -- the sensor design, manufacture and application sector. In some cases, like applying thermocouples, or other sensitive and tiny sensors, it may be as costly as fixing the car problem itself.

By the way, the car owner needs to be aware (if the technician hasn't warned him) that after the fault is fixed that made the *check engine* light come on, the car has to be driven a certain minimum number of "readiness miles" before the system resets itself and turns the light off.

To wind up this article on Precision Imports' best efforts to help us enjoy our Porsches, I'd like to repeat a few quotes by Dick and some of my conclusions regarding the troubling trend toward spoiling a practical performance car into an overly sophisticated machine, eventually risking it becoming an unreliable

"garage queen":

- a. He observed that a 1988 car is "stupid" (from a diagnostic capability point of view) compared to a computer-controlled 2009 model.
- b. He also noted that a moving car is a bad environment for sensitive controllers that are tied to and guided by complex computers that are also sensitive to: (1) vibration, (2) varying extremes of temperature and the associated thermal differential problems and (3) high "G" loads.

I feel that the "smart car" may have outsmarted itself because the sophistication required for its smartness makes it vulnerable to its harsh operating environment, impairing reliable operation.

So, I suggest we take what we've learned so far by running these "smart cars" and decide what unreliable sophistications we can sacrifice for a simpler, more affordable, practical, fun -- yet high performance -- car.

We've finally completed the 2009 season of Tech Talks. They were well attended by enthusiastic NCR (and some NER as well) people who constructively challenged the outstanding speakers and were in turn rewarded with information and advice that helped them to more safely drive their Porsches to their design limits.

If you have ideas for improving these presentations, please submit them to the NCR Board of Directors for consideration for next season. At any rate, I assume we are all more than ready to move on to our "moving events" - rally (sign-up for the May 9th Jay/Matt gig), AX and DE.



May 2009 33 Northlander

OPEN HOUSE BRUNCH AND RIDE AT PORSCHE OF STRATHAM



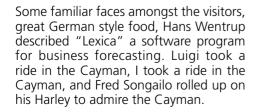


Photographs on page 34 by David Churcher























Matt and Jay came by and took the Cayman for a ride. Matt had his Pentax ready and the weather was perfect for a Guards Red Cayman and a ride on the roads around Newfields and Stratham.

Does the brake photograph imply: "stop this temptation" and the clock photograph: "time to consider a new Porsche"?

It was a great day to celebrate the beginnning of spring.

Thanks to Harry and Kathy for a great event ... and a ride to remember.

Photographs on page 35 by Matt Romanowski

May 2009 35 Northlander

REFLECTIONS ON SEBRING

Olivier Koen

Hello,

Thanks again to Dave, I had to wake-up early (Oh boy, do I hate that!) to go to Florida where the 12 hours of Sebring were about to start. What an epic weekend! Grabbed the camera, threw a few T-shirts and a toothbrush in the bag, found the darn keys and rushed on to the bus already late (me, not the bus unfortunately).

Audi vs. Peugeot...and both of them are seen as potential winners! I let you guess on which car the Froggy I am had the biggest expectations. This is serious stuff and big bets are going on (actually, we just bet the dinner but I say big because of Dave's appetite!). I was dying to see the new R15 and 908 elbow to elbow (French saying for neck to neck).

First day on the track: the tests. For the machines and the drivers of course, but also for the spectators and the cameras.

Having lived in New Hampshire all year long, the transition was kind of hard and



Olivier had a hard time waking up but once awake gave us some interesting perspectives. Do see the note on page 42. Photographs pages 36 and 37 by Olivier Koen

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I'm still amazed to find out that summer in Florida starts in March! 30°F suddenly turned into 30°C in the shades...well there's no shade on a race track!

The camera test revealed a surprising difficulty. I found it very difficult to shoot the Audi and the Peugeot because of their amazingly silent diesel engine. If you don't pay attention, you just don't hear them coming and at more than 200 km/h, the window for a good picture becomes pretty small.

The track is very rough in some parts and doesn't let you forget that you stand on an old airport. Poor suspensions, poor tires and poor drivers...12 hours at these speeds and on this pavement, the first wood bench in sight may appear like a king size bed after that.

Second day on the track and I'm grumpy (had to wake up even earlier). The alarm clock did not wake me but Dave's yelling did. Not quite awake completely I needed coffee to finish the job. A cup of coffee found on site was at least terrible enough to finish the alarm clock job but I maintain that employees must wash their socks between each cup if they absolutely want to use the same to pass the coffee through.

The race started around 10AM. This was going to be a long day and the temperature hadn't decreased.

Very nice attention from the race management staff, the crowd was allowed to go on the track to see the cars and talk to the team members just before the event. Needless to say that it ended up in a rarely seen compact mass of people.

The suspense was unbearable, Audi and Peugeot seeming to play a relay for the first place between the pit stops and the passing and amazingly, this situation kept going until the very last minutes of the race. Only about 20 seconds between the Audi and the Peugeot after 12 hours! This makes me wonder if we hadn't reached a threshold in terms of car performance nowadays.

Anyway, Peugeot finished second and Dave still has a big appetite! But in the depths of my mind, I'm convinced that the French team was sneaky enough to not reveal their strategy too early and win the 24 hours of Le Mans cutting the grass right under Audi's feet at home!

Cheers,

Olivier

see Editor's note page 42







President

...continued from page 6

May 9th and concludes with an optional overnight stay at the Indian Head Resort in Lincoln, NH. May 12th is our next board and chair meeting, and all are welcome to join us for dinner and attend the meeting – come and see what it takes to manage the affairs of a Porsche Region. May 18th, 19th, and 20th are NCR's first NHMS driver's ed events of 2009 - the 18th is reserved for a novice day, a great opportunity for those of you wishing just to dip your toe in the pool without diving in. May 23rd is NCR's first autocross day at Fort Devens in Ayer, MA, and May 30th is our Car Control Clinic at NHMS, a fun parking lot event. Come join us for any of our May events. Jump online and sign up!

June will promise some great events as well including an ice cream social and an encore of last year's hit outdoor drive-in movie at Blair Talbot Motors in Dover... fun, fun.

Anyway, whether it's the chirping of the birds, or just that smell of spring in the air get that car out of the garage and enjoy this time of year. Better yet, enjoy it with all your NCR friends.

Looking Back ...continued from page 11

split up into two groups and then paired up with co-drivers (Rob Morse and I were together). Proceeding first to the "acceleration & stop" course, Rob and I were allowed two runs apiece in the new Carrera 4, 944 S2 and 928 S4 (auto). We began each run by accelerating through a 180-degree turn, shifting into 2nd gear, then proceeding at ful Ithrottle down a straightaway stretching approximately 100 yards. As we passed through a "gate" (consisting of rubber traffic cones), we were instructed to execute a "panic stop" to test the car's ABS-brake system. Not to play down the Carrera 4 sturbine-smooth acceleration, the new 944 S2 was the biggest surprise in terms of raw power and torque. With some practice, we were able to reach speeds of 50-55 mph, with both cars, before braking "hard" at the end of the course. The incredible new ABS-brakes brought us to an abrupt stop flawlessly (with a crisp "chirp" of the tires)

with deceleration forces that reminded me of my first aircraft carrier landing (or "trap"). With its added weight and automatic transmission, the 928 S4 was a little slower getting off the line, though no-less-impressive.

On to the "slalom" course, Rob and I tried our hand at "knocking over the cones" with a 944 Turbo, 928 S4 (5-spd.) and 911 Carrera (regrettably with square tires). The 911 Carrera won hands down with its cat-like agility, though I'd have to say the 944Turbo was no slouch.

Following a short break for refreshments and to allow the staff to reset the course, we proceeded to the final event of the day, the road course. Following an instructional run with one of the staff members at the wheel, each team was turned loose for one run per driver in each of the four cars provided. Rob & I decided to "warm-up" to the event by first driving the 928 S4, followed by the 944 S2, 944 Turbo, and for the finale, the Carrera 4.

The 7-turn course was laid out on two levels allowing us a short uphill run, followed by a sweeping 180 degree left turn (at about mid-point) and then proceeding down hill through a series of turns to the finish. Combining what we had already experienced in the "acceleration & braking" and "slalom" events we were able to gain a full appreciation of each car's unique performance and handling characteristics. Due inpart to my inexperience, I felt slightly intimidated and "ham-fisted" my way around thecourse in the 928 S4 (going w-i-d-e in the sweeping left-hander), without giving the cara fair chance to demonstrate its capabilities. Rob, on the other hand, drove like a seasoned pro, giving the car a good workout.

Hopping next into the 944 S2 we both were impressed with the cars rocket-like acceleration, handling and brakes. A beautifully "balanced" automobile, it would beour choice for an affordable club "sports racer" and everyday car. This is not to say that the 944 Turbo, driven next, didn't perform well. With the short course, its turbo-charger didn't have sufficient time to "wind up", and we weren't able to fully experience the cars acceleration potential. Its handling, though impressive, didn't quite have the crisp feel of the S2.

We saved the best for last, slipping behind the wheel of the new 911 Carrera 4 for our final run of the day. Though the car had been driven hard by those before us, itleft the line smoothly and quietly (due in part to the new encapsulated engine). Without braking prior to the first turn, I accelerated hard coming through the apex and the all-wheel-drive system performed flawlessly. The car felt like it was bolted to a track. It made even a "hamburger" like me feel like a pro! Flying up the hill and through ashort series of turns. I tapped the brakes lightly to get set up for the 180-degree lefthander. I pushed the car hard through the entire turn, a maneuver that, in Rob'swords, "would have sent a normal 911 into 360s." I couldn't guite get up the nerve tocrank in more steering and we went slightly wide, it was nonetheless impressive. Sailing over the crest of the hill and into a gentle lefthander, I fought t to overcome the desire to use the brakes. Staying on the power, the car stuck like glue. After a short stab onthe brakes at the double-coned "gate" I entered the last sweeping left turn and stayed on the power all the way around. I broke hard at the end of the course, my pulse racing wildly. Many thoughts flashed through my head, but the last was the most vivid . . . Let's see... if I sold my house, Sandy's 356, the kids, the dog ... maybe I could just afford. . .! Orbetter yet ... Dear Santa!

After filling out a short Q&A form and receiving a nicely, framed certificate of completion of the "Ride & Drive" Program, we thanked Paul Metzger and his team fora truly memorable experience. It will be a l-o-n-g time before anyone gives me the keys to \$330,000+ worth of race-bred automobiles for an afternoon of enjoyment. Thankyou Brian Bowler and PCNA and to Dr. Porsche for re-defining the word "Excellence."



SALE*:** Four stock Boxster wheels with slicks, painted gray/silver. Some small scratches in the paint from storage. No damage to structure. Asking \$500 for the set. Tire sizes Rear, 255/40 ZR 17; Front, 205/50 ZR 1, BF Goodrich G-Force T/A racing slicks, maybe 30% left Brad Marshall 603-496-2038 BRADUSM3@aol.com

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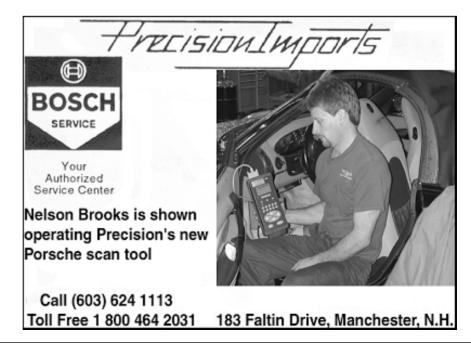
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SEBRING

... continued from page 37

(Editor's note)

Olivier et moi sommes allés à Sebring pour la course de douze heures. Comme j'ai dit le mois dernier, Olivier était un peu en retard pour le car et son programme du « MBA » a prévenu ses efforts de présenter ses photographes et raconte pour l'édition d'avril. Mais, maintenant il est arrivé, pas trop tard pour cette prochaine édition – l'histoire de Sebring 2009 et ses photographes par Olivier.





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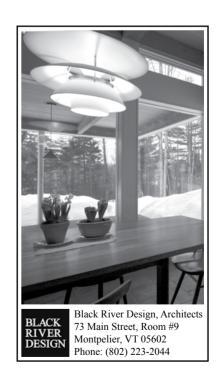
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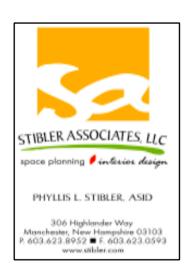






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The sentimental trips I (David) have to CA are to visit old friends ... well, I mean, friends of many years ... but, friends with old cars ... like the '59 'vette (Ray's) above. We go to vintage and hot rod shows too, and, wow, a 1963 Super 90 and a few others...

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