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BERKEY IMPORTED CARS INC.
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Autocrosses, autocrosses! The series is off to a flying start. January 29th, February 4th and February 20th were the dates of our first three autocrosses. I’m sure that our chairman, David Kimes, is pleased with the great attendance so far this year. Especially that event on February 20th where those of us that arrived at 8:00AM found ourselves way back in the numbers. There is probably something to be learned in the "early bird get's the worm". I know I'm going to set my alarm earlier about you? Good news David has informed me that there have been three more Autocross dates added to the calendar. These will be at Golden Gate Fields.

Friday Night Socials started in February and got off to a well attended start. Rob Neidel brought slides he shot at the first Time Trial to be enjoyed by all. Remember the first Friday of every month we meet from 6:30PM on at Squeezers in Santa Clara. Stop by for a beer, a glass of wine, a spot of dinner and a chat with your fellow Porsche friends. See you there.

Watch for special events in April and May. The first Zone Autocross is hosted by our region on April 9th. The infamous "Crab Weekend" is April 21-23 hosted by Sacramento. (Will I ever get to go to this event?). And don’t forget the beer tasting on May 7th hosted by Danielle Ringen. I know I will be there.

Now to a moment of sorrow for all of us in the Golden Gate Region. In February we lost two people with close ties to our region. First there was the loss of Perc Bliss who was one of the founders of Golden Gate. His achievements live on as each year the President selects a member of Golden Gate who exemplifies his dedication to a club he helped form. Also we join together in sorrow for the untimely death of Craig Hills. Craig was the son of La Quita and Glenn Hills and a participant and dedicated worker at our Time Trials. I know all of us join together and send our heartfelt sympathies to their families.

Valerie

THANKS, HUH, BOSS

Many thanks to my wife Barbara who typed much of this issue, it would have never gone to press without her.

Credits: Cover drawing by Tony Mazzagatti, Sierra Nevada Region. Time Trial photos courtesy of Rob Neidel. Who’s Who in GGR photo, courtesy of Brian Suen.

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SOME 914 TECH TIPS

Courtesy of AUTOMOTION

When a flywheel is resurfaced, be sure to measure the depth of material removed. A resurfaced flywheel causes the throw out bearing arm to travel a longer distance, and this must be compensated for by shimming the clutch pivot point the same amount removed from the flywheel. This is especially critical on the 914. The unshimmmed arm pulls the cable taut, which, in turn, pulls on the bulkhead panel forward of the engine. Stress on this panel causes metal fatigue in the panel, and it eventually pulls apart, leaving you stranded.

The 914 can easily be stranded by failure of an inexpensive plastic clutch cable stop. Replace the black plastic trunion with the new metal one, part number 911.423.205.03. Before removing the clutch adjusting nut, count the number of full turns to remove it; and when replacing the nut, turn it in this amount plus three additional turns for a good starting point.

THANKS, HUH, BOSS

Many thanks to my wife Barbara who typed much of this issue, it would have never gone to press without her.

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NUGGET 3
1989 Zone 7 Calendar

April

9  Zone 7 Autocross #1, hosted by Golden Gate Region at Alameda County Fairgrounds, Pleasanton; fee - $10 per driver; run group sequence A B C D; for information call Stacy Lynd at (408) 730-1002.
15  Zone Concours Prep Session at Lukes & Shorman, Albany. For information call Dick Cottrell (415) 92-2100.
15-16  Zone Seven Autocross School, hosted by Loma Prieta Region at Oakland Coliseum; fee - $35; for information call Henry A. Watts at (408) 245-4040.
21-23  Sacramento Valley Region "CRAB XVIII" in Sacramento. For information call Stan Breyfogle (916) 334-1426.

May

13-14  Golden Gate Region Time Trial #3 at Laguna Seca. For information call Richard Stuck at (415) 967-1861.
14  Zone 7 Concours #1, hosted by Monterey Bay Region at Monterey Vacation Park; fee - $12 per entry; for information call Dolores Dannemiller at (408) 455-1268.
20  Zone Seven Autocross #2, hosted by Redwood Region at Sonoma County Airport, Santa Rosa; fee - $10 per driver; run group sequence B A C B; for information call Ray Scruggs at (415) 453-5231.
21  Zone Seven Autocross #3, hosted by Loma Prieta Region at Sonoma County Airport, Santa Rosa; fee - $10 per driver; run group sequence B D A C; for information call Catherine Chrissafulli at (408) 246-6990.
25  Zone Seven Concours #2, hosted by Loma Prieta Region at Stanford University, Palo Alto; fee to be determined; for information call Bob Blackburn at (415) 651-6839.

Notices of events of Zone-wide interest to be included in this calendar must be received by the Zone Rep no less than 45 days prior to the date of publication.
Sunday, APRIL 9

Alameda Fairgrounds, Pleasanton

David Kimes, Chairman (408) 779-5988

Run/Work Sequence and Grid Times

A Runs/GGR Works - Grid opens at 8:30 AM; Closes at 8:45AM
B Runs/A Works - Grid opens at 10:00 AM; Closes at 10:30 AM
C Runs/B Works - Grid opens at 11:30 AM; Closes at 12:30 PM
D Runs/C Works - Grid opens at 1:00 PM; Closes at 2:30 PM

Run Groups*

A - Production 356, 924S, 944, 928 and Showroom Stock 924S, 944, 928
B - Production 914-4 and 914-6, 912, 912E, 924
C - Production 911, 930 and Showroom Stock 911, 930
D - Super Street, Improved, Modified, Exhibition

*This event is also a Golden Gate series points event.
All entrants must run/work with the appropriate group in order to receive Zone or Regional points.

Particulars: Registration and Tech open at 7:30 AM. Fee: $10 per entrant.
Cars must be tech'd and on Grid in run-ready condition prior to the grid closing times.
No open exhaust. Helmets must have 1980 or later Snell Sticker. Loaner helmets available.
Course walk times are approximately one hour before the first run group and before the third run group.
All drivers must work per the above schedule.

Directions: From Highway 680 take Bernal avenue East to signal. Turn left at the signal
and then right through fairgrounds gate. Follow road to the parking lot.
Saturday, April 15th
9 AM to 2 PM

Lukes & Shorman, Inc.
1011 San Pablo Avenue at Marin Avenue
Albany

Guest Speaker: Henry Watts (author of Car
Beautiful)

Fee: $5; includes lunch!

ADDED FEATURE

"Judging the Porsche. Zone, Parade and SCCA. Pit-
falls, pratfalls and other details that judges look for,
including the seldom noted "GOTCHAs."

Instructor: Linda Smith; 1985 Parade Concours
Chairperson

For Information and Reservations:
Dick Cottrell
1685 Hunt Drive
Burlingame, CA 94010
(415) 692-2100

Monterey Weekend Getaway
August 19th & 20th

Deluxe rooms at Asilomar Conference Center,
with ALL meals included.

Saturday: 17 Mile Drive, Private lunch and tour
at the Monterey Bay Aquarium, stroll through
Cannery Row, wine tasting at Bargetto Winery,
dinner at Asilomar, and after dinner surprises.

Sunday: Breakfast and lunch provided.

All this for only $165/couple.

Sunday you have three options: Attend the His-
toric Auto Races at Laguna Seca ($35/couple ad-
tional cost) or the Concours d’Elegance at
Pebble Beach ($40/couple additional cost) or
just enjoy the beautiful Central Coast and shops
of Carmel (whatever cost you can escape the
stores with/couple).

This tour will fill fast (limited to about 20 cars),
so contact Ed Wise at (408) 973-0659.

European Auto Salvage Yard

Largest inventory of used Porsche parts in Northern
California; also new & reproduction parts.

(415) 653-EASY
Same day UPS shipping
Porsche parts exclusively

4060 Harlan Street  Emeryville, California 94608

GOLDEN GATE REGION 6
Celebrating
Sebering 1971
917 IMSA VICTORY
Martini Rossi Porsche
May 13 & 14, 1989
Laguna Seca International Raceway

Sponsored By
EASY European Auto Salvage Yard
- Largest inventory of used Porsche parts in Northern California; also new & reproduction parts.
- Same day UPS shipping
- Porsche parts exclusively

(415) 653-EASY
4060 Harlan Street • Emeryville, California 94608

Chairman/Registrar: Richard Stuck (415) 967-1861
1989 Time Trial and Driver's School Series
SOLVANG TOUR

Memorial Weekend
May 26, 27 & 28

We will be staying at the Danish Country Inn in Solvang. Estimated couples price is $155 which includes 2 nights lodging, hosted full breakfast Sunday and Monday, hosted cocktail parties Saturday and Sunday night, private party Monday for the Indy Car Race, and 2 different wineries on the way down with plenty of Porsche Roads.

Space is limited, so call now for reservations.

Mike and Teresa Lommatzsch: (408) 978-2108.

GGR Calendar Goes Down in Flames

Just to show that not everything you read is true, enquiring minds might want to know that the Reno Fun Train trip has been cancelled (March 31-April 2), the tire tech sessions have been postponed, and the Concours/swap Meet scheduled for April 15th proved to be too taxing and has also been cancelled. Relax now because the year is going to heat up with a Zone Rally series and the ever-surprising Karl Keller (and Susan) have got a tour for you in October.

Friday Night Social

Burgers, fries, beers, and Porsches can be found at Squeezers in Santa Clara, Friday, April 7th, after work (6-6:30 PM to whenever). Join the regulars and see what’s happenin’, maybe some surprises.

Squeezers is located on the corner of Stevens Creek Boulevard and Saratoga Avenue in Santa Clara. Turn right into the last driveway before you get to Stevens Creek.

Like be there, or be square.

ADVERTISERS

It should be noticeable that we have fewer advertisers than we once had. For those that do not like ads in the Nugget, this may be a good thing; but as the referendum on raising a fee for the Nugget was defeated in the last Club election and costs continue to climb, revenues from some source are needed.

We are lucky to have the support of our advertisers (and sponsors) because every dollar they spend is one dollar less we have to spend ourselves. Patronize them AND MOST IMPORTANTLY tell them when you do patronize them that you are there because they support Golden Gate Region. When you place an order, mention that you saw their ad in the Nugget or the Roster.

GOLDEN GATE REGION 8
KARL'S BACK -
AND DOES HE HAVE A TOUR FOR YOU...

It's the "Cambria Tour." Mark your calendar NOW for Saturday and Sunday, October 14th and 15th. We'll tour, South, down highway 1 from Carmel to the town of Cambria stopping at Point Lobos and Nepenthe on the way. There will be a tour of San Simeon, one night's lodging, dinner on Saturday night, a Sunday brunch and a wine tasting. All of this, and more, for just $140 per couple. Sign up now so you won't miss it!

Contact: Karl or Susan Keller
Phone: (408) 284-2043 (work)
(408) 225-4837 (evenings)

BEER LOVERS!!
and the curious wine person..

BREWERY TOUR AND BEER TASTING

Learn about brewing and taste a variety of beers produced at

THE TIED HOUSE CAFE AND BREWERY
954 Villa Street
(between Castro and Bailey)
Mountain View
(415) 965-BREW

Sunday May 7, 4 p.m. 'till 7 p.m.

$15 per person:
Includes tasting of five beer varieties numerous munchies, including cajun spice onion rings, fruit and cheeses, garlic bread with beer and cheese sausages.

Reservation and refund deadline:
Friday, May 5, 1989

Make check payable to PCA-GGR, and mail to:
Danielle Ringen
1072 Echo Drive
Los Altos, CA 94022

Information? Contact (415) 948-9025 before 9 p.m., please.

TIRE TECHS

The tire tech sessions reported in the March issue of the Nugget have been postponed until later dates due to other commitments by the manufacturers involved. Watch your newsletter for the rescheduled dates.
CARRERA DE SIERRA

Mark your Calendars
Saturday and Sunday
September 30-October 1

The twelfth running of the classic is set!! Rallymaster John Clever has promised us a wonderful journey over Ebbetts Pass to Reno. After an exciting night at the brand new Nugget we will return via an alternate route, just as scenic.

This traditional relaxed event is geared to the fun-loving seat of the pants beginners and novices, with a few tricks for the expert classes.

We will start in Sacramento, and finish at a wonderful BBQ party in Jackson.

Join us, won't you?
Save the dates and watch for details later.

For Information:
John Clever (209) 835-9090
Rik Snake Larson (916) 481-6084
Phillip Marks (707) 429-3744

A presentation of the Porsche Clubs of America (Sacramento Valley Region) and of Great Britain.

PARK CITY

PORSCHE CHALLENGE

Save Labor Day weekend for the Park City Challenge. A multi-region event consisting of a Pack-Rat Concours, Slalom (4 runs), Rally, and two meal functions.

For more information contact Darrell Troester, 6344 South Loreen Place, Salt Lake City, Utah, 84121 or call (801) 277-9440.

4th Annual Asparagus Festival
Concours d'Elegance

April 23
Oak Grove Regional Park
Stockton

To participate send $10 to
Asparagus Festival Concours d'Elegance
c/o KWIN FM 97
P.O. Box 7871
Stockton, CA 95207

or call
(209) 951-8165 for information.

Cars for sale may be exhibited in a "For Sale" area for a fee of $25.

Deadline for entry is April 21.

Chairman: Roger Turnbeaugh

Frey Racing offers a complete selection of safety equipment and accessories for both car and driver in stock:

- Nomex driving gear
- Rod Ends
- Helmets & Shields
- Fasteners
- Window Nets
- Safety Restraints
- Nuts & Bolts
- Pit Boards
- Safety Wire & Pliers
- Racing Books
- Car Numbers
- Champion Spark Plugs
- Redline & Kendall oils
- Stopwatches
- Fuel Pumps, Regulators & Filters
- Tire Pressure Gauges
- Braking Systems
- ... and much, much more

Visit our showroom —
Hours: 9:00 a.m. - 8:00 p.m.
Monday - Friday
10:00 a.m. - 5:00 p.m.
Saturday

Frey Racing, the one-stop racers center,
530 Reed Street, Santa Clara, CA 95050
(408) 727-9970
IN MEMORIUM

Since the last issue, Golden Gate Region has lost two outstanding contributors.

Our first president, Perc Bliss has passed away. A founding member of Golden Gate Region and its first executive officer, Perc was instrumental in creating this Bay Area haven for Porsche madness and setting the stage for all the players who came after him to enjoy the marque with other like-minded individuals. We regret his passing and our thoughts and best wishes go with Ethel at this time.

Craig Hills, son of Glen and LaQuita Hills, and well-known to all active time trialers as a tireless worker and contributor to that series, passed away under tragic circumstances. Our sincerest condolences and best wishes go out to Glen and LaQuita.

The loss of any member is always upsetting, but to lose two such valuable and serviceable members is a genuine blow to us all.

KEN'S
SPORTECH
INC.

Providing expert Porsche service and repairs in the Bay area since 1979. Ken and his crew offer personal and professional experience that you and your Porsche can appreciate.

408 / 377-8055
1436 White Oaks Road, Campbell, CA 95008
Monday Thru Friday 8:00 to 5:30

Dear Friends of Al Holbert:

On September 30, we lost a truly great man. Al Holbert's tragic death at the age of 41 was a tremendous loss to his friends, his church, the racing community, and most importantly, his family.

Al stood for the highest ideals in everything he did. His lifestyle was one that took him many places, but he never allowed it to make him lose sight of his values. This kind of commitment influenced the people who came in contact with him. They treasured his quiet friendship and strength.

Following Al's death, I know a lot of us felt a desire to do something. We can't bring Al back, but we can keep his memory alive. Through the gifts of several individuals and firms, the foundation has been laid for the Alvah R. Holbert Memorial Scholarship at Lehigh University. This endowed scholarship will support young men and women who wish to pursue a career in mechanical engineering at Lehigh just as Al did. It's something we can do that will last forever through generations of Holbert scholars.

I hope you will join us in this effort. Our goal is to raise $135,000 which will permanently endow the Holbert Scholarship. This effort, which includes Al's family, fraternity brothers, classmates, members of the racing community and friends, will help us all to make something good out of the tragedy by helping to provide an education for deserving young men and women in generations to come.

Contributions can be sent to:

Alvah R. Holbert Memorial Scholarship
c/o Patricia Boig, Alumni Memorial Bldg. 27
Lehigh University, Bethlehem, PA 18015-3086

Thank you for your consideration.

Sincerely,

H. Timothy Everett
President

NUGGET 11
ACROSS
12. Christian Symbol
15. ----- Round the Flag, Boys.
25. The 6th Month
29. 3 plus 4
32. adolescent child
34. Over ----- 

DOWN
3. Part of a sentence
26. exist

See next month's Nugget!

Sacramento Valley Region's
Autocross & Driving School
April 8, 1989 (Saturday)
CAL EXPO, LOT "C" (Cal Expo Off Ramp - Business Loop 80) $10.00 per driver - Qualified Instructors Available. To request one familiar with your car, call Ken Mitchell, (916) 782-5228 by April 5, 1989.

- 8:00 a.m. Registration
- 8:30 a.m. Course Walk
- 8:45 a.m. Driver's Meeting
- 9:00 a.m. First Car On Track
- 10:30 a.m. Change Work Groups
- NOON Lunch Break
- 1:00 p.m. Resume Event
- 3:00 p.m. Change Work Groups
- 5:00 p.m. Finish - Pick Up Equipment
- NEXT Bench Racing/Beer & Pizza

How To Enter
Send $10.00 to
Ken Mitchell
1419 Deerfield Circle
Roseville, CA 95678
(916) 782-5228
(describe your car, indicate if instructor desired)

PORSCHE TRIVIA QUIZ

1) What was the first model of sports car to bear Porsche's name?
   a) Where was it made and in what year?
2) What was the first motor racing event that Porsche entered as a factory team?
3) What was Porsche's official competition debut in the United States?
4) When was a "Targa" model first introduced?
5) What is "Targa" an abbreviation for?
6) Where did the "Carrera" name come from?
7) What does "Cabriolet" mean?
8) What are the features of the Porsche crest?
9) Which of the following advanced technologies is used for the first time in the 959?
   a) Variable torque four wheel drive,
   b) Anti-lock braking,
   c) Ceramic cylinder heads
d) all of the above,
e) Answers a and b.

Waiutardand
The background card of the race of the decade
The skyline pool of teams qualifying horses over
a flying roof
The term was originally used to denote a car with
development or competitions
a car that is capable of greater performance
than the car to which is compared.
The name is sometimes given to the most
powerful car in the race.

(1) 1996
(2) 1995
(3) 1994
(4) 1993
(5) 1992
(6) 1991
(7) 1990
(8) 1989

ANSWERS TO PORSCHE TRIVIA
GGR SALUTES OUR SPONSORS

PLUS ONE MOTORSPORTS is the place to take your car for wheels, tires, suspension techniques and aerodynamics. John Pulliam and Tom Taylor opened shop in September, 1983 and have built a reputation for the finest products and workmanship.

Among the accessories carried by Plus One are the ever popular Yokohama tires, BBS wheels, Koni shocks and MOMO steering wheels. They can provide you with a catalog and specification sheets for the products you are interested in and also have a beautiful showroom at 30952 San Clemente Street in Hayward. They offer tire and wheel packages wherein the price includes mounting, balancing and shipping.

KEN'S SPORTECH at 1436 White Oaks Road in Campbell was originally opened as Ken's Porsche Technique on January 1, 1979. Ken Mack, the proud owner of this high quality shop, started his Porsche doctor career as an apprentice at Stoddards in 1970.

Ken's Sportech is a full service Porsche repair shop, using the latest technology in equipment to repair your engine, transmission and alignments. Ken feels the experience of his mechanics is a big factor in his ability to provide quality service. Two of his mechanics have over 18 years of experience!

Ken Mack enjoys an excellent reputation not only for Sportech but as a PCA member and supporter of the club. This is Ken's 10th consecutive year of sponsoring GGR Time Trials, events in which he is active as a driver also. Last year Ken missed a couple of events and some were afraid that his retirement from the Time Trials was under consideration. He claims he was "in between races" and that even after all these years, he still enjoys the thrill and challenge of Time Trialing. The 1990 Parade will mark Ken's 20th anniversary as a PCA member and a Porsche Mechanic.

Ken Mack

PLUS ONE MOTORSPORTS

1436 WHITE OAKS ROAD • CAMPBELL, CA • 408/377-8055

NUGGET 13
A few Time Trialers went to the track on Friday to stretch their minds and muscles on the track. Jerry Hagn paid his money, as did Henry Watts and Cecil Beach, but Jerry got very little track time as his care was quite uncooperative about running even in the pits. In fact, his car spent more time up on jacks than on the track. I guess that is what happens when you put a Brown #2 engine (Sergio used to call it Sepia Brown) in a yellow car. Jerry really should get a medal of some kind though because of the patience and self control he displayed while dealing with all the frustrations he was feeling in dealing with his 911’s mysterious illness.

Bud Behrens was back in his usual form as our Track Steward, giving the drivers a familiar tongue lashing. In all fairness to Bud, some of the drivers deserved it! Another Change in faces was Gretchen and Steve Rider, our new Grid Team. Steve may have been an innocent volunteer for this job due to the fact that Gretchen’s father is our Time Trial Chairman, Richard Stuck. Gretchen and Steve are a nice addition to our Time Trial family. Gretchen will get to your funny bone even in the face of sheer terror of going onto the track or severe disappointment at a bad run time. The reason for this change in faces is that John Peichoto has retired from this position. We will miss him as he, too, always had a smile and an encouraging word for all of us. Thanks, John, for all you’ve done while we had fun!

Saturday night the stage was set for the potluck. Sandy Provasi is the organizer of our potlucks this year and created a German theme for the dinner to coincide with the event. We had a nice response for the dinner even with the unusually small field of drivers. The ski bunny weather didn’t daunt those who came prepared. Barbecued steaks, bratwurst, and chicken were prepared and then the diners took refuge from the cold by splitting up into the Neidel, Beach and Provasi motorhomes. Sandy then personally delivered the desserts with her accompanying German music. The Beach’s motorhome was even treated to her rendition of the Chicken Polka.

I had to rely on my informants for some of the Saturday night festivities as Lloyd and I had to race back home to get dressed for a black tie dinner party. My company had the gall to schedule their celebration party on the weekend of a Time Trial.

continued next page
Time Trial #1 continued

They'll just have to get their priorities straight. Anyway, I did find out there was a beer tasting session while waiting for the barbecue to finish. Rob Neidel, Ken Mack, Troy Lothrop, Rich McGlumphy, George and Shirley Neidel and Karen Neidel were seen tipping back a few bottles of domestic beers. Rob had brought the bottles of "Nude Beer" to try out. The puzzling thing was that the label had a woman on it...no, that's not the puzzling part...she was wearing a bathing suit?? NUDE beer? But, leave it to Ken Mack to figure out you could scratch off the bathing suit and...well, use your imagination.

A little extra partying was called for as Judy and Terry Zaccoone were celebrating their 27th wedding anniversary. Congratulations to a super couple! It was nice to see Terry back on the track with us again. This time he brought a partner, daughter Julie was a student in her new 914, while Judy heroically worked the turns two days in a row!

Newly licensed students this weekend were Catherine Crisafuli, Rich Walton, and Win Seipp. Congratulations for passing the test. Good job!

Two more PCA heroes rose to the occasion this weekend. Jan and Larry Grove towed their broken car home on Saturday, but returned on Sunday with the motorhome that they had promised could be used for timing. Now that is dedication and loyalty at its finest. Incidentally, Emmett Wilder loaned his motorhome to the Groves for the weekend and it's for sale. Maybe GGR could purchase such an item?

Another of our finest is Ed Clement who took the time to get Julie Zaccoone's 914 running so it could be driven home. Otherwise it would have been another night camping at the cold and lonely track for the Zaccoones. Rodney Rapson also had a little mechanical magic to perform. He rebuilt his transmission at the track Sunday, replacing two gears all by himself (with a little handling holding/tool passing from his college roommate).

Billy Bob Newlin came up Sunday to announce timed runs. It's always fun to listen to his nonsense on the airwaves. His lovely assistant, Rebecca, was appointed Chief Timing Slip Runner and carrot stick/cheese cube thief. Billy Bob was also sporting what he called a "Secret Weapon," a zapper gun. He wouldn't tell me what the secret was, but did say, "Wait 'til the next event." What is this Nonsensical Newlin noodling around in his noggin now?

Richard Bradshaw was sporting a 'trick' spoiler on his 914 during his timed run on Sunday when his en-

gine lid popped up. Sharon Neidel was rather startled during her run when at Turn 9 she spotted a pink flamingo on the edge of the track. One of the turn workers at Turn 9 apparently thought it would be funny to put a stuffed flamingo on the track. Actually it wasn't funny because 'startled' is not something you want to be when traveling at those speeds. The turn worker was not very gracious when asked by Frank Alvarez, Chief of Communications, to remove it. Okay, at least get people who respect what we're doing out there.

Nancy Dorigli won a free entry to the next event when her early entry was drawn out of a hat, and Jay Hicks received a free entry for his Closest Guess. Jay guessed his timed run EXACTLY! He claims his secret was the fact that his gear shift knob came off and he had to shift with just the stick itself.

Because of the lower turn out for this first Time Trial, Great Races II - 24 Hours of Daytona really afforded those of us who did drive some quality track time. I had a couple of sessions myself where I never saw a single car. Sandy Provasi had the same situation. She began wondering if she had missed the checkered flag and everyone was waiting for her to come in! It was a superbly run weekend, leaving fond memories until the next event on May 11 and 12 at Sears Point. See you there for the next installment of Great Races II.

Cheers,
Pattie
# THE GREAT RACES II

## RESULTS FOR EVENT NO. 1

### STOCK CATEGORY

<table>
<thead>
<tr>
<th>Class</th>
<th>Name</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class N</td>
<td>Terry Zaccone</td>
<td>2:13.93</td>
</tr>
<tr>
<td></td>
<td>Ken Myers</td>
<td>2:18.62</td>
</tr>
<tr>
<td></td>
<td>Larry Vilmer</td>
<td>2:21.37</td>
</tr>
<tr>
<td>Class NL</td>
<td>Cathy Crisafulli</td>
<td>2:05.73</td>
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<tr>
<td></td>
<td>Julie Zaccone</td>
<td>2:28.28</td>
</tr>
<tr>
<td>Class V</td>
<td>Terry Sullivan</td>
<td>2:05.73</td>
</tr>
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* = New Track Record for Class

**NUGGET 17**
Weather Dampens Cars, Not Enthusiasm at GGR #2

In case it has escaped your attention, the weather in February is somewhat unpredictable. I was reminded of this as the CHP was escorting us over Mission Grade at 6:00 A.M. on February 4th, 1989. I was, of course, on my way to the second GGRAutocross. The CHP was there because the heavy rain, hail and freezing temperatures had turned 680 into a skating rink. The Porsche was reacting to all this by going in whatever direction it felt was appropriate. Just as I was cursing myself for driving on 008R’s I noticed Diane, behind me in our Bronco, doing the same thing. However, as 71 of you can attest, we did arrive and the show did go on.

This was technically a Diablo Region event and Ed Wilson and Jim Pasha set up a very fast course through the puddles. The rain did eventually stop and the course dry out but not until we had a new world’s record for DNF’s and spins. One of the more notable events was Karen Neidel trying to display numbers and keep her feet warm. (She gave great numbers but the feet froze.) Our lovely president was nattily attired (great hat) and was displaying her jumping in place ability during her course work.

If you weren’t there you have no appreciation for how cold California can be. Due to the terrible weather, several folks asked if we could stop at 4:00 instead of 5:00. I put it to a vote but if you know concheads you know the results. I voted to close at 4:00 but as it turned out I was able to squeeze out a class win on my SEVENTH run at 4:58 so thought staying was a great decision. Sorry John.

I’ll bet Strawhat in Pleasanton still wonders what hit their soup line. A fun day in spite of everything.

David Kimes
Autocross Chairman

914s Rule GGR #3

Our third Autocross of the season started out much better. Another beautiful dawn welcomed Diane and I to the Fairgrounds and Event Chairman Terry Zaccone arrived just as we were unlocking the gate. As the cars started arriving, We quickly noticed we were probably the only three people in Pleasanton who were not driving 914’s and running in EP.

An incredible 14 of the 106 entrants were in E Production and they put on quite a show. The course was quickly determined to favor our small air-cooled brethren and Terry was not very popular with the water pumpers or six cylinder fans. Our president and first lad were on hand with their new 914 and after one run in the 944, to needle the absent Danielle, madame prez jumped into the fray with the other EPL’s (only for fun, of course). Since it was the official day to honor Presidents, I think Sandy Provavi and Nancy Dorighi could have been a little nicer, but that’s racing.

Paula Evans reminded me it is in poor taste to announce the catering truck delay while eating a doughnut so I’ll apologize to those who didn’t notice there were still several doughnuts left in the box.

A special thanks to Bob Cross for the new number board. As one of the many who has been bitten by the old one I thank Bob. Wonder what he meant when he said "I’ll take it home with me and bring it to all the events myself." Has he seen us pack the trailer perhaps?

Bill Newlin brought his Super-Zoomie car to an Autocross for the first time this year and almost snatched TTD from Darrell Terry erasing the only bright spot the 911 fans had all day. (@#$%&*$# Zaccone)

The "let’s all race in one car and find out who the best driver is" group found out the best drivers on Monday were Roger Pettey and Ian Thompson. Some clever interpretations of the rules allowed them to save face and force me to not allow any future changes to the registration cards without my initials. This is still all for fun isn’t it?

We have received word from Golden Gate Fields that they are going to have Autocrosses there this year and as soon as I have the dates and can submit them to the board we will update the Nugget. Looks like a nine event series as of right now. If you are reading this and have no idea what we’re talking about, come out to the GGR Autocross series. We welcome newcomers and will do anything we can to make you feel at home.

GOLDEN GATE REGION 18
# RESULTS: GGR Autocrosses

## #2 & #3

Sponsored by AUTOMOTION

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continued next page

NUGGET 19
Results continued

| Class EPL cont. | Sandy Provasi | 45.307 | 103.462 |
| Class BL cont. | Barbara Lateer | 47.575 | 107.717 |
| Gloria Martin | 48.213 | 109.044 |
| Pat Wilson | 104.025 |

| Class FP | Terry Zaccoone | 43.360 | 102.013 |
| Class L | Richard Stuck | 43.373 | 102.885 |
| Henry Watts | 43.559 | 102.962 |
| Sergio Meza | 45.260 | 105.522 |
| Kirk Doberenz | 43.595 | 103.343 |
| Ted Miles | 44.634 |
| Ian Thomson | 45.251 | 103.077 |
| David Thal | 47.861 |
| Roger Pettey | 103.052 |
| Casey Winningham | 108.116 |

| Class BL | Judy Miles | 47.664 | 105.405 |

| Class FP | Sergio Meza | 45.260 | 105.522 |
| Class BL | Judy Miles | 47.664 | 105.405 |
| Terry Zaccone | 46.408 | 103.875 |
| Ted Miles | 105.123 |
| Patty Winningham | 110.705 |
| Class LL | Roger Pettey | 103.052 |
| Judy Zaccoone | 46.408 | 103.875 |
| Judy Miles | 105.105 |
| Class FP | George Neidel | 44.362 | 101.647 |
| Class PL | George Neidel | 102.165 |
| Carolyn Doberenz | 45.742 | 104.315 |
| Judy Zaccoone | 46.408 | 103.875 |
| Patty Winningham | 110.705 |
| Class IPL | David Colman | 103.332 |
| Class HP | David Colman | 103.312 |
| Bud Behrens | 44.577 | 103.976 |
| George Neidel | 101.647 |
| Jerry Haga | 103.963 |
| Class PL | George Neidel | 102.165 |
| Mary Ann Behrens | 45.887 | 104.775 |
| Judy Zaccone | 46.408 | 103.875 |
| Joanne Shelly | 105.005 |
| Class IP | Judy Zaccone | 46.408 | 103.875 |
| George Neidel | 101.647 |
| Brian Maddox | 47.680 | 108.521 |
| Judy Zaccone | 46.408 | 103.875 |
| Patty Winningham | 110.705 |
| Class T | David Colman | 103.332 |
| Roger Turnbeaugh | 104.127 |
| Paul Christoferson | 104.546 |
| Class P | Paul Foster | 45.689 |
| David Blanchard | 48.032 |
| Class JP | Paul Foster | 45.689 |
| Danielle Ringen | 47.281 | 109.163 |
| Class GL | Paul Foster | 45.689 |
| Valerie Blanchard | 48.270 | 109.163 |
| Janet Plemons | 47.090 | 101.221 |
| Class IP | Rich McClelland | 58.713 | 102.079 |
| Dennis Vasconcellos | 106.553 |
| Steve McClelland | 102.088 |
| Class KP | Steve McClelland | 102.088 |
| Dan Holly | 45.013 | 106.166 |
| Karen McClelland | 108.321 |
| Len Harrington | 105.142 |
| Class M | Laura Rodriguez | 108.321 |
| Eric Nichols | 104.817 |
| Class U | Steve McClelland | 102.088 |
| Class BL | Steve McClelland | 102.088 |
| Carey Belz | 47.051 | 106.034 |
| Bob Cross | 59.421 | 100.212 |
| Teresa Lommatzsch | 47.123 | 104.896 |
| Llyod DeMartini | 100.287 |
| Marcella Mitchell | 47.147 | 104.609 |
| Class UL | Llyod DeMartini | 100.287 |
| Eric Nichols | 104.817 |
| Pattie DeMartini | 101.308 |
| Mitchell | 105.142 |
| Class M | Lorna Cross | 105.050 |
| Carey Belz | 47.051 | 106.034 |
| Class UL | Lorna Cross | 105.050 |
| Teresa Lommatzsch | 47.123 | 104.896 |
| Bill Newlin | 58.441 |
| Marcella Mitchell | 47.147 | 104.609 |
| Class M | Bill Newlin | 58.441 |

GOLDEN GATE REGION 20
Results continued

Class ML
Stacy Lynd 44.680 59.029

Class Z
Darrell Terry 56.452
Kevin O'Grady 57.853
Greg Orton 100.491

Class ZL
Jacki Orton 106.242

TOP TEN EVENT #2
Terry Zaccone 43.360 TTOD
Richard Stuck 43.373
Henry Watts 43.559
Kirk Doberenz 43.595
Tom Provasi 44.013
Greg Peart 44.036
Jeff Reitmeir 44.190
Sharon Neidel 44.204 TTDW
Ray Scruggs 44.298
Geoge Neidel 44.362

TOP TEN EVENT #3
Darrell Terry 56.452 TTOD
Kevin O'Grady 57.853
Bill Newlin 58.441
Jeff Reitmeir 58.639
Rich McClelland 58.713
Stacy Lynd 59.029 TTDW
Steve Cross 59.421
Bob Cross 100.212
Llyod DeMartini 100.287
Greg Orton 100.491

Redwood and Loma Prieta Regions present
Zone 7 Autocrosses

#2 & #3
Saturday and Sunday
May 20 & 21
at the Sonoma County Airport

$10 per driver

See Zone 7 Calendar for run group sequence and next month's Nugget for full details.
SOME HANDLING THEORY

by Dick Guldstrand
Guldstrand Engineering

- This is an abstract of an article supplied by Custom Alignment,
- 1905 Old Middlefield Way, Mountain View, CA 94040 (415) 961-5311.

By now you have probably read enough "straight talk" articles about high speed handling to be totally confused. Your condition stems from the fact that most such articles are written to sell something rather than to inform. This article will outline a few basic concepts which will help you make an enlightened choice about how to modify your car for superior handling. Some parts will get a bit theoretical, but the knowledge gained will be worth the effort, so bear with us.

Where to Start?

Where do we start this discussion of high-speed handling? I can tell you it doesn't start with g-forces, gumball tires, spring rates or any other thing the enthusiast considers central to high performance.

It starts with Joe Average. You've met him. He's the driver of that car acting as moving chicane on your favorite back road. Joe is also the typical car buyer and the key to Detroit's plans for making big profits. They want to sell a large volume of cars all based on the same basic design. To do this they must appeal to the large group of buyers in the middle of the market. Sport coupes represent the most Detroit is willing to do for the enthusiast. If Detroit can't sell hundreds of thousands of a particular part over the life of the model run, they simply are not interested. Their marketing plans rely on volume. Detroit is not in the business of designing cars especially for handful of true enthusiasts.

We need to look at how Joe drives and what he expects from a car. Then we can compare his style with that of the Enthusiast Driver. Once we understand these differences, we can look at how they affect the overall design of the car. The best way to examine these differences is by watching our two drivers negotiate a typical turn.

A Typical Turn

Let's assume a 180°, medium-speed corner with a radius of approximately 230 feet. This turn will have a total distance along its circumference of 722 feet.

If you are having a hard time visualizing it, think of a 180° freeway on-ramp with a recommended speed of 25 mph. Assume also that both Joe and the Enthusiast are driving base-model sport coupes which weigh about 3500 pounds. Cornering in the normal manner, Joe will round the turn at about 30 mph. His subjective reaction to the cornering experience will be that the car handles just fine. The Enthusiast will corner at 45 mph. He feels that the car leans too much and is unresponsive.

A Typical 180° Turn

Why do Joe and the Enthusiast have such different reactions to driving the same care around the same turn? The simple answers are that the Enthusiast is going faster than Joe or that the base-model coupe is designed for Joe's driving style rather than the Enthusiast's. While these answers are valid, they don't help us decide how to obtain superior handling. We're looking for a more fundamental understanding. To get it, we have to discuss some basic physics and the nature of human response to time-distance relationships.

It's Only Natural

The basic physics we need to examine is the concept of energy. Of particular interest is kinetic energy, the so-called energy of motion which is present in all moving objects. The amount of kinetic energy in any particular moving object is determined by both the weight and velocity of the object. It is important to realize how weight and velocity influence

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Some Handling Theory continued

the amount of energy. This relationship is expressed by the formula:

\[ \text{Energy} = \frac{1}{2} \text{Weight} \times \text{Velocity}^2 \]

This tells us the amount of energy increases in direct proportion to added weight and in geometric proportion with added velocity. Thus, if the weight doubles the energy also doubles, but if the velocity doubles the energy will be four times greater.

Let’s get down to earth by seeing how much energy is involved as our two drivers round the typical turn as above. When Joe Average rounds the corner at 30 mph, he is cornering at about 0.279 g. The amount of energy involved is about 142,785 newton-meters. The Enthusiast Driver goes around the turn at 45 mph or about 0.628 g, which is not that slow for a base-model car. The amount of energy involved as the Enthusiast corners is about 321,183 newton-meters. Notice that while the Enthusiast is going about 50% faster than Joe (45 vs. 30 mph), the amount of kinetic energy involved has increased by 125% (321,183 vs. 142,785 newton meters).

You’re thinking this is all very interesting but wondering how it relates to improving your car. Well, it means that the amount of energy involved with your car during cornering is the basic physical design criteria used in the construction of all suspension components. Think of the suspension components as devices to resist, store and control energy. The spring is a good example. We always hear people talking about spring rates. What does “spring rate” really mean? When we say that a spring has a rate of 250 pounds per inch, it means the spring can store 250 inch/pounds of energy for each inch of compression.

Why don’t we use our example again? If we assume that as Joe goes round the turn his outside springs are compressed one inch; then as the Enthusiast corners, the outside springs will be compressed an additional 1.25 inches. How does this extra compression affect the drivers subjective reaction to handling? At this point we get to the second important concept: the nature of human response to time-distance relationship.

It’s Just Human

Back at our typical turn, we can watch more closely as our two drivers negotiate the corner. Recall that Joe went around the turn at 30 mph, or to put it another way, at 44 ft. per second. Assume that as Joe enters the turn, the car takes 2 seconds to roll over, compress the outside springs and come to a steady-state cornering attitude. Likewise, at the exit of the turn, Joe’s car takes about 2 seconds to unroll and get comfortably straight again. Watching Joe go through our 722 foot long turn, we see that it takes him 88 feet to transition the turn, that he has 546 feet of steady-state cornering and another 88 feet of transition back onto the straight. Joe spends a total of 16.4 seconds in the turn. Of these, 4 seconds (24%) are spent in difficult transitional cornering maneuvers, and 12.4 seconds (76%) are spent in relatively easy steady-state cornering. This is why Joe feels that the car handles fine. At 30 mph, he spends relatively little time doing the difficult tasks of getting on and off the proper line and has a good deal of time in the middle of the turn to make corrections.

The Enthusiast Driver experiences quite a different situation. He is going 45 mph or 66 feet per second. Remember that basic physics indicates that there is 125% more energy involved because the Enthusiast is cornering 50% faster. Remember also that the greater energy causes the outside springs to compress an additional 1 1/4 inches. Assuming a linear suspension response time, it will take the Enthusiast 4.5 seconds of transition at each end of the turn. He spends 297 feet of transition during turn entry (66 feet per second x 4.5 seconds), has 128 feet of steady-state cornering, and 297 feet of transition at the exit. This is why the Enthusiast thinks the car is unresponsive. He is in the turn for a total of 10.9 seconds. Of these, he spends 9 seconds (82%) of the time in difficult transitional cornering and 1.9 seconds (18%) in relatively easy steady-state cornering.

The technical name for this phenomenon is yaw response. The yaw response characteristic of a car is the single most important of that group of traits we call “handling”. The parameters for determining an ideal yaw response characteristic are derived from study of the human nervous system. The yaw response must be designed to make the driver comfortable at the speed he wishes to go. It cannot be too slow or too fast. It must be slow enough so the driver can react to steering inputs; yet, it must be

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Some Handling Theory continued

fast enough so that corrections can be completed before an off-road excursion occurs. The base-model coupe has been designed in Detroit with an ideal yaw response for Joe Average, who normally corners at about 0.300 g. If a driver wants to corner at some higher speed, then the suspension must be modified to provide an ideal yaw response at the higher speed. In other words, we must keep the yaw time, when expressed as a percentage of total cornering time, constant. To keep the Enthusiast Driver comfortable going around our typical turn at 45 mph, we must modify the suspension so about continued 18% of total cornering time is spent in transitional cornering. This is what is meant by keeping the yaw time constant.

CONTINUED NEXT MONTH

Many thanks to Danielle Ringen for obtaining this tech material for us.

SOME 924/944 TECH TIPS
Courtesy of AUTOMOTION

Check your 924/944 fan direction. After working on the fan, make sure the fan is rotating in the correct direction. Inadvertently switching wires will cause the fan to run backwards, which will cause your engine to overheat, and possibly lead to expensive engine damage.

Save your 924/944 windshield wiper motor. Your wiper motor resides in a compartment under the hood just in front of the driver. Make sure the rubber drain cap in the forward compartment wall works properly, otherwise the compartment fills with water and destroys your wiper motor.

NEW MEMBERS

New Duals
Ken Meyers
(Larry Vilmer)
14 Juniper Drive
Lafayette, CA 94549
(415) 253-1385
1975 914
Redwood Region

Transfer In
Stuart Cain
1023 Highland Avenue
Santa Clara, CA 95050
1974 914
from Sacramento Valley Region

Transfer Out
Richard J. Norelli
to Hudson Champlain Region

TOTAL PRIMARY MEMBERSHIP: 781

WHO’s WHO IN GGR
Has Teo Fabi resigned? Is this Brian’s new autocross car? Is your treasury safe with this man?
THE MART

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FOR SALE

1970 914/6 Roadster #9140431167, White, Black Interior. Nice interior, rough body (straight but needs some paint & welding); engine runs smooth, but valve guides gone on #1 cylinder. Original stock condition with 88K miles. Great project car, sold as is. $6400/OBO. FOB Paul Troutner (408) 475-9400 days, (408) 923-6251 evenings.

"Cookie Cutters" set of 4 15x7" $250 (firm), 914 tow bar $100/OBO. (209) 835-3352 or (209) 832-1152.

Four 5 1/2Jx14 ORIGINAL PORSCHE ALLOYS $300. Dress up your 914! Stewart Hook (415) 530-8381.

1973 1/2 911T Targa, Silver/Black, Blaupunkt, Momo, a/c, spoiler, 73 K miles, excellent condition. Asking $10,000. Call (408) 356-4514.

BBS 3-piece Racing wheels two 15x7" and two 15x8" fits 911 and 914-6, $1000/OBO. Doug (415) 538-5901.

Spring Cleaning Sale - help support my 4-Cam habit. NOS T5 hood, $450; T6 hood, $375; T6 front bumper complete, $350; T6 tank, $250; T6 tank cover, NLA no tears or cracks, $100; rebuilt 1960 Normal long block, balanced, 1729 NPRs, new clutch, valves, etc. $2800; fresh S-90 and 912 set up for 356, also 912 core eng.; 1959 Convertible D, needs restoration, make offer; 1960 Coupe, no engine, $3000. 1960 S-90 Coupe, rebuilt engine, solid driver, $7500; 1964 C Coupe, black plates, recent restoration, $14,000; 1970 914-6, needs assembly, $9000; 1973 1.7 914 parts car, runs, $750; 1975 914 tub w/suspension, $200; call for more info and other needs. Dave Merz (707) 795-2787.


1978 911SC Sunroof Coupe, 930 slant nose conversion, '87 3.2 litre engine with 1800 miles, Sapphire with grey leather sport seats, blue accent, HOFCO.

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The MART continued
alarm with door locks, Alpine stereo, 7 & 9" alloys, Yokokamas, Bilsteins, a/c, 930S oil cooler. I will consider interesting trades. $49,500 Ken Mack (408) 377-8055.

Many 356 engine parts and new case in the box, $950. 901 gears, M-4, N-4 & S, need P & Q; 1973 911 Flywheel, $75; 2.0 P & C 9.1-1 $300; 86 mm race pistons 11-1, $400; 1970 914-6, original 105K. Larry Chmura, (415) 934-1574.


1972 911T sunroof coupe, has early sport Recaros in leather, S-equipment, strong 91E rebuild, $12,000/negotiable. New 12V Bosch blue coil $20; 22mm Weltmeister sway bars, $300 both; '72 911T Bosch distributor, $80; 911 Autopower rollbar with padding and extras, $250, Perf. Products adj. oil returns, $20. Large selection of VHS Porsche and racing tapes. Bob Neal (415) 949-3271.


WANTED


914 Door handle, for 1972, exterior, driver's door, lock assembly not needed. Paul Troutner (408) 475-9400 days, (408) 923-6251 evenings.


Carrera 2 body, any 4-Cam parts, C or SC Cabriolet, any Rudge wheel parts. Dave Merz (707) 795-2787.

BOARD BUSINESS IN BRIEF

March Board Meeting
February 21, 1989

The minutes of the last meeting were approved as submitted.

OLD BUSINESS: Budget for next sixty days: Treasurer budget submitted and approved. Need budgets from concours/swap meet and beer tasting. Time Trial budget approved. Action Items: Need Social, Time Trial and Rally inventories for Club insurance. Need refund from Vasonna Park for the Family Picnic. Post mortem of events: Time Trial #1 at Sears Point was a good turnout along with Autocross #2 which was also an excellent turnout. Autocross #3 also had excellent weather which brought out a lot of people. Insurance for the upcoming events are fine. Changes to the Calendar: Reno Train Tour in April has been cancelled. Club computer: Club computer is in Brian Suen's possession.

NEW BUSINESS: Appointed positions: Historian: Sharon Neidel and Zone 7 Rep: Marsha Wilson. New Track: Stacy Lynd will be looking into GGR investing in the new Modesto track. Rule changes: SCCA specs have been approved by the board for vehicle racing weight. The rollbar rule to remain unchanged, whereas, first time students do not require a rollbar/cage but any subsequent driver will require a rollbar/cage.

DIRECTORS' REPORTS: President: Brian Boller was appointed the new PCNA President. The Trefen Tour being held September 30 through October 14 will be $1695 plus airfare. Flowers were sent to Mrs. Ethel Bliss in memory of Perc Bliss. Vice President: The Perc Bliss award will be renamed the Perc Bliss Memorial Award. Secretary: Budget approved. Treasurer: Budget approved as submitted. Membership: 0 new members, 1 new dual, 1 transfer in, 1 transfer out, 15 non-renewals, 9 late renewals, 9 dropped for a total of 781. Competition Director: No report. Social Director: No report. Nugget Editor: Report read. Goodie Bag: Budget approved.

Respectfully submitted,

Kathryn McVean
Secretary

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COMING EVENTS

APRIL
1 Reno Train Tour - CANCELLED
7 Friday Night Social p.8
9 GGR Auto-X #4/Zone 7 Auto-X #1
   - Pleasanton Peichoto p.5
15 Concours Tech Session p.6
15-16 Concours/Swap Meet - CANCELLED
   Zone Auto-X School - Oakland
   Coliseum p.21
21-23 CRAB - Sacramento - SVR
25 Board Meeting - Lynd

MAY
5 Friday Night Social p.8
6 Yokohama Tire Tech - CANCELLED
7 Beer Tasting - Ringen p.9
13 Zone 7 Concours #1 - MBR p.4
13-14 GGR Time Trial #3 - Laguna Seca
   - Stuck p.7
20-21 Zone 7 Auto-Xs #2 & #3
   - Santa Rosa - RR & LPR p.21
23 Board Meeting - Lateer
27-29 Solvang Tour - Lommatzsch p.8

Board Meetings held at home of Director named.

GGR EVENTS HOTLINE
408-227-7208