

# *The Knockoff*

## **ATTENTION ATTENTION FROM YOUR CLUB REGISTRAR:**

JUNE 28TH LIME ROCK PARK

The registrar is the first impression a driver, race worker, crew member, or guest has of the Mohawk Hudson Region. We are an ambassador for the region. We never get a second chance to make a first impression. You get to meet many old friends and new members too.

Please call **Mary Cameron** at **518-797-3610** for more details about what we do at the track.

Come to the June 4th meeting at Son's so we can review the forms and details of being a registrar. Remember we only do one race a year.

Also, we will need a person or persons to take the Photos for the ID's. This is not a hard job, please come and help out your club.

**REMEMBER JUNE 28TH  
WE NEED HELP!!!**

FOR THE GOOD OF  
THE SPORT.  
**Mary Cameron**  
Chief Registrar

## *In This Issue:*

**Maximum Enjoyment  
Weekend is less  
than a month away.**

Directions and map to  
Thacher Park.

**Surviving Drivers  
School**

**Car number checklist**

**A look back at the  
April 1967 issue of  
*The Knockoff***



## *Regional Results*

### **MoHud racers earn victories at Lime Rock regional on May 3rd**

Two Mohawk-Hudson region members posted victories in the first NARRC regional race held May 2nd and 3rd at Lime Rock Park, while several others had fine top-ten finishes.

Starting from the pole, Rich Alexander recorded his first victory in his newly acquired Club Formula Vee.

Tom Campbell drove his Chevrolet Camaro home to a fine second place finish in GT-1.

Improved Touring B and Formula Vee saw several MoHud drivers finish in the top ten.

In Formula Vee, both front row starting spots were held by MoHud drivers. Front row starter, Dave Riggi, nearly lapped the entire field on his way to victory. Pole-sitter Dick Stewart finished third.

Rick Pocock started on the pole in Improved Touring B and finished third. Todd Boice recorded a top-ten finish in his first race of the '97 season, Todd finished 8th.

Doug Garrison rounded out the MoHud drivers competing at Lime Rock. Doug finished 5th in Spec Racer Ford.

# MOHAWK - HUDSON REGION SCCA OFFICERS

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<p style="text-align: center;"><b>Asst. Regional Executive</b></p> <p>Eric Kroth 8 Ackerman Ave Delmar, NY 12054 (518) 439-8973 (H)</p>	<p style="text-align: center;"><b>Director</b></p> <p>Paul Tariello 601 Tedesco Ct. Schenectady, NY 12303 (518) 356-0568 (H) (518) 454-2435 (W)</p>	<p style="text-align: center;"><b>Solo Events Co-Chairman</b></p> <p>Andrew Henery 2673 Troy Road Schenectady, NY 12309 (518) 783-6559</p>
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<p style="text-align: center;"><b>Mo-Hud Hotline &amp; Website Address</b></p> <p>(518) 580-1830 <a href="http://www.mohud-scca.org/">http://www.mohud-scca.org/</a></p>	<p style="text-align: center;"><b>Activities Director</b></p> <p>Jim Garry 83 Marlboro Road Delmar, NY 12054-2922 (518) 439-3107 (H) (518) 457-3154 (W) garryj@crisny.org</p>	<p style="text-align: center;"><b>Knockoff Editor</b></p> <p>Jim Bucci 6 Hunter Avenue Latham, NY 12110 (518) 782-0954 (H) (518) 457-5533 (W) Jjbucci@aol.com</p>

The Knockoff is the official publication of the Mohawk-Hudson Region, Sports Car Club of America. Opinions expressed here are not necessarily those of the Mohawk-Hudson Region or of the Sports Car Club of America. The deadline for all materials is the general membership meeting the preceding month.

Electronic submissions may be made via 3.5" diskettes or by sending e-mail to the Knockoff editor.

The Mohawk-Hudson Region possesses its own electronic mailing list on the Internet. To join, send a message to: "Majordomo@mohud-scca.org" containing the phrase "Subscribe mo-hud" (Do not include the quote marks).

## ADVERTISING RATES

<u>Type:</u>	<u>Size:</u>	<u>1 Issue:</u>	<u>6 Issues:</u>
Full Page	10 x 7	\$20	\$100
Half Page	5 x 7	\$15	\$75
Half Page	10 x 3	\$15	\$75
Quarter Page	5 x 3	\$10	\$50
Business Card	-----	\$5	\$25

## **REport**

MoHud's calendar is very full for the month of June so all the planning and preparation is going on now and there are some very busy folks who could use some help. First is the Car Control Clinic on June 7/8. We have about 10 instructors who will be trained on Saturday and then we will run a couple clinics on Sunday. What we need are clients for the clinics. If you know of any teenagers who recently got their drivers license, talk to them about the clinic and if they are interested, call Mike Larimer or myself and we will get info to them and sign them up. The fee will be \$65 for a six hour clinic that is basically brake and steering management in their own car with a parent.

Secondly, the professional solo school the following weekend is soldout and ready to happen. There is already signs of a resurgence of solo activity and this school will enhance what I believe is going to be an incredible year for the solo community.

Thirdly, our Lime Rock race is well into the planning stages, the application is complete and nearly ready to mail, all but one specialty chief are in place, but we will need help at the track on June 28 at registration, timing and scoring, tech, and some general gopher duties during the day. If you can assist, please call me. This is an excellent way for a new member to get involved and see what our racing is all about. The party at the end of the day will include the Solo guys who are running an event at Lime Rock the same day. Their event needs some help at registration and a couple pylon shaggers during the event. Call Eric Kroth or Chip Van Slyke if you can assist. Don't forget, there's a free party for workers and competitors afterwards.

Next on the agenda is a rally and club picnic the day after the solo/race at Lime Rock. Sunday, June 29 will complete the Maximum Enjoyment Weekend with a picnic at Thacher Park. The event was put together by our activities director, Jim Garry, and should be a well attended and fun affair.

Make sure to let Jim know if you plan to attend and if you can assist him in any way give him a call. I find that I can not attend the Sunday event due to my daughters high school graduation followed by a business trip to Virginia that evening and I'm not at all happy about the conflict, but that's life.

I must extend a congrats to the solo team for a very successful event last month which drew 60+ drivers and everyone got 5 runs. The planning and thought that went into this years solo program is already paying nice dividends and I'm sure the word will spread about the event and we will continue to draw large crowds provided the high quality remains consistent. This is the impetus we needed to build our region membership with some new blood. I can remember running solo in the 60s back in Pennsylvania where we would get up to 100 drivers and several hundred spectators on a Sunday. It was very competitive and great fun. For most new members it is their introduction into SCCA and no matter where they go from there, great memories of solo events will always be with them. It's kind of like your first ..... .., oops I better not write that. Anyway, great job guys, keep up the good work. I understand some road racer type came in and swept a class full of Mazda RX7s.

Larry

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## **Weir posts National win**

MoHud driver Mike Weir drove his Latham Cleaners sponsored Weir MK-IV to victory at the NESCCA National held at Summit Point, April 20th. Mike, driving in the D-Sports Racer class, turned a best lap of 1:19.334 on the 2 mile Summit Point Raceway track on his way to victory.....Congratulations Mike!

# Mohawk Hudson Region, SCCA

presents

## Maximum Enjoyment Weekend

June 28th and 29th

Mohawk-Hudson Region will host a **Road Race, Solo II, Rally and Picnic** in one weekend.

- Ever wonder what it would be like to work in the timing tower at a race?
- Would your crew like to try their hand at a driving competition while they're at the race (providing you don't break your car and make them work on it all day long)?
- Want to spend a fun hour finding your way through the countryside and end up at a picnic?
- Or do you just want to enjoy the camaraderie of some fun folks at a picnic?

### **Saturday, June 28th:**

MoHud Race at Lime Rock Park  
call Larry Morton at 914 339-4588 for  
details

MoHud Solo II at Lime Rock Park's  
autocross track\* (see note below)  
call Eric Kroth at 518 439-8973 for  
details

### **Sunday, June 29th:**

MoHud Rally to Thacher Park  
MoHud Picnic at Thacher Park  
for both, call Jim Garry at 518 439-3107  
for details

\* Note: If you are going to be a driver, worker, crew member, or spectator at the June 28th race at Lime Rock, the Solo II will be set up so that you will be able make your runs without missing your other assigned duties or race schedule. Call for details regarding registration procedure and fees.

Non-members are cordially invited to the activities. Depending on what you plan to do at the race, you may have to sign up as a temporary member. The Solo II, Rally, and picnic do not require membership.

# PICNIC!

As part of the Maximum Enjoyment Weekend, Mohawk Hudson Region is hosting a picnic at Thacher Park in the Yellow Rocks Pavilion.

Date: Sunday, June 29

Time: Noon to dusk

Cost: \$10 per person

Menu includes: Burgers, Grilled Chicken, Potato Salad, Pasta Salad, Corn on the Cob, lemonade and ice tea; for other beverages, please bring your beverage of choice (beer OK); ice chests will be on hand.

Don't forget about the rally prior to the picnic which will terminate at the Park. Please let us know of your interest on the registration form. More information will be available in later issues of the KO.

**Mail-in deadline for the picnic is June 18th----If you decide after that date that you would like to attend, call Jim Garry to sign-up (518)439-3107**

To attend picnic you must fill out this registration form and send to:

**Jim Garry  
83 Marlboro Road  
Delmar, N.Y. 12054**

Make check payable to *Mohawk Hudson Region*.

Name \_\_\_\_\_

Address \_\_\_\_\_

\_\_\_\_\_

Telephone number (    ) \_\_\_\_\_-\_\_\_\_\_

Number of people x \$10 = Amount Enclosed \$ \_\_\_\_\_

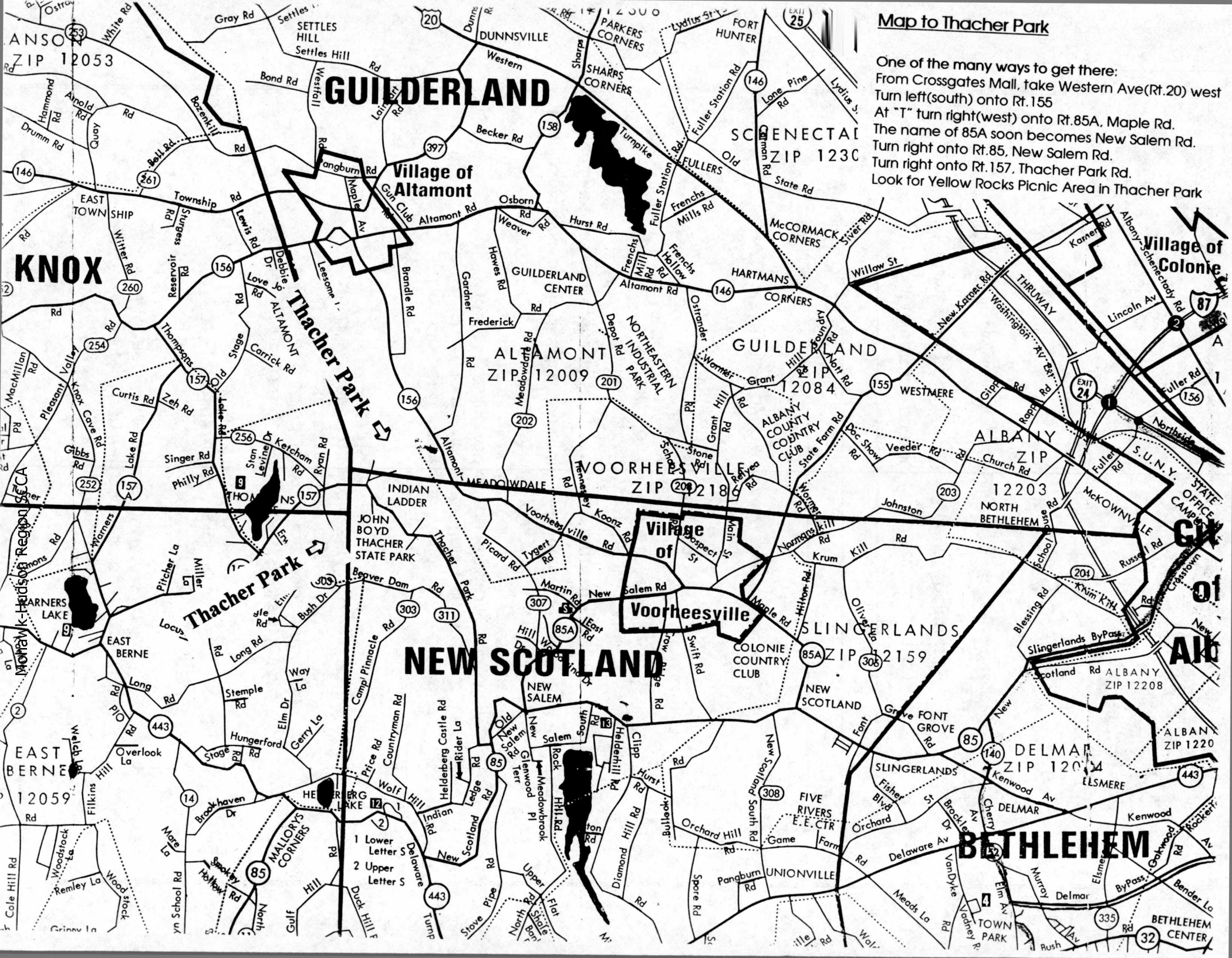
I'm interested in participating in the rally (please circle one)

YES            NO



### Map to Thacher Park

One of the many ways to get there:  
From Crossgates Mall, take Western Ave(Rt.20) west  
Turn left(south) onto Rt.155  
At "T" turn right(west) onto Rt.85A, Maple Rd.  
The name of 85A soon becomes New Salem Rd.  
Turn right onto Rt.85, New Salem Rd.  
Turn right onto Rt.157, Thacher Park Rd.  
Look for Yellow Rocks Picnic Area in Thacher Park



# GUNDERLAND

## Village of Altamont

# KNOX

## Thacher Park

# NEW SCOTLAND

## Village of Voorheesville

# GUILDERLAND

# BETHLEHEM

## Village of Colonie

# ALBANY

Albany County  
Mojave-Hudson Region  
SECA

EAST BERNE  
12059

ALTAMONT  
ZIP 12009

VOORHEESVILLE  
ZIP 12181

GUILDERLAND  
ZIP 12084

SLINGERLANDS  
ZIP 12159

ALBANY  
ZIP 12203  
NORTH BETHLEHEM

DELMAR  
ZIP 12034

ALBANY  
ZIP 1220

BETHLEHEM CENTER

*I guess the following should come under the "Better Late Than Never" category. It's my fault. I had it filed with some other e-mail and in the confusion of becoming the new editor and all it didn't make the last couple of issues of The Knockoff. -Jim-*

## **NEDiv Roundtable report**

The Northeast Division held it's annual Roundtable in Pittsburgh in mid-March and Larry Morton, Roly Heacox and Rich Welty attended. Flights in both directions were delayed due to weather problems, but other than that it was a production and enjoyable weekend. The convention was the most laid back of any I have attended, no arguments, no screaming matches, not much controversy at all. We arrived Friday night and went to the reception party which is a good place to lay some groundwork for your agenda for the weekend. The best discussion I heard was the three RE's from New England, North Jersey and New York laying the foundation for talks regarding the demise of Bridgehampton and what happens when New York Region wants another venue for a National race. I understood that Lime Rock will not give SCCA another National date, although I did not substantiate that.

Saturday morning there were specialty seminars on flagging, timing, starting, and registration, but I was asked to attend a NESCCA meeting to work on the budget and continue our planning of the procedures and policies manual currently being developed. We received the bad news that the National office will not help NESCCA with the \$10,000 it has previously given NESCCA each year, the reason being the budget is tight this year. I am preparing a letter to the Board and Nick Crow requesting at least some of the money. I will state that is my belief that when things are tight you cut out none productive expense and losers, not newly successful ventures that are catching the attention of Regions all around the country. The NESCCA series was the envy of the other divisions in 1996, don't pull the rug out from under us just when we are hitting our stride. I had suggested a gradual decrease in funds when I spoke to Mr Crow at the November minicon and that seemed acceptable at the time. But I digress.

The mid morning seminars included an introduction to Legends cars, an emergency services seminar along with a seminar on electronic media. I was planning on attending a worker retention seminar because I too wondered how they held their bladders all morning standing out there on turn whatever and guzzling Gatorade, but our NESCCA meeting continued since we were on a roll and getting a lot accomplished.

Lunch was very good and I got to sit with our new VP of club racing, Dennis Dean. He's a pleasant man who I found had answers and didn't really try to dodge questions. He seemed knowledgeable on a variety of subjects and interested in our opinions. Naturally, I asked him about the Spec Racer situation and he explained that are only about 70 cars left that are not converted and haven't order the kit. The Board has tabled the subject of allowing those cars to run in 1997 until next month.

The attempts to reduce the National classes to 18 has been scrapped for now and the Board has decided to let the 2.5 rule run it's course and see what effect that has. At the same time, they are looking at what to do with the cars that get eliminated by that rule. The hope is we can integrate them into other classes so as not to obsolete the cars but simply eliminate an under subscribed class.

The early afternoon seminars included a flagging and communications school, a web page seminar, and an intro to the new NNJR Volvo Historic Racing Series for 1973 or earlier vehicles which is a four to six race series to be run in conjunction with regularly scheduled regional races. Roly attended the afternoon Stewards meeting and Rich and I hung out in the halls and discussed some web page and tech issues. The second half of the afternoon was a NESCCA forum where we presented the budget to the racing regions and although there was much concern over the future of the series due to lack of funds and the possible loss of a series coordinator, I think the group felt we were doing the things we could to keep the series alive. We need sponsorship if NESCCA is to fly and tossed around ideas on how to get the help we need. The NESCCA Steering Team agreed to meet again on the Friday prior to the Watkins Glen National to continue it's work.

A brief NARRC meeting followed where no real changes occurred, simply a few issues were clarified and there was an effort made by George Henderson and myself to get some form of a NARRC newsletter off the ground which will probably appear within the framework of current region newsletters.

We discussed Legends cars and are in agreement to allow them to run, probably with the small production and GT cars. They are homologated under DSR rules but would not fit into that race group as they are too slow.

Again, at yet another banquet, it was announced that the guest speaker could not make it, so a few super effort type awards were presented, some door prizes given out, including 2 tickets to the NASCAR race in Charlotte, NC, which was won by George Henderson of NYR, a volley ball game ensued across the tables using a beach ball, Fred Slick from National office talked on a few subjects, the meal was very good, and I got a chance to exchange some ideas and thoughts with a few more people. Sunday's meeting with the Directors of which only Bill Bradshaw and Steve Limbert were in attendance was very low key as was the NEDiv council meeting that followed. We wrapped up by 11:20 and Roly and I went to the Pittsburgh airport for our 5:45 flight. We were joined by Laurie Sheppard, Fred Slick, and George Henderson. A great debate and story telling marathon ensued well into the afternoon until the sudden realization that someone had to catch a flight broke the continuity of conversation.

Larry



# Surviving Drivers School

The following suggestions and information are offered in the hopes of helping your drivers' school to become a maximum learning experience with minimum confusion.

## Paperwork

STUDENT LOG BOOK & NOVICE PERMIT-issued by our Competition Director, Jack Hanifan (518)438-3754

REGISTRATION FORMS-Mail them to the event's registrar well in advance; late entries are expensive! This will also "reserve" your place should the school be filled.

SCCA MEMBERSHIP CARD-Used to verify your membership in SCCA.

VEHICLE LOG BOOK-Race car should have had "Annual Tech" before you attend drivers' school with it.

GCR(General Competition Rules)-and specifications for you car type(Production, Formula, IT, etc. Improved Touring and Showroom Stock must also have a factory shop manual.

## Equipment

UNIFORM-must be of GCR-approved fire-resistant material. One piece driver's suit preferred.

UNDERWEAR-Required under all single or double-layered driving suits. Must be Nomex.

HELMET-Snell SA 90 or later. The following medical information MUST be labeled on back of helmet: name, date of birth, blood type, date of last tetanus shot, allergies and any other important medical history or information.

SHOES/SOCKS-Nomex socks. Leather or Nomex shoes.

GLOVES-Nomex recommended.

## Car

READY TO RUN-Before you bring it to the track

CAR NUMBER-Must be clearly visible. \*A Car Number Checklist appears elsewhere in this issue\*

SPARES-Hoses, oil, coolant, fluids, belts, spark plugs, cap, rotor.....

TIRES-At least one front and one rear mounted spare. Rain tires are required at Lime Rock if the DMV trooper officially declares the track wet.

## Crew

A CREW MEMBER IS A NECESSITY-Bring at least one person with you to act as your "pit crew" Review with them their duties ahead of time so there is no confusion at the track. Let your crew refuel the car, change tires, check fluid levels and tire pressures. The less YOU have to worry about, the better your ability to concentrate on the driving school.

## Final Notes

ASK QUESTIONS

BE ON TIME

LEAVE YOUR EGO AT HOME

HAVE FUN!

### Consignment Auto Sales Inc.

#### Sales and Service

Specializing in MG and Triumph  
Parts - Sales-Service all makes

66 North Manning Blvd.

2 1/2 blocks north of Central Ave.

Albany, NY 12206

518-438-2881



The following are examples of *Helvetica* style numbers.  
Notice how these numbers are made..they are very easy to read and distinguish from one another.

**1 2 3 4 5 6 7 8 9 0**

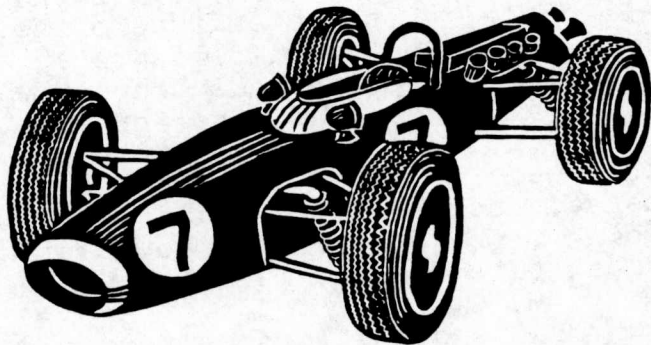
### **CAR NUMBER CHECK LIST**

- **MINIMUM OF 8" HIGH, 1.5 " STROKE WIDTH**
- **HELVETICA STYLE - UNIFORM STROKE WIDTH**
- **SIDE NUMBERS MIDWAY BETWEEN WHEELS  
--ESPECIALLY IF OPEN WHEEL WITH NO WINGS**
- **MAXIMUM COLOR CONTRAST**
- **BLACK OR WHITE BEST CHOICES FOR MOST CONTRAST**
  - **TWO NUMBERS MUST BE SAME COLOR**
  - **TWO NUMBERS MUST BE SAME SIZE**
- **SPACE BETWEEN NUMBERS EQUAL TO ONE STROKE**
- **HAVE TAPE OF SAME COLOR FOR NUMBER CHANGES**
- **LEAVE SPACE ON EITHER SIDE OF NUMBER FOR  
NUMBER CHANGES**
- **THICK & THIN STROKES NOT EASY TO RECOGNIZE**
- **IF STROKE WIDTH NOT UNIFORM, USE WIDEST STROKE**
  - **WHEN AT REGISTRATION - DOUBLE CHECK  
CAR NUMBER ASSIGNMENT**

On the following few pages you will find some classified ads and a story that appeared in the April 1967 issue of *The Knockoff*. The information was provided by Carlton Foster of CAF Designs in Wood, Cambridge, NY.

# KNOCK OFF

APRIL 1967



MOHAWK - HUDSON REGION



## C L A S S I F I E D

1949 MG Series Y Tourer - 1250 cc - Only 17 made, 7 in USA...\$1500.  
 1962 MG Midget - White with black top - good condition.....\$ 950.  
 1963 VW convertible - blue with black top - good condition...\$ 950.  
 ...Spenard's Custom Service, 1737 Union St., Schenectady, N.Y.....

\*\*\*\*\*

1950 XK 120 Jag roadster - RHD - black w/red upholstery -  
 concours condition .....\$ 995.  
 1960 TR-3 - black w/white top - excellent throughout.....\$ 850.  
 1960 MGA - gold w/black top - A-1 condition.....\$ 795.  
 1963 Corvair Spyder convertible - 4-speed - tach - turbo-  
 charged - 150 hp... ..\$1095.  
 1966 Honda 305 Super Hawk - black & silver - 4000 miles -  
 many extras.....\$ 595.  
 1965 Harley Davidson M-50 - 1100 miles.....\$ 150.  
 ...Sid & Ellis Gershon, 1717 Union Street, Schenectady, N.Y.....

## AN ANTIQUE AUTO RACING ENGINE

R. W. "Speed" Raymond  
 Historical Consultation: Carleton Foster

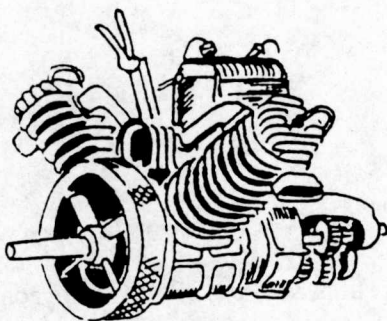
As everyone knows, Benvenuto Bustenati invented the first successful internal-combustion engine in 1869. What is not generally known is that this Italian artisan-statesman-turned-inventor anticipated by nearly a century the current Formula One racing engines. In 1870, Bustenati was making V-twin cylinder air-cooled 4-stroke engines of seven horsepower at 120 rev./min. for use in converted pedicabs in the guided-tours trade in Italy. His tiny but prosperous company was also making a two-stroke one-lung water cooled engine for stationary irrigation pump applications in isolated rural districts. In July of 1872, he foresaw the need for a more powerful engine to be used in the automotive sense, because it was rumored that the Italian aristocracy was going to bring back chariot racing and they were looking for a substitute for the messy, inefficient horses.

Bustenati's first effort was the Silent Operating Type "A" engine (S.O.-A). He used the V-twin pedicab engine in conjunction with the 2-cycle waterpumping engine on a common crankshaft. This setup ran passably well despite the problems involved, and developed a fantastic 17 brake horsepower for a mere weight of 350 pounds. A number of S.O.-A's were sold and the Bustenati racing program was firmly established.

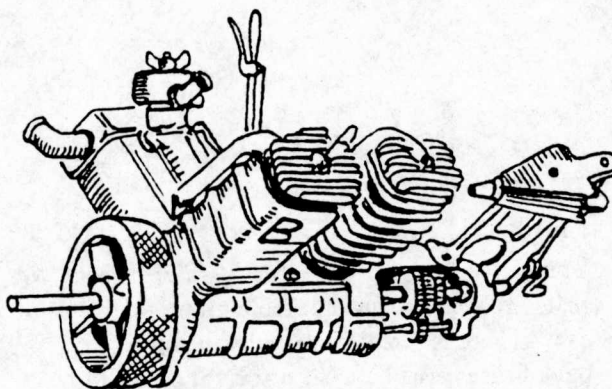
By 1874, the demand for more competitive machinery prompted Benvenuto Bustenati to develop his second and greatest triumph, the Silent Operating Type "B" engine (S.O.-B). This is the selfsame engine people still refer to when they claim that their engines "run like an S.O.B." Such a marvel of engineering craftsmanship deserves a detailed description.

It was a 120° V-3, with the two-stroke water-cooled cylinder on the center crank throw, between the two 4-cycle air-cooled cylinders. Cooling air was provided by the open cast flywheel, whose five spokes were, in a sense, fan blades. Quadruple overhead camshafts worked the 4-stroke side and balanced the extra weight of the water jacket on the 2-stroke side. The displacement of the two air-cooled cylinders was 750 cc. each, equaling the liter-and-a-half of the 2-stroke cylinder. This rather unusual arrangement (by today's standards) necessitated carrying two fuel tanks aboard the car, one with plain petrol, the other with the gas-oil blend required by the two-stroke cylinder. Each four-stroke cylinder had one 17-millimeter sparking plug, while the two-stroke had two 14-mm plugs to cover the larger piston area.

The transmission was of the open type, with gears freely rotating in air. Lubrication of the transmission was effected by ducting the oil-laden exhaust of the two-stroke cylinder down



SILENCIA OPERANDI TIPO A



SILENCIA OPERANDI TIPO B

around the open gear assembly. This method served as an indication of the quality of lubrication in the two-stroke cylinder, for when the transmission gears began to emit a high-pitched screaming sound, the driver could feel confident that the cylinder wasn't receiving proper lubrication.

Ignition was by magneto on one side, coil on the other, through a common set of distributors. It may be said that the S.O.-B was a testbed, for it was possible to simultaneously compare the performance of a number of varied systems (air or water cooled, coil or magneto, 2-stroke or 4-stroke) all in the same engine. Fuel was injected into the 4-stroke side, while a single-barreled diagonal carburetor supplied the 2-stroke cylinder.

Starting was easy. The driver thrust a "starting bar" forward which simultaneously did three things: it choked the 2-stroke's carburetor, advanced the spark timing and opened petcocks on the two air-cooled cylinders to reduce compression. He then gave the knurled open flywheel a spin with the palm of his hand. The engine would usually burst into life immediately, and the driver would release the starting bar. Occasionally, two or three tries were needed, as on chilly mornings, whereupon the driver would mutter an affectionate, "Why, you S.O.-B!"

Bustenati continued to produce his engines until a fire destroyed his workshop, jigs, fixtures and blueprints in 1879. By this time he had grown weary of engines and took up another of his many interests--assisting the noted physicists Lorenz and Fitzgerald in their attempts to observe the lumeniferous ether.

Yet it can truly be said that today's overly-complicated, finicky, pampered racing engines were anticipated nearly a full century ago by this forerunner of engineers who thought, "It's no good if it isn't complicated."

## I LEARNED FROM THAT

Jon Yenick

You can make your driver's seat safer. Most seats are well attached at the bottom, that's easy. There is a real problem with some seat back braces. We have seen several cars with a single post back brace attached to the cage. Generally, either a stout rod or tube welded to a flange attached to the center of the seat back. The other end extends back to a convenient point on the cage and usually attaches with some sort of adjustment. In other cars, we've seen dual bracing where bars attach with a flange to the seat back at shoulder points and extend back to the cage or tub. In nearly all of these cases, the seat back brace is quite solid. The seat installation must be designed to fail in a safe manner. The back brace should have a crush zone to absorb energy in a crash and must direct the impact forces away from the driver's spine.

The single post back brace is the worst case. Even with a large flange to distribute the load, the weld can fail and send the rod or tube through the seat and into the driver's back. Ouch! A double brace is better. When the double brace weld fails, it only breaks your shoulders or few ribs. With a crush zone, energy can be greatly absorbed in the brace before any real damage occurs. Roger Kraus and John Mew came up with a nice design for our race car. First, a full width flange was fitted to the seat back. Dual braces were welded at the shoulder points extending back a few inches. The rods then bent toward the center and attached to the cage at the same single point mount that had been previously used. The bend in the brace is the crush point. When the rear impact occurs, the braces will begin to fold at the bend and absorb energy before the seat collides with the cage. If everything in the brace were solid, all of the impact force would be transferred through the bar(s), flange weld, seat, and ultimately the driver's

back. Impact forces of 10 G's are common and 40 G's are possible. The crush action can be calculated based upon material properties and dimensions, span length, bend angle, etc. There could be other equally safe designs, but this one is easy to make.

In racing and now in street cars, crush zones are common with collapsible steering columns and other schemes usually intended to suppress head-on crash loads. Race cars often find the wall while going backwards. You might want to take a hard look at your seat installation and imagine what it will do when it gets a 20 G shock load from the rear. I thank Roger Kraus for helping me understand how to design a safe seat brace. You are welcome to stop by and see the design on the Krasus Goodyear Porsche 42 ITS car, either in our pit at the track or at **Roger Kraus Racing** in Castro Valley, CA. For more information, call **Yenick Motorsports** (408) 926-5657 or fax (408) 926-7670.

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## The Ad Page

### 1991 ITS Miata

Will be ITA in 1/98. Fresh engine, clutch/PP. Konis, adjustable bars and bushings, Jackson header, BBS with new BFGs, 2 exhaust systems, plenty of spares, wheels, rains, seat, etc. **\$8500**

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1 Sparco 2-layer sponsor bl/wh, size 52

1 OMP gear bag  
1 set of Hella 3000's, New  
1 VW 1600 carb engine, cam, big valves-Fresh  
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2 VW short blocks, 1700 and 1800  
1 set Hella Road Star 115's  
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Hella 2000 used, spots, fogs, driving lights. Lots of rally stuff, helmet box, Terra Trip, map lights. Thom O'connor 518-765-2887.

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## 1997 Mohawk-Hudson Region Autocross Schedule

<b>Date</b>	<b>Event</b>	<b>Location</b>
May 4	Peripheral Lot 1 +	State Office Campus, Washington Ave, Albany, NY
May 18	Griffiss AFB +#	Griffiss AFB, Rome, NY
	ATA at Crossgates	Crossgates Mall, Colonie NY ( <i>Triumph Club</i> event)
June 7&8	National Tour *	Ft. Devins MA
	Edinburg Kart Track	Edinburg NY ( <i>Tri-Vettes</i> event)
June 14&15	McKamey School(Full)	School Full
June 28(Sat)	Lime Rock Solo II +@	Lime Rock Park, Lakeville, Ct
July 13	TBA*	TBA
July 19&20	NEDiv Championship	Griffiss AFB, Rome, NY
July 27	Peripheral Lot 2 +	State Office Campus, Washington Ave, Albany, NY
August 17	Berkshire Mall +	Berkshire Mall, Lanesborough, MA
Sept 6&7	Edinburg Kart Track	Edinburg NY ( <i>Tri-Vettes</i> event)
Sept 21	Peripheral Lot 3 +#	State Office Campus, Washington Ave, Albany, NY
Sept 28	Porsches at Crossgates	Crossgates Mall, Colonie NY ( <i>Porsche Club</i> event)
Oct 12	Brodie Mtn. +	Brodie Mtn., New Ashford, MA

+ Count towards Mo-Hud Championship

\* Tentative

@ Combined with Mo-Hud race (Skip Barber autocross course)

# Event counts in both CNYR and MHR series (subject to change)

Except for Divisional, National, and School events, event times are as follows:

- 9:00 Registration and Technical Inspection open.
- 10:30 Last chance to register without incurring late fee (\$5.00)
- 11:00 Registration and Tech Close.
- 11:15 Drivers' meeting.
- 11:30 First car off.

Club Members get \$5.00 off entry fee

### Directions to Edinburg:

North on Rt 30 from Amsterdam or West on 29 from Saratoga. North on 110 up the side of Great Sagandaga Lake, to Rt 13, to Batchellerville. Cross the lake at Batchellerville, continue on to village of Edinburg. Go straight through the four way at Edinburg, continue on one or so miles, turn right before the cemetery. Then two or so miles on the right near the "airport", you can't miss it.

For details contact: Chip VanSlyke (518) 465-4251





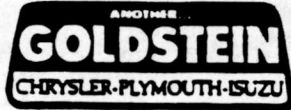
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