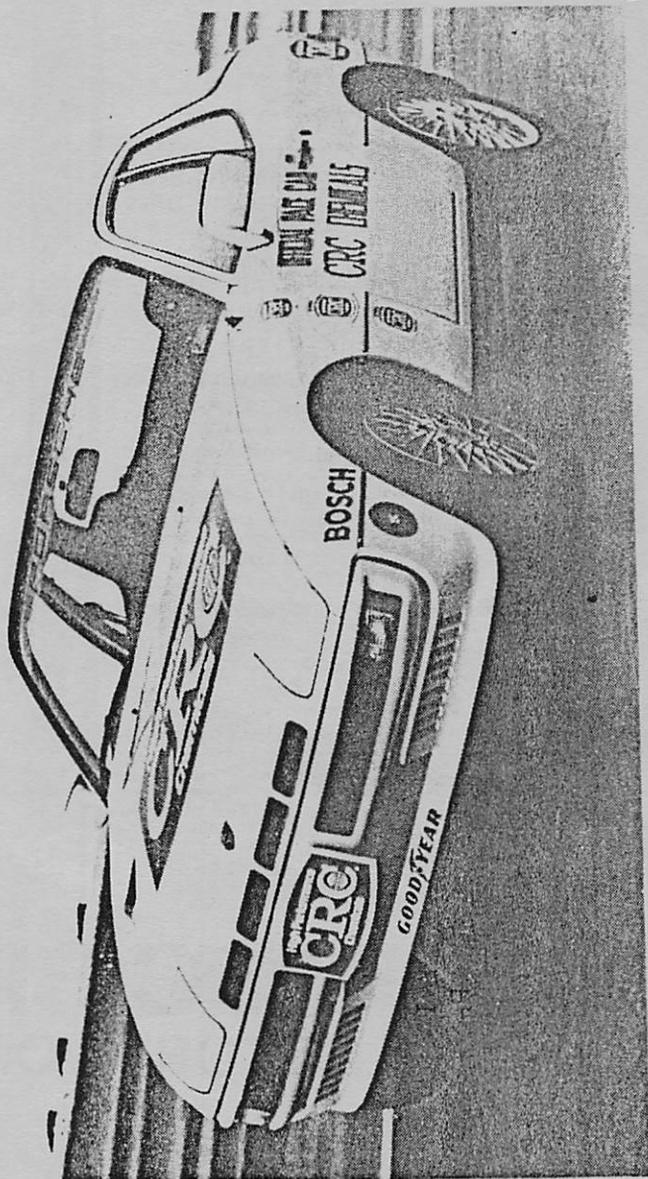




# der Gasser

Jan. '82

Porsche Club of America: RIESENTÖTER



Next Meeting Jan. 21 Geo Wash.

# Mail Order Tire Prices in Philadelphia!

Tires by  
**NTW**  
National Tire Wholesale

SPECIALISTS IN MAG AND WIRE WHEEL  
MOUNTING AND BALANCING  
SPECIALISTS IN HIGH PERFORMANCE TIRES  
BALANCING ON THE HOFFMAN  
GEODYNA 55 SPIN BALANCER  
ALIGNMENT & SHOCK INSTALLATION

-Bilstein, Koni, Gabriel shocks-

**RV HEADQUARTERS**

Sport, Race, Truck, Camper, Motorcycle Tires

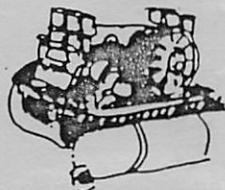
Michelin, Semperit, Bridgestone, Pirelli,  
Goodyear, Goodrich, General  
Stratton, Laramie, Continental, Metzler

Show Your Membership Card For Dealer Prices  
(Only available at Pennsylvania NTW's)

WAREHOUSE/SHOWROOM LOCATIONS:

WILLOW GROVE	KING OF PRUSSIA
2435 Maryland Road	180 Church Road
657-6600	265-0900

LAWRENCE PARK  
INDUSTRIAL PARK  
651 Parkway  
328-3100



## precision MOTOR WORKS

Sales      Repairs      Parts  
Roberts Road, Bryn Mawr, Pa  
Bob Koerbel      527-6025

RIESENTÖTER GENERAL MEETING!!!

DATE : JAN 27 (WED)

TIME : 8.30 P.M. (DINNER 6.30 P.M.)

PLACE: GEORGE WASHINGTON MOTOR LODGE  
PLYMOUTH MEETING EXIT OF PA. TURNPIKE  
(EXIT 25)

**the finest  
accessories & parts  
at dramatic discounts**

**Subtle  
Dynamics**

**215 Plank Avenue, Paoli, Pa. 19301  
(215) 296-3877 (800) 345-1293**

## P R E S I D E N T ' S   M E S S A G E

This is the inaugural address of what I suppose might be called the Galbraith Administration. I certainly hope this term fares better in the eyes of the electorate than, say, the somewhat larger Nixon or Carter administrations down in the Potomac Region. There will be no break-ins of rival clubs, no "Ferry Beer", and no erasing of tapes. There will be a lot of social events, competitive events, tech sessions, sailing, skiing, rallying and driving. There will be a lot of attending of meetings, and events because they will start on time, (famous last words), the business section will be dispensed with rapidly, and the enjoyable section will take precedence.

The 'cabinet' this year has already come up with many new, some old, all good ideas for the year ahead. Nevertheless, please contact any one of us if you have a suggestion for a speaker, meeting site or event. For this purpose we are publishing both the work and home phone numbers of each officer on the back page.

This year Riesentoter Region turns 25 years old!! We intend to celebrate such a momentous occasion by scheduling an event befitting our Silver Anniversary. We are looking for a committee of three, probably experienced members, (read Old timers), who will work together of this one item to make it the best, and the best attended ever. Nominations, volunteers are being accepted.

In closing, I wish to thank the President and Officers of last year's committee for an extremely enjoyable year and for laying the groundwork for a, hopefully, better year to come.

DON

## S O C I A L

The first social event of the 1982 season will be a trip to The New York Auto Show on Sunday, Jan 31. We'll start with an optional breakfast then leave from King of Prussia by 10.00 a.m. If enough people respond by Jan 25, we'll rent a bus (about \$10 per person round trip with beer and bathroom) - otherwise I've found "Park it Yourself" garages at the Coliseum. Final details will be announced at the meeting, but if you are interested please call me first at work 215 644-4790 or at home between 7.00 and 10.00 215 431-2836.

The Executive Committee needs suggestions for speakers and/or programs. Please contact Don, Larry or Craig.

This summer I hope to charter a few sailboats for a weekend cruise around The Chesapeake. If you have experience as a sailor and can captain a boat, please let me know. The body lean on these babies is atrocious, but burying a towrail at 8 knots is ALMOST as exhilarating as a Porsche at the Glen!

CRAIG

# TECH REPORT

-: EXHAUST TUNES #1 :-

It is hard to believe all the work that has been done in the field of tuned exhaust systems. I had the opportunity to buy a few books on the subject and discovered the art and science goes back to the early 1900's. Some of the designs have worked well, but I suspect with the low speed engines, the dynamics of exhaust gas flow was more predictable. More recent work with high speed auto engines tend to finalize the design on the test stand not in the mathematics. Unless you have a test stand, dyno and instrumentation, you will have to play with the math or take advantage of some of the simple equations developed from all of the dyno work. I would like to summarize what I found and then propose another approach, one I have not read about but one that seems interesting. Maybe you dyno owners can test the theory.

One source does not consider pipe diameter as being important and only relates RPM vs tunes pipe length. For instance you can use the following according to the writer.

<u>RPM</u>	<u>FOR MAX POWER AT A RPM</u>	
	<u>LENGTH OF EXHAUST PIPE IN INCHES</u>	
4,000	50"	
5,000	40"	
6,000	34"	
7,000	29"	
8,000	25"	
9,000	32"	
10,000	20"	

TABLE #1

The key to an efficient exhaust system is one exhaust pipe per cylinder each at the above length. You can merge them into one larger pipe after this tuned length.

This goes for any of the above or below values.

Another approach gave both pipe length based on exhaust temperature, RPM and pipe diameter. Here it is:

<u>RPM</u>	<u>EXHAUST PIPE LENGTH IN INCHES</u>	
	<u>*EXHAUST TEMP 500°F</u>	<u>*EXHAUST TEMP 800°F</u>
5,000	22½"	24½"
6,000	18½"	20½"
6,500	17"	19"
7,000	16"	17½"
8,000	14"	15½"

TABLE #2

\*At the exhaust port not at the tailpipe. Most of us should use 500°F column. Racers sees 800°F-1000°F

INSIDE EXHAUST PIPE DIAMETER IN INCHES

ENGINE		RPM - FOR MAX POWER				
BORE (INS.)	STROKE (INS.)	5,000	6,000	6,500	7,000	8,000
2	2	0.55	0.60	0.70	0.72	0.76
2½	2½	0.85	0.93	0.99	1.15	1.25
3	3	1.10	1.22	1.27	1.32	1.41
4	4	1.72	1.87	1.95	2.00	2.15

TABLE #3

If you need values for a different bore/stroke, let me know.

Obviously both writers took somewhat different an approach when it came to pipe length. If I equate them to the same basis, it get:

RPM	PIPE LENGTH IN INCHES		
	AT 500°F TABLE #2	AT 800°F	TABLE #1
5,000	22½	24½	23½
6,000	18½	20½	20
7,000	16	17½	17
8,000	14	15½	14½

Next issue I will give you another approach that combines all of the above plus another improvement.

TONY CHECKOWSKI

# **HOLBERT RACING**

**PORSCHE 924**

**BBS WHEELS**

We are a unique specialty shop. Unlike many others we do not represent a large number of lines, instead we limit our sales to products of our own manufacture and one or two carefully selected lines. Our prime emphasis is on Porsche 924 products and **BBS** Wheels for most popular cars.

For a catalog, please send \$2 to  
**Holbert Racing Inc., 1425 Easton Rd., Warrington, PA 18976**  
**(215) 343-3131**

# JANUARY MEETING

Our first meeting of 1982 proves to be an interesting one. Tom Kane of NTW will be with us to introduce the new B.F. Goodrich Comp. T/A. According to Tom, Goodrich has developed this tire to compete directly with the P7 and NCT.

In addition, Tom is bringing two exciting films. One covers the Pro-Rally scene and features an Audi-Quattro. Of special interest are the camera angles, specifically, one mounted on the bumper, another in the cockpit. The second film tentatively will take us on several laps round the infamous Nürburgring.

In between, Tom will hold a question/answer session on tires.

So come on out and join us! Will be having dinner around 6.30 p.m. Mark your calenders!

LARRY

P.S. Tentatively scheduled for February is Al Holbert.

P.P.S. Any suggestions for March?

## The Mighty-Nitto Award

Vern Lyle

The idea for an award with such a name came about early in the autocross season. We had just purchased our '72 911 and both managed to win our class at Christmas Village three days later - despite the car being equipped with Mighty brand spark plugs and rotted Japanese Nitto tires. The names just went together, so in the spirit of accomplishment we started looking for someone who deserved an award "for making the best of a bad situation".

In our opinion, that happened during the Parade rally in Asheville. Charlie Keller and son Eric were sort of baffled by the designation CAST 40 or CAST 32 following route instructions. Now they know it means change ave- speed to... but at the time, Charlie figured it must have something to do with caster angles in the front suspension. Not being able to figure out how to use such information, they decided to ignore it and just enjoy the rally. Well, the Kellers finished with a better score than any other Riesentoter and better than a whole lot of "experienced rallyists". We thought the whole bit was Mighty-Nitto.

This is a perpetual trophy to be awarded annually at the Banquet. Just who will choose the next recipient(s) is undecided. Suggestions are welcome.

Also, if anyone knows where I can get some new Nittos, I would appreciate it. Since changing plugs and tires I haven't won anything. However, Melody did win the DVSA Championship on the NCTs so I suppose that was a Very-Goodyear.

LEASE YOUR NEXT

PORSCHE



**ROBINSON**  **INC. MERIT**  
LEASING  **INC.**

NORMAN ROBINSON, PRES  
521 LANCASTER AVENUE  
HAVERFORD, PA 19041

215-525-2107

1981  
TREASURER'S REPORT

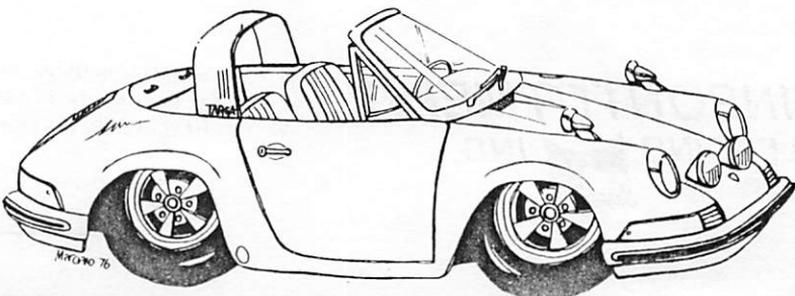
Jan. 1 -- Nov. 30

Opening Balance \$374.62

	<u>INCOME</u>	<u>DISBURSEMENTS</u>
Jan.	0.00	310.25
Feb.	931.28	2.34
Mar.	197.00	386.67
Apr.	504.00	351.90
May	944.87	1191.25
June	124.00	497.30
July	0.00	232.76
Aug.	621.00	354.80
Sep.	66.00	354.37
Oct.	300.00	340.11
Nov.	<u>1085.56</u>	<u>303.36</u>
Total	<u>4773.71</u>	<u>4325.11</u>

Closing Balance \$823.22 @ 11.30.81

Don Galbraith



## OFFICERS

### PRESIDENT

DON GALBRAITH  
13 COBBLESTONE DR  
PAOLI, PA 19301  
644-9079  
W: 496-2075

### VICE-PRESIDENT

LARRY BRUCE  
2150 KINGSWOOD ROAD  
BROOMALL, PA 19008  
353-5807  
W:

### TREASURER

BILL COOPER  
2144 SCHULTZ RD  
RD.2 LANSDALE, PA 19446  
584-6026  
W: 825-5334

### SECRETARY

CHRIS GALBRAITH  
13 COBBLESTONE DR  
PAOLI, PA 19301  
644-9079  
W: 337-0254

### SOCIAL

CRATG ROSENFELD

451-2336

W: 644-4790

### TECH CHAIRMEN

BOB PATTON  
138 MERLIN ROAD  
PHOENIXVILLE, PA 19460  
935-1725  
W: 648-2949

TONY CHECKOWSKI

584-0776

### COMPETITION

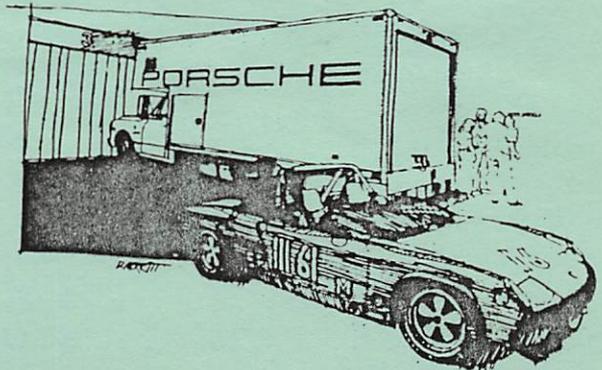
VERN LYLE  
BOX 363  
WEST POINT, PA 19486  
679-9262  
W:

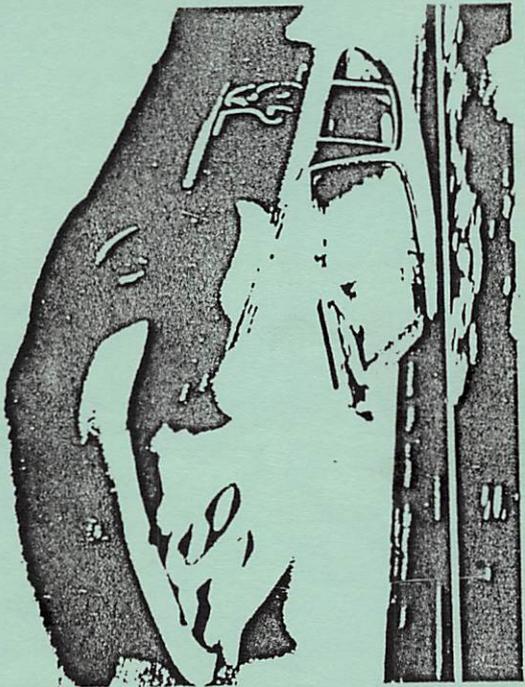
### MEMBERSHIP

SKIP COREY  
108 MICHAELS DR  
WALLINGFORD, PA 19086  
874-3201  
W: 766-8109

### PAST PRESIDENT

AXEL SHIELD  
1022 BELVOIR ROAD  
NORRISTOWN, PA 19401  
279-1809  
W:





# COMMITTED

to high performance machinery...  
to selling it, to servicing it  
and to racing it.

2097 North 63rd Street, Phila. /GR 3-6400

**MIKE TILLSON**

**Motorcar Service and Sales**

# der Gasse



J. F. BRODY  
R.D. 1, BOX 478  
SPRING CITY, PA  
19475



Fire Pumper  
1860s  
USA 20c

# to:

~~909 3rd Street~~  
West Chester, PA 19380

X