VINTAGE RACER GROUP
VRG NEWSLETTER
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For the driver who enjoys racing with others who value driver attitude, skill and car preparation.

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VRG RACE SCHEDULE 2009

Pittsburgh Area Social - TBD
Winter Warm-up - TBD
APR. 10-12 - VIR with VDCA
VIrginia International Raceway, VA
MAY 1-3 - Jefferson 500
Summit Point, WV
MAY 15-17 - NHIS Vintage Celebration
Louden, NH
JUNE 19-21 - Mosport Vintage Festival
with VARAC, Mosport, Canada
JULY 10-12 - PVGPHistoric Races
BeaveRun, PA
SEPT. 18-20 - New Jersey Motorsports Park,
Millville, NJ
OCT. 16-18 - VRG at the Glen,
Watkins Glen, NY
NOV. 27-29 - 12th Annual Turkey Bowl,
Summit Point, WV

Visit the VRG website at www.vrgonline.org for changes and updates to the schedule

PAUL NEWMAN
1925 - 2008

PHIL HILL
1927 - 2008

PRESIDENT MESSAGE
THANKS TO ALL FOR THE NJ EVENT

Thanks for the kind words from so many of you, via e-mail and personally in the paddock during the weekend. From the Event Chair's perspective, most things went better than expected for a first-time event. The NJMP staff was very helpful -- believe me, there were a few issues that no one knew about because we got them resolved quickly before they became problems.

There are so many people I need to thank, this could start sounding like the Academy Awards show, but I really need to call out a few names in particular:

Bob & Carol Watkin, who did so much work prior to the event, and then got up at 6:00 AM all three days to open the Registration Booth at 7:00 -- with great help from the **Hirschtritts, Darry Bova, Peter Krause, Bob Schoeplein, and several others**.

Steve Hyatt, our Race Control guy, along with his wife, daughter Taylor, and son Domenick -- fantastic job, especially given the fact that this is the first time Steve has worked with us, and the first time he has worked this track. Great leadership of the F&C crew.

Barb Romanansky, party planner extraordinaire! Great job on the Saturday night barbecue.

Roger Allard, pace car, who towed his Allard J2X Mk II all the way down from Canada to do this!

B**ruce Baker**, Chief of Grid, did a great job under challenging conditions (squeezing cars into a very tight false grid!) -- with expert help from **Diane O'Connor, plus so many others that I've lost count!**

Steve Baron, one-man-band in Timing & Scoring, flexible, easy to work with, never missed a session. Steve came all the way down from New England to help us this weekend, and provided the AMB system components we needed in order to use transponders.

Tivvy, Ralph, Steve Limbert, Greg K, Graham, and anyone else I may have forgotten who Tech'ed 140 cars in record time.

Charlie Greenhaus & Entropy Racing Team, our guests for the weekend, who provided not just five more entries but also the track talk (thanks Charlie Turano), and mechanical assistance and advice to many.. We're looking forward to having this group back with VRG again.

So many flaggers that I can't begin to name them all ... really good experienced people on each corner, plus enthusiastic new recruits who performed much better than one could ever expect, and never a complaint about the long hours or sometimes stressful conditions (we gave the flaggers a LOT to deal with this weekend!)

British Motor Club of South Jersey, and Delaware Valley Classic MG Club, who provided large numbers of novice/volunteer flaggers -- we would have been really short without them!

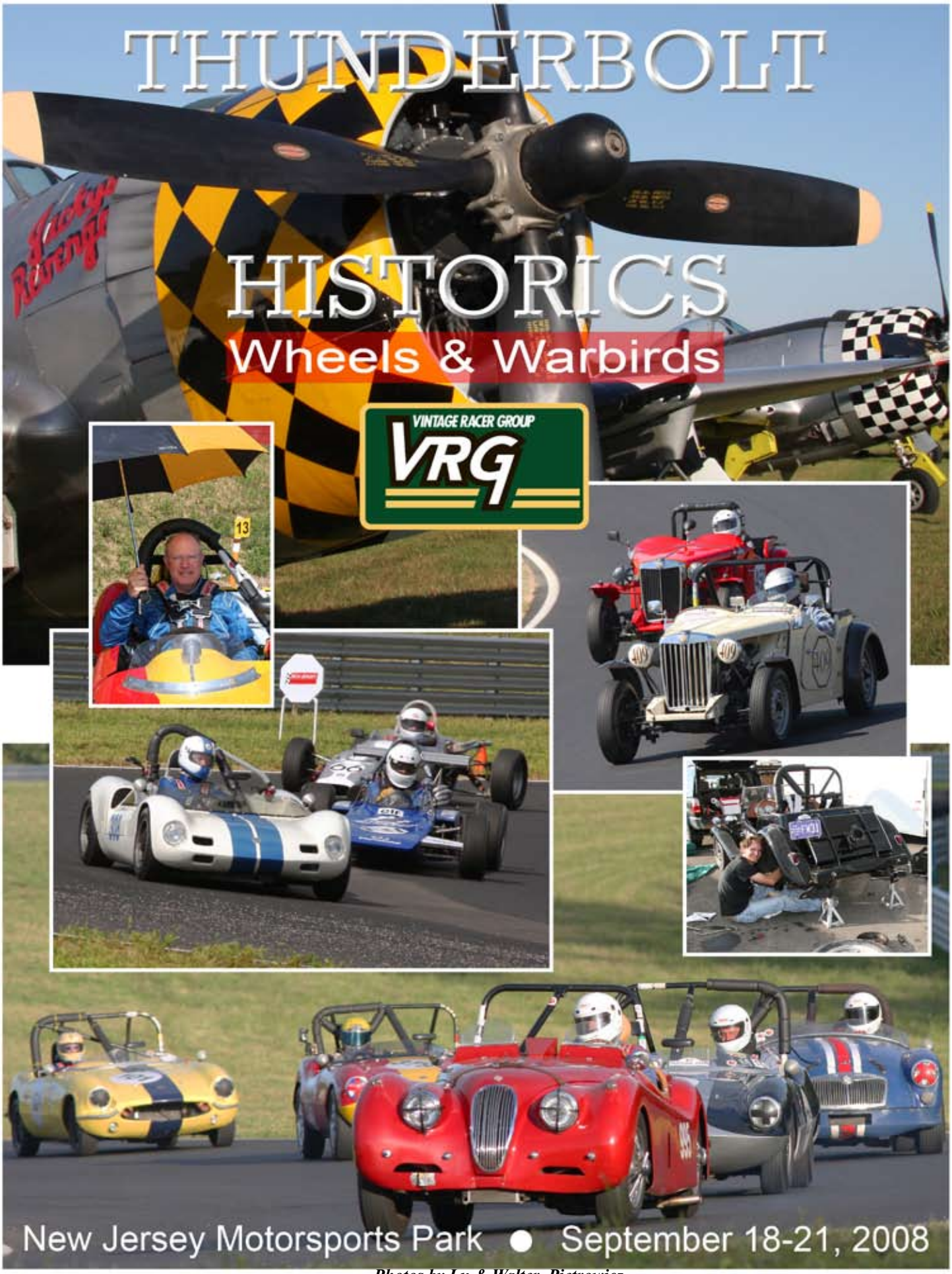
Keith Lawrence, Assistant Event Chair, who backed me up all weekend. When I needed to be 2 places at once, he was there.

MG Vintage Racers and Allard Owners Club, our feature groups for the weekend, who brought so many entries (and the beer for the party!) and had a great time all weekend. The Australian Pursuit was terrific!

And finally**, all the entrants, drivers, and crew** who really made the event happen ... without you, there wouldn't be a race. So many stories of people working hard to prep their car, or fix a tow vehicle, or overcome some obstacle so they could be there this weekend -- truly appreciated!

THANKS TO ALL!

Mark Palmer



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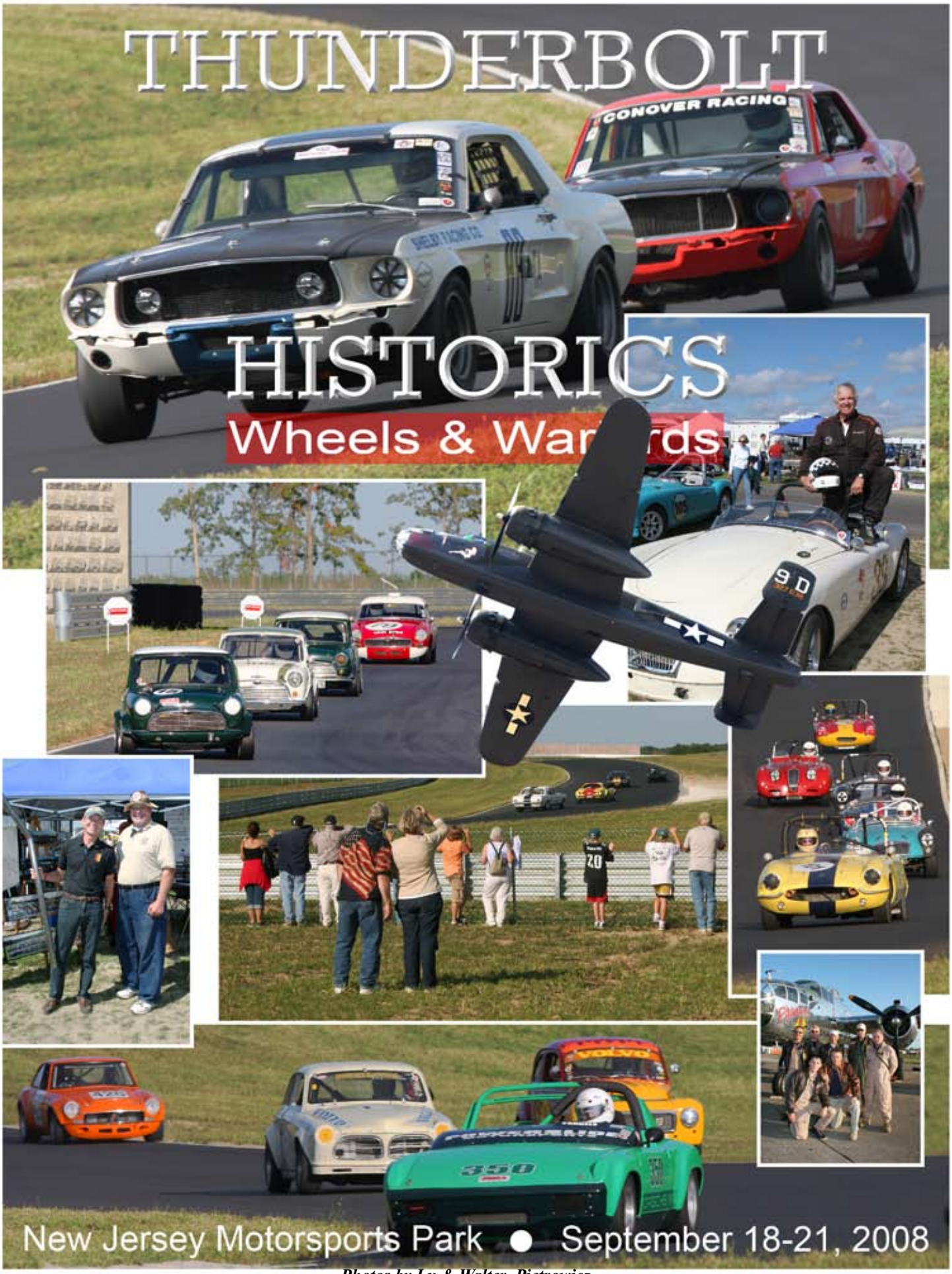

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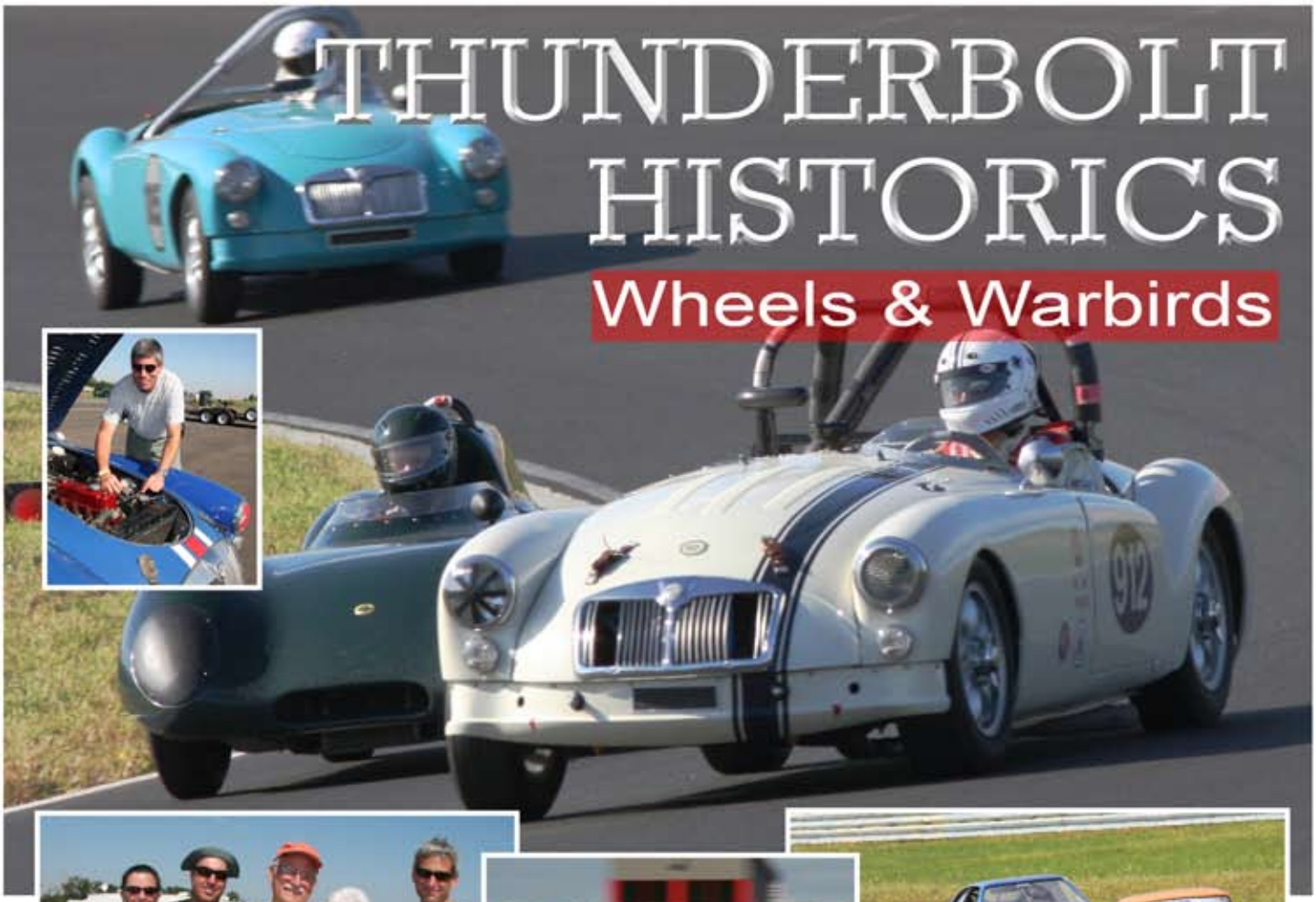
THUNDERBOLT HISTORICS

Wheels & Warbirds



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THUNDERBOLT HISTORICS

New Jersey Motorsports Park
September 19 – 21, 2008

The tow truck operators may have entered the event as rookies, but they graduated the weekend as veterans. On Friday there were 16 tows. Saturday there were fewer and Sunday, even fewer, possibly because there were less cars to tow. They did their jobs well and VRG is indebted to their "service with a smile."

My view seemed to be mostly from the spot we had parked (near the bathrooms), or from the cockpit of the Crossle. Mark Palmer was on the PA system or on the starting grid most of the time except when he was being looked for, which seemed to be "all of the time." We were parked on the front row and the most frequently asked question of the weekend was, "Have you seen Mark Palmer?" (That translated, meant, "Do you know where he is?") The stock answer became, "He is over there." From the cockpit I saw Keith Lawrence, in baseball cap and headphones, directing the starting grid. He did a terrific job of helping Mark Palmer who could not have done his terrific job as event chairman without Keith's help on the grid. It was one of those weekends in which most things went well, we had great racing on an excellent new track, the Lightening Circuit, good attendance, spectators, MG Vintage Racers, a Vintage Air Show but…too many incidents. No one was hurt, but there were a lot of unnecessary damaged auto bodies and torn off suspension pieces. The Drivers Committee awarded seven 13/13's.

There were two drivers meetings, Thursday evening or Friday morning, take your pick. Mark Palmer explained that in being on a new track, the first sessions would be have the first two laps under a yellow flag, there would be no timing and scoring, and urged everyone to be careful and learn the track. The open wheel group was fourth out, we had two laps under yellow and at turn four on lap four, the lead car spun, he was hit by the car behind him and he was hit by the fifth or sixth place car – red flag. For you Army veterans it was another version of "hurry up and wait." We did not learn much about the track that session. It got a little better as the day went on (I think we may have had six laps before the track was again red flagged due to a wreck), and we may have completed three sessions. By Sunday the 15 little Indians in our group were only seven. In two of the Saturday races in which there were incidents involving two cars, the passing car was trying to emulate Parnelli Jones in his Trans Am racing days when he would leverage his way around a corner by bouncing off the car to his outside. Given the prize money at the Thunderbolt Historics it was a fool's errand. I think that VRG can be proud of the event and the turn out. It is not proud of some of the individual driving performances. As an adult pastime we expect the participants to act, on and off the track, as adults. We should hold ourselves to a higher standard. It might have been the phase of the moon, or the New Jersey water. For what ever the reason most of the incidents should not have happened; and having raced on the track with most of the drivers for many years, I am mystified that they did happen. NEVER AGAIN!

We have some "from the cockpit" reporting that will now follow.

Bill Hollingsworth

MG Vintage Racers with VRG at Thunderbolt Historics

To say MGVR's East Coast Focus Event at VRG's inaugural Thunderbolt Historics at New Jersey Motorsports Park's Lightning course was a success would be an understatement to say the least! 39 MGVRs took to the new circuit to play on this challenging, fast course. Mother Nature outdid herself with gorgeous weather all three days, with just enough of a breeze to keep the temps in the comfortable range throughout the event.

Friday was "practice day;" reserved for keeping speeds down and learning the new track. Following

on-track activity, MGVRs retired to the Paperwaiter Restaurant for our annual banquet, this year featuring Tony Giordano's Abingdon Competition Department photo collection.

Saturday's race schedule was jam packed with fast, furious action, including the MG/Allard Challenge Race, won by MGB pilot Stephen Mullen, followed closely by Jack Cassingham (Midget) and Bill Shields (MGB). Ralph Steinberg was the first (and only) Allard across the finish line. Ralph carried the torch for Allards this weekend in the Pete McManus J-2. Following Saturday races MGVRs and VRGers met at the Millville Air Museum for a barbeque dinner and general carousing.

Sunday dawned foggy, but damp was to yield to another day of blue skies (filled with WWII fighter and bomber aircraft) and warm temps. By now attrition played a part in partially filled grids and emptying paddock. Those of us with cars that would make it on the track enjoyed perhaps the best racing of the weekend, with plenty of track time and ideal track conditions. Dicing in Group 5 was especially fierce as a group consisting of a twin cam MGA, two pushrod MGAs, an Elva sports racer and a TR-4 traded positions throughout the race, all chasing Jim Holody's twin cam. It doesn't get any better than this! The noon hour brought the Awards Ceremony at MGVR Central. The gathered contingent applauded as it was announced that Mike Kusch was the recipient of the Bill Parish Master of Speed Deception award. The applause was deafening when Vicki Leonard hoisted the Big Copper Bucket as MGVR Spirit Award winner. Continuing the MGVR/Allard challenge from Saturday, the Australian Pursuit Handicap race turned into a picture of perfection with the race to the finish was close, with Rachel Prehodka-Spindel gaining 1st position (TD), followed closely by Jim Juhas (MGA) and Mark O'Day (TD). After post-race awards at MGVR Central, all racers acknowledged another successful focus event, said their goodbyes, and packed for the long trip home.

Many thanks to all VRGers who worked, organized, or participated in the 1st ever Thunderbolt Historics. I'll be back again next year! (VRG is indebted to the efforts of Chris Meyers and Greg Prehodka in securing the large entry of vintage MG's. Ed.)

Chris Meyers

More MGVR at the Thunderbold Historics

NJMP is already a spectacular facility; when the finishing touches are applied it will set a new standard. Two touches the Lightning Circuit sorely needs are showers and a proper flag stand at start finish. The starter presently resides in a deep hole well out of sightline as one approaches the fast & challenging Turn 1. Missed checkers were frequent. (The Start/Finish Line Flag Stand is in process. You are going to have to bring your own showers. Ed.)

VRG hosted MGVR in fine fashion, due in large part to the superhuman efforts of Mark Palmer. Track time was ample (I clocked over 140 miles of racing, although I skipped two sessions). With 140+ cars present, less than half the paddock was occupied. Most MGs avoided the asphalt areas, with their multiple spill & drip restrictions, but accommodations were still generous.

Rich Benz orchestrated the excellent MGVR banquet with the capable help of his grandchildren. He also worked tirelessly as MGVR liaison with the track and all around MG concierge. He was present all weekend at the wheel of his ex-Mark Donohue MGA.

The Lightning circuit is fast and challenging. On a clean lap, I downshift once, to third, at the left hander before the light bulb, then back to top before the Lightbulb entry. Braking occurs twice, at turn one and at the above mentioned left hander. It seemed that many drivers were braking at a number of unnecessary points.

The challenging nature of the track requires full commitment at most apexes. This leads to real difficulty in passing for evenly matched cars. If you cannot power by on the straights, the narrow, high speed corners make diving for apexes almost certain to end in tears. These conditions resulted in an unusual quantity of bent metal.

On this particular weekend, Track Management presented an additional challenge: finding your marks while watching tight formation flying for 4 P-

47 Thunderbolts, 5 AT-6s; 2 B25s, a Catalina PBY, strafing passes by a P-51 Mustang, P-40, and Corsair. The Millville Air Museum provided a unique and hospitable site for the VRG banquet. Their outstanding collection focuses on the P-47 and the pilots who trained at Millville.
Also included is an operational Link Trainer, which is an ingenious analog simulator for instrument flying. My mother worked at Link in production during World War II, and it was a memorable moment to watch son Nick at the yoke maneuvering the trainer.

Group 1 included T-series MGs and streetable MGAs. Among many other interesting cars were Peter McManus' Ardent Alligator & Allard, the latter helmed by Ralph Steinburg, who gave am exciting performance taming the beast. The Lightbulb was a favorite spectator spot, as the sweeping high banked turn provided excellent vantage to compare lines and drift angles. The quicker T-series were exiting the turn at over 80 mph!

Every one was learning a new track: apex cones were well situated to indicate where the car should be placed. It took a number of laps to achieve that placement. Dan Leonard said he spent much of the weekend trying to convince himself that he could take Turn One (a sweeping top gear right with a steep blind brow just past the apex) without braking. I proved that I couldn't do it late in the MG Australian Pursuit Race. Brain fade had me peering into the Starter's hole, trying to see if he was waving the checker, while I drove well past my braking point. A lurid spin produced a large "dust ball" and filled the TF with fine silt and pea gravel.

Thanks to Mark, Rich, Chris, Greg, VRG and all those who worked so hard to produce a memorable weekend.

George Pardee

More in Seat Correspondence

Doug Reichard won the Group 2 race for German, Italian, Japanese, and Swedish cars with the lone Pinto thrown in. Doug's Porsche 914-6 ran strong all weekend and finished with a comfortable lead. Second place was another Porsche, the 911S of Jim Hartman. Sweden produced the third place car. The 122 Volvo Amazon of Rich Kushner crossed the line a few ticks behind Jim. Tom LaCosta brought his new Alfa GTA and it ran really well all weekend so he's thrilled with his new toy. Margo Otey drove a 911 she just bought the previous weekend. It was delivered to the track on Friday and she shared the car with her friend Damon Josz.

Tim Earle walked away with the Group 3 win in his Super 7. Michael Kusch's MGB was second, but there was close racing behind him with only about a second separating Jim Glabicky's '64 Datsun Fairlady 1600, Joe Ware's Austin Mini Cooper, and Jack Cassingham's MG Midget. Ralph Salomon was quick and a contender in his Ginetta G4 until it broke on Sunday.

The sports racers and open-wheeled cars of Group 4 were up next. Peter Krause won in his 1984 Tiga S2000. He also set the vintage track record for the Lightning circuit this weekend and it will probably stand for a pretty long time (at least until next year)! Kyle Kaulback's 1971 Lotus Type 61 MX was second. Earl Roberts snagged third in his Formula 3 car, a period correct, 1972 GRD-372. Bob Romanansky was the first of the Formula Fords in fourth overall. Charlie Greenhaus was the first of the Entropy Sports Racers over S/F. These cars are former SCCA's Spec Renaults, and Entropy Racing fielded 5 of them this weekend. Their team Driving Instructor, Charlie Turano, had driven the track before and gave the chalk talk on Friday and really helped us all out with many pointers,

Group 5 had a great turn-out of Austin Healeys! Seven, I think. Whitman Ball drove his 100-6 to the head of the Group 5 pack and won going away. The 1957 356A of Les Roub was second over the line with Nathan Scigliano's Elva Courier rounding out the podium. Jim Holody came all the way down from

THUNDERBOLT HISTORICS

Wheels & Warbirds

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London Ontario, Canada to race. His MGA Twin Cam had sustained some damage at the Glen just 3 weeks earlier. Jim worked round the clock to get it repaired and ready for this event. One of the rarest cars at this weekend race was Dave Belden's 1955 Lotus Mk IX in this group. Unfortunately the Lotus didn't make it into the Sunday race.

"Almost I won, Tivvy didn't run, Tivvy and I had a "Coming together--my doing" on Sat, he said he was done, had too many things to do anyway, I of course wasn't allowed to run (as it should be) but my Son Bob arrived on Sunday, and Mark said ok to him running the 159 Healey, He is the one that ran away with the Sunday race. He was there again this past weekend, but with his '74 2002 BMW--had another good weekend --'cept for the rain he said.

-- Whit Ball (Whit won the Parnelli Jones Award for his punt and the respect and admiration of his fellow drivers for his attitude and his acceptance of the responsibility in the incident. Ed.)"

Group 6's ground pounders had a good race. Frank Grimaldi placed his Trans-Am veteran Chevy Camaro at the head of the queue. Wes Meyer's Corvette finished in the silver position. Bob Aliberto kept Ford's image in focus with his 1965 Shelby GT350 in third. VRG invited Tom Cetola in his historic stock car (Chevy Monte Carlo) to run this weekend. He has run with VRG before in this group and its fun for the crowd to see a NASCAR stocker out rippen' up the track. Joe Volpe, NJMP's track manager, couldn't get his own Mustang ready in time to run. So Bob Aliberto loaned Joe his Mustang for a session so Joe could go out and get the feel of his own track.

VRG found it really tough to get enough flaggers and other workers for the event because the SCCA was running their regional over on Thunderbolt the same weekend. So VRG Mark had to cast a wide net to find help. He got workers from as far away as North Carolina, West Virginia, and upstate New York. He also got great support from local car clubs, the South Jersey British Motor Club, the Delaware Valley Classic MG Club, and the local Alfa Romeo Owner's Club. VRG ended up with over 65 volunteers for all positions! The flaggers especially did a great job, being that they had never worked together as a group before, and most of them had never seen this track before.

NJMP's Lightning circuit is really fast and challenging, with 2 or 3 big pucker spots (one we entered at 135 mph). Check out the famous "Flash's Fast Lap @... 914-6 GT Edition" at the end. (This portion of Flash's text was not included as it was part of a 14 page submission for which we are indebted, and lack space. ED.)

This weekend (which had great weather) was jammed packed with all kinds of other neat stuff to do. NJMP has two circuits. VRG was racing on the Lightning (as in P-38) circuit, and there was an SCCA Regional on the Thunderbolt (as in P-47) circuit.

Then there was the air show (that was focused on warbirds) at the Millville airport, next to the track. So we had four P-47 Thunderbolts, a P-40 Warhawk, a P-51 Mustang, a Spitfire, two B-25s, a C-47, a PBY, four or five T-6s, and a bunch of single engine spotter type aircraft flying overhead all weekend.

One of the most spectacular demos was the P-51 that did a number of rolls and dives. He finished off with a full throttle pass, 300 feet off the deck, during the V-8 race. The sound of the flying Mustang easily drowned out all of the ground-bound Mustangs.

Stefan Vapaa said, "I really like the track and was enjoying unlocking its secrets. The planes were fantastic. It was a good thing I had my head-neck restraint on when I was on track... It prevented me from looking up every time an interesting shadow crossed over the track in front of me."

About four laps into Sunday's race, Flash had pulled out a sustainable lead, so he settled into a comfortable, constant pace. As he exited T-4, he noticed the flight of four Thunderbolts taking off from the airport. "That's really kool" rumbled through his subconscious. Then his conscious brain screamed, "Jackass! At this moment you are here to race, not watch warbirds."

Then they had an oldies concert Saturday night after a fantastic VRG dinner at the Millville Army Air Corp Museum. Leading off the concert was The Rip Chords with "Hey Little Cobra", "Three Window Coupe", "409" and more. The Orlons, Danny & The Jrs., and The Dovells also sang. And you didn't have to drive to any of these events, there were shuttle buses running around all weekend to take you from one to another.

Richard Ryan

Group Four in Seat Report

Quick and nimble Formula cars and Sports Racers made up Group 4 . These cars are perfectly suited to the new Lightning circuit with its wonderful mix of blind turns, tricky corners and very fast banked bowl section (the Lightbulb) leading onto the long main straight. The entry of 25 cars featured a healthy turnout of 15 Formula Fords, plus Earl Roberts' Holbay powered GRD F3 car, and Chris Shoemaker's Royale Formula Continental, making this a Ford fiesta. Add to that the Ford- powered Sports Racers of Peter Krause and Bob Willis in their rapid S-2000's and the Elva Mk IV of Tom Grudovich……well, it must have finally brought some cheer to Henry Ford IV ! But wait, what was that Equipe over on the other side of the Paddock - why it was Charles Greenhaus's Entropy Sports Racer team, clustered around their transporter, a beautifully restored 1951 American LaFrance Fire Truck in brilliant yellow team colors. These 1.7 L. cars are the ex-Sports Renault Spec racers which ran in the SCCA in the 1980's. At Lightning, they proved to be fast, dependable, and well-driven.

The Friday practice round and the Saturday qualifying sessions introduced the Group 4 drivers to some of the track's charming eccentricities, including "marbles", kicked on-track at the apexes; and "dustballs" - blinding siroccos produced by missteps off-track..

Despite several cars suffering late-season mechanical woes, or, on-track damage during these sessions, eighteen brave pilotos took the green in Sunday's feature race. Peter Krause ran away from the crowd, taking first place at an average speed of 93 mph in his Tiga S-2000 Sports Racer. Kyle Kaulback was second in his wonderfully original Lotus 61 MX (Chapman's "Modified Experimental" designation, apparently strictly for Marketing purposes, but unique, nonetheless) Formula Ford - a car he has preserved and raced for 25 years! Taking a well-deserved podium finish was Earl Roberts in the GRD, our only "Wings and Slicks" entry.

While the K & K boys lapped the field, the real wheel-to-wheel action was going on close behind. Bill Hollingsworth and Bob Romanansky were at it again, as the two Formula Fords finished within feet of each other after 18-plus minutes of racing. Very close behind, were Cal Trumbo and Larry McKenna exchanging places, running nose-to-tail throughout, and crossing the line with 0.3 seconds separating their two Formula Fords. Just behind, Bill Gaudreau followed in his well-driven Crossle FF. The tail was waged by the Entropy gang, who, as the thermodynamic term would imply, finished in close order, broken up only by John Geller's rapid Royale. Nick Kachur, in the ex-General McKenzie (you will remember him as the Canadian who commanded all UN Forces in Serbia) Merlyn FF set his personal best time of the weekend to finish on the same lap as the Entropy cars.

A fast track, beautiful weather, a collection of very interesting vintage race cars, a healthy amount of skilled competition and a fantastic race organization – what more could one ask for? Group 4 can't wait 'till next year!

Larry McKenna

THUNDERBOLT HISTORICS

Wheels & Warbirds

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Testing The Limit

"At some stage in your development, you
may have to overstep your known capabilities.
I strongly urge that you pick that spot carefully."

Jim Clark, 1966

Before trying to suggest how to find "the limit", it might be a good idea to first define it. When braking at the limit, we're applying enough brake pressure to make the tires begin to rotate more slowly than they would without any brakes applied. They are generating rotational slip (percentage slip or slip ratio) and they are on the verge, or threshold, of locking up. Hence the term Threshold Braking. In corner entry, the driver on the limit smoothly transitions from using 100% of the tire's potential for braking to using 100% of the tires potential for corning, where it begins sliding sideways as it also travels forward (slip angle). In some corners this transition happens very quickly; in others, where trail-braking can be used to the greatest advantage, the transition occurs more gradually and the driver must maintain 100% of the tire's potential while combining steering and braking. When accelerating at the limit, which may also be done in combination with steering, the drive tires are again producing slip ratios and they are on the verge of loosing traction and spinning. The following graph represents a simple, theoretical, and perfectly driven corner where trail-braking is used on entry and where the driver is able to unwind the steering as he accelerates exiting the corner. Exactly 100% of the tires' potential is always being used, even when braking and acceleration are combined with cornering.

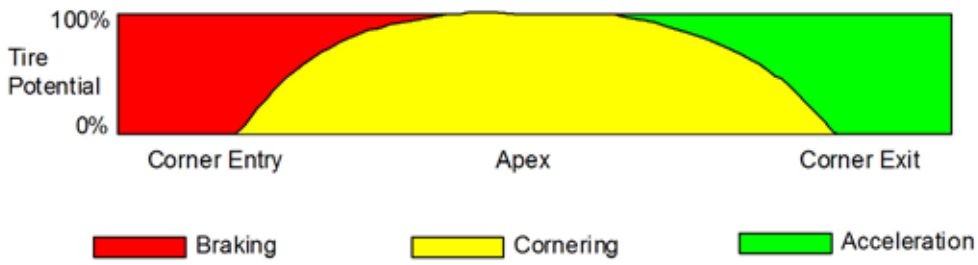

FIGURE 1

Figure 2 shows what the graph might look like if the driver is inconsistent or pushes too hard. Any unused area below the 100% line, or any used area above the 100% line, represents slower speeds. Here the driver brakes below threshold level until he approaches his turn-in point, where he senses too much entry speed and increases brake pressure. This is very common. As he turns in he comes too quickly off the brakes, falling momentarily below the limit. As he continues to add steering, however, the lack of trail-braking results in too much entry speed and he exceeds the limit in corning. The resulting slide scrubs speed, which allows him to go immediately to power in the middle of the corner. He goes to power too aggressively, however, and passes right through the limit. He must lift slightly to keep the car on the road, causing the car to slide and once again scrub speed and fall below the limit. Once gathered up, he accelerates off the corner and eventually reaches the limit again as he gets the steering straight. Figure 2 illustrates several things, but one of the most important is something that aggressive drivers don't often recognize… for every period of time spent above the limit there is almost always a corresponding and longer period of time spent below it as the driver recovers either his line or control of his car.

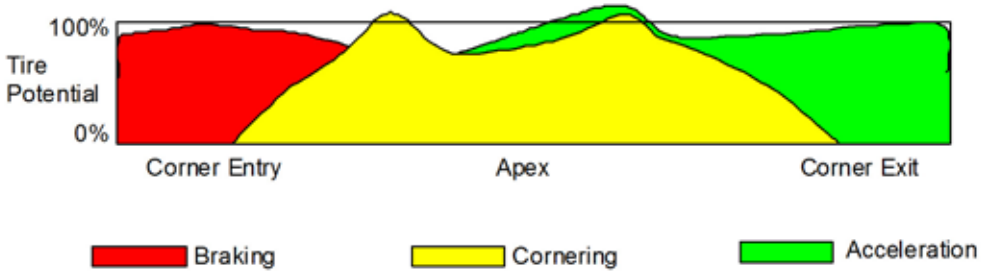

FIGURE 2

In both examples the drivers can say that they drove their cars "at the limit". In Figure 1, however, the driver was at the limit the entire time, while the driver in Figure 2 was at the limit for two very brief periods, once under straight line braking again under straight line acceleration. The rest of the time the driver in Figure 2 was either below or above the limit, resulting in both cases in reduced speed. These graphs not only show us the distinction between driving at the limit and driving in its vicinity, they also contrast the consistency of a smooth driver with the roughness and vulnerability of the driver who is inconsistent and/or pushing too hard. Friction circles yield similar distinctions, where the better drivers generate smooth arcs and novices generate "spikes". No driver can create the perfectly flat 100% line shown in Figure 1, but the better the driver the closer it will be. It's important to keep in mind that one can drive all day long at 99% of a car's potential and be faster and safer than the driver who pushes too hard and finds himself oscillating above and below the limit.

So how do we get to the limit without falling into variations of the mountain range shown in Figure 2? The following is a discussion of the time-tested, step-by-step strategy for finding the limit. Even though you're probably familiar with this process, it may worth revisiting the details.

1) Eyes

This "skill" is not generally included in the process described below. I include it, however, because unless the eyes are used properly none of the following will ever really come together. Based on both my own driving experience and the experience of others, the way we use our eyes is often subject to the greatest deterioration of any of the driving skills we use. For many, keeping the eyes up and far ahead, while using only our peripheral vision for nearby reference points, is a constant battle. There are many who would say that this is not a problem they've experienced. In most cases, the people who say this have never learned to use their eyes properly in the first place. Proper use of the eyes is really worthy of its own article, and to address it properly we would need diagrams and photos of specific corners. For those familiar with Beaverun, however, consider that we should be looking for the apex for Turn 2 well before we get to the apex of Turn 1 (and while the apex of Turn 2 is still obscured by the guardrail). At NHMS, as we enter Turn 6 in a closed car we should be looking for the apex through our driver's side window. As we enter Turn 9 at NHMS, our eyes should be looking toward the apex even though it's hidden behind a grassy knoll. Watch some in-car videos on Youtube where the camera is mounted on the driver's helmet. You'll see the heads of faster drivers turn toward the apex well before they reach the turn in point.

2) The Line

This may seem obvious, but the desire to go quickly is often so seductive that even the best drivers will go to a familiar track and take for granted that their knowledge of that particular track has deteriorated somewhat since their last visit. These drivers realize very quickly that their line is suffering, and they slow down until the line is reestablished, at which point they begin gradually picking up the speed again. Whether at a new track or at a track a driver has lapped thousands of times, the line must be very consistent (plus or minus a few inches) before one

can effectively drive a car near its limits. Reference points must be established, whether we're using conventional trackside objects or the relative positions of many objects when utilizing the "sight picture". Further, we must be comfortable enough with these reference points to be detecting with our peripheral vision the approaching reference point while actively looking far down the track for the subsequent one. As mentioned earlier, this subsequent reference point is often not yet in sight. This level of "heads up" driving, and the associated precision of the driving line, will not come all at once, it will come one or two corners at a time, and we must admit to ourselves that a good line and good speed through a single corner doesn't mean we're ready to put the hammer down around the rest of the track. When we're looking two reference points ahead, when our hands smoothly turn in once, hold steering lock through the middle of the corner, and unwind smoothly as we exit, and when these inputs consistently place the car within a few inches of every reference point, then and only then are we ready to flirt with the limit. If we establish and maintain a good line, the rest will fall in place and higher speeds will be the byproduct. When we try to force higher speeds we not only start to slow down, we also greatly increase the chances of spinning.

3) Braking Points

We all know that our braking points can't be established when we're driving inconsistent lines because our entry speeds will constantly vary. When our line and entry speeds settle down, we can then establish an optimal braking point for each corner. If we're not trail-braking, and provided that we're braking at consistent levels, it really is that simple. But for most of us this strategy alone will work in only a portion of the corners we see.

4) Trail-Braking

Trail-braking is used by most of us in the rest of the corners. It's important to identify where trail-braking is necessary to keep the car at its limits, because to take advantage of it we must brake later then we would otherwise. This is one of the reasons it's very important to always brake at a consistent level, whether or not it's actually at threshold level. It's easier to be consistent, however, if we always threshold brake. When trail-braking at the limit, the diminishing brake pressure and increasing steering input must be executed exactly right, or the car will start to go off line. If we have the correct steering input but too little braking pressure, we'll carry too much entry speed and this will put us off line. If we have the correct steering input but too much braking pressure, we'll lock our front tires. Likewise when the braking pressure is correct but the steering input is off. This is further complicated when we're using trail-brake rotation to help point us into a corner. Not only do our steering and brake inputs have to be exactly right, the timing and speed with which we release the brakes in order to induce a slide must also be exactly right. Hurling the car into a corner is a lot of fun, but it won't keep the car at the limit. The various inputs needed to create successful trail-braking and trail-brake rotation must be modulated in concert if we expect to be able to maintain a car at its limit as we transition from braking to cornering.

5) Throttle

If we've entered most corners properly, we will generally transition to power prior to the apex. If we haven't successfully slowed the car, if we've turned in late or too little, or if we've failed to adequately rotate the car, we must delay the use of throttle until the car is pointed and/or back on line. Knowing where we are relative to the proper line and properly timing our inputs are both crucial. Further, in most corners we can't simply stomp on the throttle… it must be increased progressively and at varying rates depending on the radius and length of the corner. If we're at the limit, we will use our throttle inputs to make subtle adjustments to the line. If we add throttle, we'll increase the radius we're driving on. If we ease off a bit, our radius will tighten (assuming we have a reasonably balanced car). In decreasing radius corners, such as Big Bend at Lime Rock, we may use a brief and slight mid-corner lift to help point the car toward the apex. If we've gone to power too soon or too aggressively, we must recognize it immediately and ease off again until our line is reestablished.

CONTROLLING LOSS OF CONTROL

6) Spins

We often concentrate so much on 2 through 5 above that our eyes start to fall down again. Get used to

reminding yourself constantly to keep the eyes up and ahead.

It's inevitable that we'll continually make mistakes when trying to keep a car at the limit. If we've followed the guidelines presented above those mistakes should be minimal, costing us speed but not causing us to spin. If, however, we've managed to overcook things to the point where we actually do spin, it doesn't mean it's time close our eyes and assume the fetal position. Even when spinning, we have a measure of control. The moment we conclude that our slide is going to become a spin, we must place our feet over the brake and clutch pedals and prepare to put both right to the floorboard. We do this for three reasons. First, when we lock the brakes we will travel in a straight trajectory, even while spinning. This makes us predictable to those following. Second, by locking the brakes we prevent the tires from suddenly hooking up and launching us perpendicularly at the surrounding Armco or tire walls, or across the path of a following car. Third, by putting the clutch to the floor we prevent the engine from stalling, meaning we can get the hell out of the way a lot quicker once we're done spinning. At the same moment that we're putting our feet on the clutch and brake, we need to judge which available trajectory will cause us, and those around us, the least amount of grief. The basic rule is fairly simple… look for the object (Armco, tire wall, tree, etc.) that is furthest away and attempt to lock the brakes so that we spin toward it. We may immediately go "both-feet-in" to prevent the spin from carrying us to the inside of the track. There are a fair number of spins in the uphill transition in NHMS's Turn 3. The drivers who go both-feet-in quickly manage to spin up the hill without going off the racing surface. Those who don't are rewarded with a spine-crunching ride over the infamous NHMS curbing, followed by a teeth-rattling foray into NHMS's notoriously course gravel. Occasionally, people drop wheels on the outside of Beaverun's Turn 9, and many of them panic and try to force the car back onto the pavement in time to climb on the brakes for Turn 10. They almost always spin. Here, the driver will also want to go both-feet-in very quickly in order to avoid hitting the tire wall on the inside or, worse for those around him, hitting the grass and eventually sliding across the track at the apex of Turn 10. There are times, however, when we may want to wait a moment before locking up the brakes. If we're running on a track that is incorporated into an oval, and we spin when entering one of the oval corners, we'll generally want to wait a moment or two to allow our trajectory to take us down to the apron of the track. This gets us out of the way of following traffic and provides more room for the car to either point in the right direction or come to a stop. If we go both-feet-in immediately in these corners, there's a good chance we'll collect the outside wall. Once when driving a Skippy Formula Ford I missed my 3-4 shift in Lime Rock's downhill corner. I couldn't find fourth and did my best to negotiate the corner while idling in neutral. My best wasn't good enough. As I spun, however, I recalled Danny Sullivan's spin at Indy. So I looked down the straight and timed locking the brakes so that I would head in that direction (had I looked at the inside Armco, chances are I would have hit it). As I spun I straightened the steering wheel, blipped and put the car into third gear, and as I came around and pointed down the straight I popped the clutch and nailed the gas. It wasn't exactly pretty, but my spin turned out to be merely a pirouette and it only cost me only a couple of seconds. Had there been another car on my gearbox would I have had the presence of mind to delay locking the brakes long enough to spin out of his way? Probably not. But at least I wasn't just riding along in the fetal position.

The best way to improve one's skill at keeping a car at the limit is to hone one's car control skills, and this is best done in dedicated skills exercises (skid pad, etc.). Your sensitivity to slip angles, slip ratios and yaw rates will be honed to degree that is nearly impossible to achieve by driving solely on race tracks. Furthermore, you will likely spend some time spinning your car, thereby developing not only an instinct to go both-feet-in, but also the ability to spin the car in a direction of your choosing. Ironically, just about the time you get really good at spinning you'll find that you don't really do it much anymore.

Ed Valpey

NOTES FROM THE EDITOR

It is near the end of another VRG season. Turkey Bowl is in two weeks and the rest is memory. The highlight of the season was the Thunderbolt Historics and the reason it was the highlight was the extraordinary volunteer effort made by the membership, drivers and spouses and children, to insure the event's success. During the months of preparation for the event Mark Palmer mated with his telephone instrument. Everyone who was asked to do some thing, did something. In the beginning there was no structure, no track structure, and no corner workers; and by event time there was an event in place, organized, and ready. It shows what can be done by an enthusiastic membership and all of you can take a bow. We applaud you!

The photo montage provided in the newsletter has been provided by Louise Ann and Walter Pietrowicz. It is breathtaking. Each newsletter is a vehicle for their talent, their gift to all of us. It shows their joy in giving – it is appreciated. In this issue particularly their artistic talent has reached a marvelous level. Please thank them.

In the aftermath of the Formula Ford destruction derby, Bob Romanansky (a *safety fast* guy and by virtue of his sane manner and possibly due to his being one of the last men standing) was asked to be the open wheel group liaison. It is felt that the race groups need to be self policing and in the case of the Formula Fords, they, as a growth group, need to take care of themselves, self police on track behavior and equipment specification. We encourage the other groups within VRG to police themselves and appoint a spokesman who can liaison with the VRG Board and its particular car group. We expect mature on track behavior and legally prepared race cars. You know, better than the rest of us, if there is a driver among you who needs to be talked to. Talk to him/her as a group with a spokesman. If there is an attitude problem – solve it. Have your liaison let Mark Palmer or Bob Girvin know what you are doing. It you think that someone has an illegally prepared car – talk to the car owner first and see if it is an oversight. In some car groups the most expensively equipped car is often the fastest. VRG would like to think that with no points and no trophies that it is not the repository for the most expensively prepared cars. If you can not fix the problem Tivvy Shenton and/or Ralph Steinberg should be consulted. There is no Czar of cars. Take responsibility – these are your friends.

Again, in the aftermath of the Thunderbolt Historics incidents it was felt that car control needed to be addressed. Ed Valpey has written an excellent article which we encourage all of you to read – more than once. Save it, read it again, and practice it. This is a drivers club, not a car club, and the *pursuit of happiness* on the race track is directly related to how well we drive on it.

Chris Meyers is working on publishing a directory from data currently available on a spread sheet. Sometime in the future we may know how to get a hold of everyone else. In the meantime you know how to get a hold of most of us, the guys and gals you race with, and all who are important to you. Thank you for being part of VRG this year.

Happy Thanksgiving,

Bill Hollingsworth

Watkins Glen 2008

This year we had a better weather report and three days to play on this great road course. The format was similar to 2007 but we added a two day enduro. Everyone had plenty of track time to enjoy the Glen, still one of the best road courses in the country. If there was a negative it was the car count, which was down from last year. Many who did not come back this year called or emailed to apologize for not returning due to broken cars or financial concerns, as the event was three weeks after the Thunderbolt Historics and in the middle of the October financial melt down. Those that came had three cool, good days of racing. Sunday's weather was close to perfect, warmer and less windy. We were surrounded by beautiful fall foliage - everywhere.

Most of the race sessions had good battles going on within the race groups. We had no car to car contact, however, we did have two single car incidents at the exit of turn 9. This is a deceptive corner with no run off room. Unfortunately one of these incidents resulted in a broken collar bone.

Friday evening we had a reception at the Watkins Glen Motor Racing Research Center. This was well attended and proved to be quite interesting. The many volumes of motor racing history on display and early race footage being shown in the small theater were Entertaining. Saturday evening there was a dinner in the Tower Suites at the track. The Glen staff did a great job providing a nice meal. Alain Raymond was given the
"Vintage Spirit" award.

We planned to have a separate race group for VARAC G70+ cars. However, the week before the event there were only four G70 cars entered, so we went back to 4 race groups and combined them with Group 3 which worked quite well. Actually, eight G70 cars showed up at the event. Our VARAC friends turned out 22 cars which are greatly appreciated. VRG members should reciprocate with a good turn out at Mosport in June.

Sundays race results:

Group 1; 1st Tivvy Shenton, 2nd Mark Palmer, 3rd Steve Hirschtritt
Group 2; 1st Robert Hurley, 2nd Rich Kushner, 3rd Bob Tkasik
Group 3; 1st John Hawkes, 2nd John Maitino, 3rd Jim Glass
Group 4; S2000, 1st David Clubine, 2nd Dean Baker, 3rd Cap Chenoweth
FF, 1st John Bechtol, 2nd Tony Cove, 3rd Bob Romanansky.

A big thank you to all the people that helped make the weekend run smoothly. Special thanks to Mike and Carla Lawton, Steve Groh, Leigh McBride and Barbara Romanansky.

We look forward to our return to the Glen in 2009. A deal is in the works to add a partner that will make a 5th race group and help pick up some of the expense of running this event. In 2009 we are planning to run the short course on Sunday as most of us have never done that. We have so much track time during the three days that a course change should add some interest to the weekend. Please include this event in your plans for 2009.

Bob Girvin

Niel McCabe
http://vintageracer.tripod.com/wg-08.html

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