

NEWSLETTER OF THE NATIONAL CAPITAL CHAPTER



MARCH/APRIL 1984

# der bayerische



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Arlington, VA 22216

BULK RATE  
U.S. POSTAGE  
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# der bayerische

is the official publication of the National Capital Chapter of the BMW Car Club of America, Inc. and is not in any way connected with the Bayerische Motoren Werke AG or BMW of North America, Inc. It is provided by and for the club membership only. All ideas, opinions and suggestions expressed in regard to technical or other matters are solely those of the authors and no authentication or factory approval are implied unless specifically stated. The club assumes no liability for any of the information contained herein. Modifications within the warranty period may void the warranty.

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All copy submitted must be received by the editor by the 10th of the month preceding the coming issue.

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Cover Photo: Raine Mantysalo

## Coming Events

### G.W. MOTORS & VDO FACTORY TOUR March 17, 1983

Join us for a St. Patrick's Day drive to Winchester, Virginia to tour the VDO factory (home of great gauges) and to have wine and cheese at G.W. Motors. The plan is to drive directly from the Roy Rogers rendezvous to Winchester in order to arrive at 11:00am. Departure from Roy Rogers 9:30a, from Winchester 3:00pm.

**Directions:** Meet at Roy Rogers in Greenbrier Shopping Center, Route 50, at 9:30am sharp. From Beltway, I-66 West to Route 50 West, 2.6-miles to Greenbrier Shopping Center on left. Roy's is on the left at the end.

Advance notice required between March 10 and 15, call either Bill Ross (Washington area) 382-4642 or Karen Fairchild (Baltimore area) 337-1484 days.

### TIRE TECH SESSION—MARCH 31, 1984

NTW's Dale City Virginia showroom will host a tech session at 10:30 a.m. Dave Arnovitz, NTW technical coordinator, will be the speaker. Dave has several years experience in the tire world. He is planning a presentation to include: tire wear (front vs. rear wheel drive), foreign vs. import tires, high performance tires, all weather tires, and checking tire wear for imbalance. A film from B. F. Goodrich is to be shown. There will be tire displays and cut-aways of several types of tires. Refreshments will be served.

**Directions:** Take I-95 South to Dale City/Garfield Exit, at top of ramp follow Garfield exit to stop sign. Make right and continue to next stop sign, and make another right. Go to traffic light and make right, putting you on Telegraph Road. Continue to NTW sign and make left.

### BMW SWAP MEET—APRIL 7, 1984

Want to clean out your garage, basement, trunk, etc.? Looking for that special rare BMW part? Looking for good, cheap used BMW parts? Looking to buy or sell a BMW? Perhaps you just want to watch others do all this!

We're holding a swap meet at Autoy, (see Autoy's ad on page 6 for directions) near White Flint Mall, on the first Saturday in April, the 7th. Registration and set-up for sellers will begin at 10 a.m. The event will run from 11 a.m. to 3 p.m. Sellers please note that everything must be removed at the end of the day.

A \$5 fee will be charged to sellers to defray expenses, but that will still be a lot cheaper than a classified ad and you will have an audience interested in what you have to sell. We're interested in keeping this just to BMW's and related items, including:

- BMW cars
- All parts, new or used
- Accessories
- Literature
- Tools

If you plan to sell items, call Bob Hoey (home-(301) 948-8368) or Bill Riblett (home-(703) 671-2609, office-(202) 389-3075). Advance notice will better enable us to plan. We hope to make this an annual or semi-annual event.

## TECH SESSION—APRIL 14, 1984

The Second Annual Do-It-Yourself Technical Session will be hosted by two area dealers: Autohaus Tischer, and Brown's Castle BMW. These concurrent sessions will run from 10:00 a.m. to 2:00 p.m. You should attend the one closest to you. In addition to a tour of their facilities and an opportunity to meet their lead technicians, you will be able to perform your own minor service under their watchful eyes. Each parts department will be open, offering discounts to club members. Come out to pick-up parts and tips and to get your Bimmer ready for Spring. Refreshments will be served.

*Directions:* To Tischer, from Baltimore/Washington Pkwy, Exit Rt. 198 (Ft. Meade), and proceed .25 miles to Tischer on the right (953-2196 or 498-7400). To Castle, from Washington take Baltimore/Washington Pkwy to the Harbor Tunnel Thruway. Go through Tunnel for 15 miles to Exit 4 (Bel Air/Edgewood). Proceed toward Edgewood and at second light (Edgewood Rd.) make left. Proceed 1.5 miles to Castle on right (621-5634). From Baltimore, use Rt. 40 East to Edgewood Rd. Right onto Edgewood Rd. for 2.0 miles to Castle (679-1500).

## AQUARIUM AT HARBOR PLACE—APRIL 21, 1984

Join us for a special tour (no waiting in line) of the Aquarium and visit to Harbor Place. Tour is approximately 2 hours. The Club will pay the discounted admission (\$3.75 or \$2.75 for children). Bring quarters for metered parking, only \$.50/hr. Washington area members may meet at Autohaus Tischer for convoy to Baltimore. Reservations requested (max. 100 persons), call between April 9 and 17: Karen Fairchild (Baltimore area) 337-1484 (days) or Bill Ross (Washington area) 382-4642/654-7987.

Schedule: 10:30 a.m. meet at Tischer BMW, 11:00 o'clock sharp depart, 12:00 noon arrive at Pier 5 for parking, Baltimore members meet group, 12:00-12:45 open time, 12:45 meet at Aquarium Info. Booth at Pier 3 (must be with group for admittance).

*Directions:* B/W Parkway, exit Downtown/Russell Street, continue to right on Pratt St., go beyond Aquarium to Pier 5 parking on right.

## TECH INSPECTION—APRIL 28, 1984

No charge tech inspection for Drivers' School participants ONLY. 9:30 a.m.-12:00 p.m. Inspection is mandatory, here, or by your mechanic.

*Directions:* Heishman BMW, 3154 Jefferson Davis Highway, Route 1, Arlington, about 1 mile south of Crystal City.

## SUSPENSION TECH—MAY 5, 1984

6:30 p.m. Terry Luxford hosts a tech session on your Bimmer's suspension, modifications, etc. Location: 210 North Stonestreet Avenue, Rockville, Maryland (Phone: 340-8BMW).

*Directions:* From I-270, exit Route 28 East to Rockville, left at light at exit (Montgomery Avenue), 4 lights and left (Washington Street), 2 lights and right (E. Middle Lane), 2 more lights and left (N. Stonestreet Avenue).

From Wisconsin Avenue/Rockville Pike/Route 355 road becomes Hungerford Road (going North), right on Park (near Rockville Mall) and left at North Stonestreet Avenue.

## CAVALIER COUNTRY SPRING TOUR—MAY 6, 1984

The spring tour, a family event begins at 9:45 a.m. at the Greenbriar Shopping Center in Fairfax County, Virginia, and takes us by some beautiful back road routes into Albemarle County, the site of Mr. Jefferson's Monticello and the University of Virginia. Bill Ross has arranged for lunch at the Bavarian Chef, about 20 miles north of Charlottesville, and the club will pick up the luncheon tab for the first 75 tour registrants. All of the roads on the tour, plotted by Bill Via, are paved. Route instructions will be provided so that those desirous of setting their own pace will be able to do so. Thus, you may linger to visit Charlottesville or depart immediately after lunch, as you choose. If you plan to run the tour, register between April 30 and May 4 by calling Bill Ross at 382-4642 (days in Washington area) or Rick Foster at 788-6253 (evenings in Baltimore area).

*Directions:* Sunday, May 6, 9:45 a.m. departure from west end (adjacent to Roy Rogers) or Greenbriar Shopping Center. From Capital Beltway (I-495) take I-66 West, then Route 50 West for about 3 miles, to shopping center on the left. Arrive by 9:30 a.m.

## DRIVING SCHOOL—MAY 12-13, 1984

Details of this annual Summit Point event and application are elsewhere in the newsletter. Drivers arrive 7:30 a.m. Workers arrive 8:15 a.m. Dinner Saturday evening.

*Directions:* Proceed toward Frederick on I-270 or I-70 to Route 340, west on 340 through Charles Town, W. Va. On far side of town, continue straight on Route 51 for short distance, then keep straight onto Summit Point Road as Route 51 curves to right. Track is several miles on left, ½ mile past town of Summit Point.



## From the Editors

This issue features our recruitment effort at the D.C. Auto Show, the upcoming May driving school, a preview of the new BMW 325e, and a good assortment of articles submitted from our membership, plus a couple of articles from other chapters.

We are also featuring original pen and ink artwork created especially for *Der Bayerische* by local artist Chuck Jaquays from Woodbridge, Virginia. The technique is called Steiple Ink—drawing with dots. Chuck's other work includes a U.S. Postal Stamp of a 1917 Detroit Electric Coupe which was re-



# Calendar of Events

## JANUARY

- 28 **Engine Modifications/AC** (9:30 a.m.)  
Tech Session: J & F Motors.

## FEBRUARY

- 11 **Tune-Ups** (6:30 p.m.)  
Tech Session: Quality Car
- 23 **Highway Safety: Bruce Reichel** (7:30 p.m.)  
(Bill Scott Racing)  
Meeting: Dulles Marriott

## MARCH

- 3 **Rebuilding** (1:30-4 p.m.)  
Tech Session: Mastercrafters
- 17† **G.W. Motors & YDO Factory**  
Tour: in Winchester, VA.
- 31† **Tires** (10:30 a.m.)  
Tech Session: NTW—Dale City, VA  
(Terry Forrest)

## APRIL

- 7† **Swap Meet** (11:30 a.m.)  
Autoy—Rockville, MD
- 14† **\*Do-It-Yourself** (10 a.m.)  
Tech Session: Tischer BMW—Laurel, MD  
Castle BMW—Edgewater
- 21† **Harbor Place & Aquarium**  
Tour: Baltimore (Tim Dougan)
- 28† **Tech Inspection**  
Heishman BMW

## MAY

- 5† **Suspensions**  
Tech Session: Quality Car (B. Ross)
- 6† **Spring Tour**  
Charlottesville (Bill Via)
- 12-13† **NCC Driving School**  
Summit Point, W. VA (Rick Foster)
- 20 **Summit Point Corral** (G. Kimpel)
- 20 **BMW NA & Air, Inc.**  
Montvale, N.J.
- 26-28 **Blue Ridge Rendezvous**  
Spring Tour

## JUNE

- 2 **\*Body Repair**  
Tech Session: VOB Auto Sales—Rockville  
Russell BMW—Baltimore
- 9 **Summit Point Corral** (G. Kimpel)

- 24 **British Car Day Corral** (B. Loftin)  
Bowie, MD

## JULY

- 14 **Audio Systems** (B. Ross)  
Tech Session: Voyager Sound
- Crab Feast** (Mike Diggs)
- 318 Race Car** (B. Ross)  
Tech Session: Genderson BMW—Annapolis

## AUGUST

- 12 **Polo Match, Picnic, Car Show** (Seu Lim)  
Potomac, MD
- 12 **Summit Point Corral** (G. Kimpel)
- 13-17 **National Oktoberfest**  
Sturbridge, MA
- 17-19 **German Festival** (Karen Fairchild)  
Baltimore
- AutoCross/Gymkhana** (Heathersley & Vincenty)
- Summit Point Corral**

## SEPTEMBER

- 1 **Emissions** (B. Ross)  
Tech Session: VOB Auto Sales
- 7 **Driving School** (Highway Safety)
- 9 **Gunston Hall Auto Show**  
(Skip Marsh)
- 16 **Fall Tour** (B. Via)  
Bavarian Inn—W. VA

## OCTOBER

- Brakes** (B. Ross)  
Tech Session: Quality Car
- 6 **Autoy's Oktoberfest**
- 12 **El Cheapo Driving School**
- Winery Tour**
- Annual Elections** (J. Forrest)

## NOVEMBER

- Meeting with Speaker**
- Evergreen BMW & Goodyear**  
Tour: Frederick, MD

## DECEMBER

- Wine & Cheese Party**

\*Concurrent sessions/Washington & Baltimore  
† See COMING EVENTS on pages 3 & 4



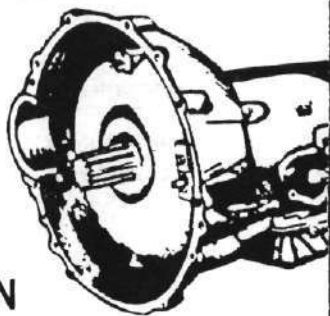
# NATIONAL TRANSMISSION SERVICE

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leased in 1981. His interests include: automobiles, trains, buildings, and scenery. Chuck welcomes your calls, for further information, he can be reached at (703) 491-2597. Perhaps, it's time to commission a drawing of that number 1 Bimmer in your life!

Recognizing that some people may not have convenient access to a typewriter, we are changing our policy that all submitted material be typed. However, if you can type it, we would much appreciate it; it is difficult for our typesetter to decipher the technical details of a handwritten article.

As you can see from the accompanying photo, we had a bit of trouble with our Coupe. Actually we're pretty lucky, in 13 years of BMW ownership, this is the first time we've had to have a car towed. Our local Amoco station employs an excellent mechanic who can take care of emergency repairs, and charges much less than a dealer. Even though the Coupe has proven very reliable, we have decided to put the car up for sale in the spring. We have a contact in Germany who might be able to find us a CS for a lot less than they sell in the States. If any members have had experience importing a car, we would appreciate hearing from you.

Our feature article is on the Washington Auto Show. Although covered in great detail elsewhere in the issue, we want to mention that BMW had a great display at the show. Just about all of the cars were open to the public, as opposed to Mercedes—who didn't even bother to display the prices of their cars.

Our spring events promise a wide variety of activities. We hope to see you at some of them.

'Til next time . . . Ira

# Auto<sup>INC.</sup>

## Quality BMW Parts & Accessories

4952 Wyaconda Road, Rockville, Maryland 20852  
Supporting BMWCCA and National Capital Chapter since 1975

From points, plugs and oil filters to total suspension conversions, Autoy has always tried to offer only the finest quality items at fair prices, backed up with service and knowledgeable advice and personal assistance. "Low ball" prices lose their appeal when customer service, spare parts, warrantee support and consistent quality are non-existent. You, as a satisfied customer, are our greatest asset and we'll never forget it. When calling or visiting Autoy please let us know you are a BMWCCA member.

### NEW ITEMS AT GREAT PRICES

ZENDER — Functional and attractive German ABS air dams.

GMP — New polyurethane impact resistant German air dams.

Autoy Inc. is located in south Rockville behind White Flint Mall. Go east on Nicholson Lane to 4th light, right onto Boiling Brook Pkwy, 2nd stop sign, Right onto Schuylkill Rd, 1st right onto Wyaconda Road then left into 1st parking lot.

EXTRA DISCOUNTS ON:  
ALL MARCHAL HEADLAMPS  
AND AUXILIARY LIGHTS  
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10am-7pm M-F  
10am-5pm  
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## President's Message

Congratulations! The National Capital Chapter, as of December 31, 1983, is the *third* largest of the 49 chapters of BMWCCA, Inc., in the United States. Through the efforts of the members and firms listed under 'New Members' in this and past issues and the many members who entered the membership contest, our membership grew to 1,047, thus displacing the Golden Gate Chapter (1,023). I am pleased to report that we are also gaining on Boston and New York (1,182 and 1,112, respectively). Our challenge to overtake both chapters and become number *ONE* by 1985 was issued to Boston and New York through Mark Luckman of the club's national office. I am willing to stick my neck out and project 1,300 by December.

This assumes that we are able to retain most of our members and better last year's performance. At the end of 1982, we had approximately 850 members. We have since increased services to members (e.g., number and types of activities, door prizes, number of firms offering discounts, Club Store inventories, chapter recognition, and quality of the newsletter) and initiated increased recruitment efforts (e.g., Auto Show, membership contests, and ambassadors to the independents and dealers).

Good weather is fast approaching and I hope to see many of you at chapter events. 'Coming Events' lists the activities and the details. You will note that for several events we request reservations. This will allow us to advise our host of the number to expect or prevent us from exceeding our reservation. If you are certain you and your guests will attend you may call for a reservation in advance of the stated dates. Please keep us posted.

Rick and Gordon still need workers for the Driving School. If you can attend, simply complete the enclosed application, noting "Worker Only," make your dinner reservation, and send the application and your check to the address listed. Any members interested in the Blue Ridge Rendezvous Tour (May 26-28) should call me. This is an overnight tour on a holiday weekend, and based on the lack of response at the Annual Dinner, we may have to cancel our participation.

As you read the pages of this and future issues of the newsletter, you may notice many new names. The members listed are not necessarily new members, but are new contributors. If you have had an interesting experience, want to share a technical tip or wish to write an article or report on an activity, give Ira or John a call. We are also developing lists of subjects for future articles that may be of interest to you (e.g., Fighting Auto Fires, Buying and Selling BMWs, Brief Histories of BMWs, Who Offers Club Discounts, etc.). An early start will provide you with two months or more to complete your article.

Bill Ross

## 156 New Members

Look for more blue and white decals on the road: The fall membership drive resulted in 156 new BMWCCA members in the last four months. With ten sign-ups, the winner of the VDO Oil Pressure Gauge donated by Evergreen Motors is Bill Ross. (Contrary to popular myth, Bill is not starting his own Chapter). In addition, there will be nine charter BMWCCA mug owners. Actually, that should read mug certificate owners, redeemable when Ross delivers the mugs. Bill's project is undergoing some start-up pains but is on track. Look for

a report in an upcoming *Der Bayerische*.

The breakdown of the results is:

### FALL MEMBERSHIP CONTEST RESULTS

1st	Bill Ross	10
2nd	Gordon Kimpel	6
3rd	Les Adams	4
	Dan & Seu Lim	4
4th	Glenn Sims	3
	Dan Sherron	3
5th	Karl Hoffman	2
	Clayton Klemm	2
	John Walsh	2

Note: Members who recruited two or more new members will receive a certificate good for one BMWCCA beer stein.

#### One Member:

George & Fay Anderson	Stephen White
Neil Brower	Tom Wilson
Steve Durovic	Martin Zimelis
Michael Early	
Bill Fraser	
Neil Halliday, Jr.	
Bob Harner	

Firms:	
Genderson BMW	17
J&F Motors, Ltd.	5
Heishman BMW	2
Autohaus Tischer	1
Bap Geon	1
G W Motors	1
Schwing Motors	1
Voyager Sound Center	1

Other:	
Auto Show	16
Road & Track	4
Motor Trend	1
Roundel	1

#### New Member Summary:

October	48
November	38
December	33
January	37
	<hr/>
	156

One notable entry is the 17 memberships donated by Genderson BMW to new car buyers. Genderson's program offers new BMW buyers the opportunity to better appreciate their purchases by introducing them to Club activities. Genderson's customers should be all the more satisfied.

Another item of note, the Auto Show has already produced 16 new members, with more applications expected. That event is described elsewhere but I would like to add that those of us who manned the booth are looking forward to talking BMW's at next year's show.

My personal thanks for your support of this drive. With similar support, Gordon's plan should make NCC the largest chapter.

Les Adams



## Auto Show Recruiting



Officials report 266,250 people attended the 42nd National Capital Area International Auto Show January 4-8, 1984. Domestic and foreign manufacturers' participation was the best in years. The National Capital Chapter (BMWCCA) participated, too, in a major recruitment effort. The chapter decided to go it alone and finance our own exhibit booth. Available estimates of costs versus benefits suggested that, at best, it was a gamble.

During last year's Auto Show, the chapter had been permitted, through the efforts of the BMW Dealers Advertising Group and the Automotive Trade Association, to recruit in the BMW/NA exhibit. Part-time efforts at the 1983 show resulted in 20 to 30 new members within 90 days.

Many things were different in the 1984 show. BMW's 1983 exhibit, while smaller, was spearheaded by the local BMW dealers. As a result, the local chairmen were able to authorize our efforts to recruit new members. For 1984, we wanted a larger display and the Show was to be paid for by BMW/NA, and was therefore under the control of Montvale. BMW/NA did request a formal proposal from the chapter of our proposed display—a promising sight. A proposal, highlighting the support of John Jaffee (BMW of Fairfax) and Steve Pieper (Heishman BMW and the Automotive Trade Association) was sent to Montvale.

In about a week, I was advised by BMW/NA's Public Relations Office that our proposal did not fit within the theme of this year's show and that we should consider a separate display for the car club.

We knew that a 12' x 6' display within BMW's exhibit was a long shot, and had developed a fall-back position. We asked BMW/NA if they would agree to defray some or all of the costs. After all, they had been receptive in the past and helped with our 1983 Charity Fun Rally. The sad news was this type

of assistance was not one of the ways BMW/NA wanted to support local chapters. We were all devastated!

We each had made a substantial investment of time and enthusiasm in this project. John Fowler, an active member and skilled graphic designer, had polished the concept and had developed much of the proposed material already sent to Montvale. Could we walk away or would we attempt to finance this venture ourselves? Last year's results were encouraging, but this was a big and potentially costly experiment.

Hastily called conferences between officers and the Board took us right down to the wire. The break even point for a \$500 to \$1,000 recruiting expenditure loomed in the distance. What additional value could be attached to many of the over 1,000 chapter members who might see and visit the booth? What value could be placed on being the only club exhibiting at the Show? What was the value of showing how the many dealers and independents in the area support the Chapter? Notwithstanding these many intangible benefits, maximum





attention to minimizing costs and maximizing new members was necessary. We decided to go for it!

Through John Fowler's extraordinary efforts and contacts in the industry, he was able to develop a truly first-class display, well under budget. The objective of the display was to show the Chapter in action—focusing on the variety of driving, technical and family/community events. Several members contributed photos for the display and others volunteered to work the booth.

There were several benefits to being an exhibitor, including invitations to attend the Official Press Preview and passes for those who worked the booth. John's wife, Kathy, who worked many hours to ensure that the display was completed on schedule, other officers and their wives and my wife and I enjoyed the Preview and had an opportunity to meet several officials from BMW/NA.

The Show opened on Wednesday, January 4, and since my office was closest to the Convention Center, I drew the 12:00 noon to 2:00 p.m. shift each day and was the backup to other members who graciously agreed to give their time. Les Adams, John Fowler, John Hartge, Bill Loftin, Raine Mantysalo (photography), Gordon Kimpel, Woody Hair, Terry Forrest, Karl Hoffman, Lionel Fernandez, Dan Lim and Seu Lim each covered for one or more evening or weekend shifts.

Each did an outstanding job as Club ambassador, greeted members who stopped by, explained the benefits of membership to prospective members (technical information, driving and other events, the national network through Friends of BMW, and discounts at area dealers and independents), and acknowledged the many sales and service personnel who visited the booth. Many other club representatives, PR people from Summit Point Raceway and members of the general public were pleased to see our exhibit and to find out how we

are organized nationally and locally. We seemed to be collecting big intangible dividends and generating considerable interest, but we were still uncertain of the payoff.

Each of the freshly printed applications (reflecting the \$30 annual dues) and past issues of newsletters had been stamped "AUTO SHOW." This would allow us to track new members as a result of the Show. The table in front of the display exhibited one or more copies of the *Roundel*, *DER BAYERISCHE*, *Friends of BMW* and a BMW history book. The history book (on loan from Heishman BMW) had a red M1 on the cover. This stopped traffic in the aisle better than a Hawker. The result was that many who expected to see a M1 in the BMW display stopped to discuss its specifications and price.

According to Mark Luckman at the club's national office, new members through the first week in February totaled 37, 16 (47%) with "Show" on their applications: not bad in the three weeks since the show, but we still have a way to go.

We have started planning for next year's show (January 2-6, 1985). I have contacted the exposition group in an effort to negotiate a reduced rate for car clubs. Additionally, based on preliminary contacts with Summit Point Raceway and local chapters of the Porsche Club of America, Mercedes-Benz Club of America and the Washington Volvo Club, we may be able to ban together to get this reduced rate and a better location. We were across from the Ferraris this year. The Washington chapter has also started to plan a 1985 display which builds upon this year's efforts and incorporates movement and more excitement.

Members who are aware of other opportunities (car shows, shopping centers, etc.) for us to use our display within the metropolitan area should contact me or Gordon Kimpel, Membership Chairman.

*Bill Ross*

## **J & F MOTORS LTD.**

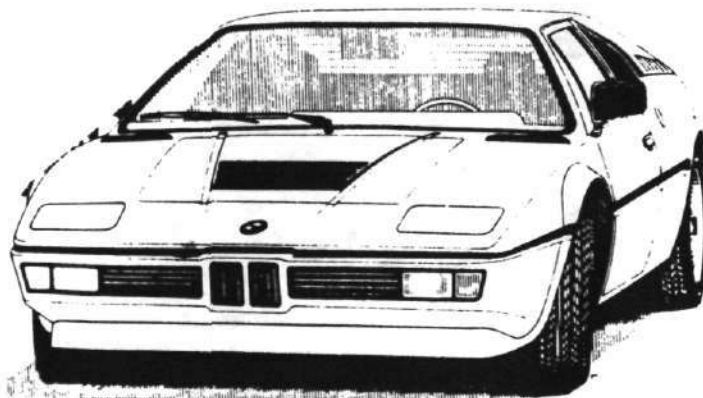
### **BMW SPECIALIST**

**4076 S. FOUR MILE RUN DR.  
ARLINGTON**

**HOURS  
MON. - FRI. 7:30-6:00**

**Joe Anderson  
Gordon Fletcher  
Carl Staton**

**703-671-7757**



## J&F Tech Session

About 75 members attended the J&F Motors Tech Session hosted by Joe Anderson, Gordon Fletcher, and Carl Staton. Topics covered were engine modifications and air conditioning.

Joe started the session by explaining the functions of the six major parts and assemblies that make up an auto A/C unit. (compressor, condenser, receiver/drier, expansion valve, evaporator, and the interconnecting hoses and electrical systems). Next, he demonstrated some of the physical properties of freon, along with safety precautions to take when handling it. For example, it boils at 21-degrees F., which means it could burn you. With BMW A/C parts spread out on a table, Joe described how the A/C works and offered some basic do-it-yourself trouble shooting tips. He gave tips on what tools are available for A/C service and how to use them.

J&F provided a generous spread of sandwich makings, chips, beer, soda, etc. It was well received and consumed by the members—many were observed building their second and third sandwiches.

After the pig out, the tech session turned to engine modifications. Joe briefly explained the benefits and possible bad side effects of a cam here or a carb there. He fielded questions from those present on engine power boosters like turbo chargers or nitrous oxide injection. He also covered some of the new engine performance tricks coming from BMW in Europe. Everyone appeared to have a good time and I'm sure everyone there learned something from the wealth of BMW knowledge offered by J&F Motors—not to mention the free lunch.

Chapter President Bill Ross presented Joe and Gordon a plaque to show the club's appreciation for their services.

*Dan Sherron*



*Photos: John Hartge*

## Quality Car Tech

Saturday February 11, Terry and Neil of QCS in Rockville hosted a session on tune-ups and motor oils. Despite weather like a typical London evening about 45 members showed up. The session covered various things: lubrication, correct plugs and points and gaps thereof, brake inspections, fanbelt tension, coolant leaks, center support bearings, guibo or hardy discs, and valve adjustments.

There was plenty of grog and munchies on hand along with the race prepared, Genderson BMW sponsored, Jim Harrison driven 2002. Terry used that car to demonstrate proper valve adjustments. You could also see a 318i race car taking shape. BMW built the roof, but Terry and his gang are making the rest of the car. On behalf of the club, we extended our great appreciation to Terry and Neil and the crew of Quality Car Service with a plaque presented to them by president Bill Ross.



*Photo: Bill Ross*

### Highlights of Terry's Tips:

**Lubrication:** 20w-50 for the engine all year, 80 weight gear oil for the transmission (NOT EP), 90 weight HP-EP gear oil for the differential—and all oils should be changed at regular intervals.

**Cooling System:** check cooling system when car is started from cold, before it gets warm. Check hoses for cracks and leaks around clamps, etc. If anti-freeze is running down center of oil pan in front, then it could be the water pump.

**Alternator and fan belts:** should be 1/2-inch play in fan belt tension. If there's more, tighten belt and check alternator bracket bushing for cracks and wear.

**Brakes:** If pads are worn to spring clips, time to replace pads.

**Brake Fluid:** Change it once a year—at least. Recommends Castrol LMA DOT 3.

**Drive Line:** check center support bearing. If drive shaft hangs low or bearing sags in the rubber—replace. Same goes for vibration when accelerating. Check guibo or hardy disc (rubber donut between drive shaft and trans) for cracks.

**Tune-ups:** In early cars use only Bosch points. They have correct spring tension and are very consistent. Use only Bosch distributor points. NGK plugs are good—broader heat range. But, use Bosch plugs for newer 1.8 liters. On points, use a little distributor cam grease (not bearing grease).

*Paul Vessels*

## Spring Membership Contest

The National Capital Chapter is pleased to announce the 1984 Spring Membership Contest to be held in April and May. The grand prize is your choice of a new Escort radar detector with state of the art "STOP" circuitry or a weekend for two (you and the membership chairperson??) at the Bavarian Inn in Shepherdstown, West Virginia. This includes two nights lodging and your meals!

Second prize is a \$100 gift certificate from J&F Motors. The certificate is good for service at their shop in Arlington or for a set of Hella driving lights installed. Attractive club beer steins will be awarded to all members who recruit 3 or more new members.

### Eligibility:

1) Contest will be based on applications received by the National office in the months of April and May.

2) Your name must be legible on the application. If your membership number is also used, you will also be eligible for the national membership contest, in which the prize will be sports seats and a sport steering wheel. The total value is about \$1,500.

3) A minimum of 10 new members is required to be eligible for the grand prize.

4) Dealership/repair facilities are NOT eligible in the company name, however employees may use their individual names on applications.

Applications will be available at all club activities, or call me at my office to order by phone. Get your applications NOW!

*Gordon M. Kimpel*

## May Driving School

The premier event of the National Capital Chapter's driving activities will take place this year on May 12-13 at the Summit Point racetrack near Charles Town, West Virginia. Once again the emphasis will be on learning and practicing the control of your car under high-speed conditions. Qualified racing drivers will be on hand to provide instruction in cornering, braking, skid control and other "active safety" techniques.

Virtually any club member who has attended one of these events will tell you of the unparalleled opportunity to try out your car under safe, carefully controlled conditions. Often they will relate in an animated fashion how much faster they could negotiate the turns or decelerate at the end of the main straight after a day's practice and instruction. If you've never been to a driving school, talk to a member who has and watch his or her eyes light up.

Elsewhere in this issue is a copy of the application form. Send it in promptly, since the number of participants is limited and we expect a full house. First consideration will be given to drivers who will bring a helper with them to assist in marshalling the turns or performing other duties like timing and registration. (Many participants drive on one day and assist on the other.) At the end of this article is a list of motels in Charles Town, West Virginia, 15-20 minutes from the race-track. For you campers, there is plenty of room at the track.

Your car must have a complete technical inspection prior to the event. This inspection will be performed at no charge by knowledgeable club members at Heshman BMW in Arlington, Virginia, on April 28 between 9:30 a.m. and 12:00 noon. Otherwise, the inspection can be done at your usual repair

facility.

A few answers to commonly asked questions:

1) How safe is it?

I have spent 18 days at drivers schools for a total of roughly 900 laps of the Summit Point track during the last 2 years. In addition, I have served as an instructor at a number of the Bill Scott Solo I schools. During this time, the only personal injury suffered by any participant was a minor cut on the hand. (Sunburn is another story—come prepared!) In the highly unlikely event of a significant injury, the club has an ambulance and paramedics on hand at all times. In addition, we do not run without a full set of safety workers stationed around the track, equipped with radios and fire extinguishers.

2) Is my car likely to be damaged?

There are two potential sources of damage, mechanical and accidental, both of which are very much under your control. I have seen numerous minor mechanical problems (e.g., loose lug nuts, thrown fan belts, etc.) which can usually be prevented by proper preparation before the event. The Heshman's tech inspection will turn up many of these. Once in a great while there is a more significant problem, like a blown head gasket. Fading brakes are not uncommon. You must have your brake system bled before the event, and it is an excellent idea to buy a set of semi-metallic pads for the front. They are not expensive and will practically eliminate any fading. With proper preparation, then, and a little common sense concerning redlines, mechanical trauma should be limited to some tire wear and a fair amount of brake pad wear. What about accident damage? Our BMW club events have had very few incidents. At less well policed events, I have occasionally seen considerable damage, in one case the complete destruction of a Jaguar XKE. (Its brakes had been malfunctioning all weekend, but the driver kept running. Get the message?) It's not uncommon to spin or leave the track on occasion. An important feature of the instruction concerns how to leave the track safely, maintain or regain control, and then reenter properly. If you keep your distance from other drivers, any such incident will usually result only in a collection of Summit Point mud under your fenders.

3) Are the instructors hard on your car?

All of the instructors are excellent drivers with a good feel for mechanical things. In my experience, they have not mistreated students' cars in any way. They will, however, drive much faster than you're used to at first so it may seem like they are really pushing. They aren't—it only seems that way. You'll be going that fast or faster, often, by the end of the day.

4) Will I be under pressure to achieve certain lap times?

Only to the extent that you have set personal goals. You can drive as hard or as easy as you like. You might wish to get the feel of hard cornering first in the slow turns (e.g., turns 1 and 5) and take it easy in the faster ones (3, 4, 10)). You might want to limit your redline to 5000 rpm, say, to avoid accidental overrevving. Nobody laughed at me when I could barely cruise my 320i around in 2:02—I wasn't pushing hard, I didn't want to risk bending something before I had fully explored the infamous BMW oversteer transition. (It turned out to be easily manageable, by the way.) Now I'm disappointed if I can't throw my stock-engined Datsun 510 around the track in under 1:40. It's all relative.

5) What should I do when I get to the track?

Drive to the paddock area, unload everything from your car (including spare tire, jack, glove compartment litter, etc), register, sign the waiver, and get in line on the pit lane for final tech inspection. Your tools and things will be safe where you leave them. (Even the Corvette Club has no problem with



theft!)

#### 6) How fast will I go?

Beginners usually lap around 2:00 flat by the end of the day. With a mostly stock 320i and a lot of experience, 1:45 or so is quite respectable. Heavily modified cars with experienced drivers can break 1:40 on a clean track. Your speed at the end of the main straight might be 100-105 mph. The slowest turns can be taken at around 35-40 mph. There are several medium-radius turns with speeds (ultimately) of 60-70 mph. The infamous "chute" (turn 4) can be taken at 80+ mph but it makes me distinctly nervous to do it and I don't recommend it. The track is 2 miles long, and speeds will generally average between 60 and 70 mph, overall.

#### 7) Can I take my spouse for a ride to show off my newly-acquired skills?

At the end of the day, there is usually time for "fun runs". As long as Fearless spouse has signed the waiver and can borrow a helmet, such rides are all part of the fun.

#### 8) What is the biggest danger of the driving school?

Driving home on Summit Point Road after the event is over. You're used to high speeds. But the road is now narrow and unfamiliar, there is opposing traffic, kids and dogs walk along the shoulder, large trees are everywhere, and so on. Explore your limits on the track! Safely!

In my 900 laps during the last two years, I have gone off the track under control about 15 times or so, have had 1 lurid, out-of-control spin (in the rain—remember, Bob McKeithen?), have worn out 1 and ½ sets of tires and innumerable front brake pads, have had no mechanical failures, and have not so much as dimpled a fender. If you prepare your car carefully, and drive with a modicum of control and good sense, I don't see why your experience should be any different.

After the driving events on Saturday, a complete steak dinner will be served at about 6 p.m. The cost is just \$8.00 per person, including dinner, beer, wine, and soft drinks. In the past, many have spent the day observing, helping, and driving, then enjoying the dinner, bonfire, and door prizes at night.

If I've missed anything you would like to know, give me a call during the evening (301-788-6253). Otherwise, I'll see you at the track!

*Rick Foster*

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The Town House, Route 340, 304-725-8441  
The Sportsmen, Route 340, 304-725-2041



## BMW 325e Preview

As you read this, the 325e is arriving at your BMW dealer. Europeans have had BMW 3-series 6-cylinders for seven years. Now we have ours. Ever since the new 3-series was introduced, there have been rumors about a 6-cylinder 3er for the U.S. We heard, "Expect an Eta engine (i.e. 528e)." We heard, "Expect a performance car." A performance Eta could be possible with higher revving and performance gearing. But, it appears that BMW has done neither.

From what I was able to find out by press time in mid-February, BMW is more excited about the 325e than I am. The car has economy gearing and is loaded with mandatory options. Expect a 325e price tag of about \$22,000. Those whose jobs depend on marketing BMWs apparently determined (probably accurately) that most Americans who pay \$22,000 for a car define power as power windows, power steering, power locks, power sunroof—but not horsepower.

On the positive side, the car certainly will be faster than a 318i. Because of its weight advantage, the 325e should be faster than the 528e (which has the same 2.7 liter engine, so why not 327e, 527e?). But, the performance probably will be much more like a European trim 320i (6-cylinder) than a European trim 323i (6-cylinder). Performance should be similar to the U.S. Audi, Saab, and Volvo turbos. The 325e might not outrun a 4-cylinder Honda Prelude and it certainly will not keep pace with a Toyota Supra or Porsche 944. But, because of its abundant low-end torque, the 325e should be quite peppy in and around town. The car will have a performance suspension and 4 wheel disc brakes. The Eta engines are built in the Steyr, Austria plant which has plenty of capacity, so BMW expects to be able to meet the demand for the 325e.

I'll reserve my final judgement until I've driven the car. I based these presumptions on some printed BMW/NA specifications which I compared with magazine road test results for other models. Here are the U.S. and European BMW specs:

	<i>U.S. 325e</i>	<i>Euro 323i</i>
Weight	2654 lbs	2484 lbs
Displacement	164 cu in (2693 cc)	141 cu in (2316 cc)
Power	121 HP/4250 rpm	150 HP/6000 rpm
Torque	170 ft lb/3250 rpm	151 ft lb/4000 rpm
Max rpm	5000 rpm	6300 rpm
Compression ratio	9.0:1	9.8:1
Rear axle	2.79:1	3.45:1
0-50 mph	6.9 sec	5.8 sec
0-60 mph	@ 10.0 sec*	8.5 sec**
Top Speed	115 mph	127 mph
1st Gear	3.83	3.83
2nd Gear	2.20	2.20
3rd Gear	1.40	1.40
4th Gear	1.00	1.00
5th Gear	.81	.81
Reverse	3.46	3.46

\*Author's Estimate  $\pm$  0.3 seconds

\*\*Road Test Data AUTO MOTOR AND SPORT 0-62 mph  
*John Hartge*





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## Rambling Ruminations

*Aerodynamics*—The August 1983 issue of the magazine *High Technology* contains an article, entitled "Going With the Flow," by Richard DeMeis, an aeronautical consultant, that presents some interesting information about aerodynamics and automobiles. This subject, once considered mainly in the development of ever-higher speed (and handling) capabilities for race cars, now has the attention of auto engineers in their search for ways to decrease fuel consumption and improve mpg ratings, as you well know.

Drag force is essentially a function of an object's shape, size and speed. The coefficient of drag is determined by the shape of the object, an automobile in this case, and is a measure of the object's efficiency in moving through a fluid. Size, in the form of frontal area, is of key importance; given two cars with the same coefficient of drag, the smaller vehicle will have less drag. Drag has a square-law dependence on speed; doubling speed quadruples drag.

DeMeis makes the point that automobile company advertising usually centers on drag coefficient and ignores frontal area, the other important factor in the drag force equation. It would be more useful for consumers, he points out, if car companies multiplied frontal area (in square feet) by drag coefficient and published the result under the rubric "drag index" or "drag factor." It would be even more useful, I think, and believe he would agree, if all three figures were published. He does just that for ten cars, none of them, unfortunately, a BMW, but let us look at some of the data anyway.

Of the ten cars examined by DeMeis, the one with the lowest drag coefficient (0.30 for the European Audi 5000S) was calculated to have the lowest (best) drag factor (6.6), even though it had the largest frontal area (22.09 sq. ft.) of the ten cars. The worst drag factor (9.5) of the lot was posted by the Chevrolet Chevette, which had the highest drag coefficient (0.51) and the smallest frontal area (18.59 sq. ft.). The Pontiac Firebird Daytona, with a commendable drag coefficient of 0.32, produced a drag factor of 6.7, given its frontal area of 20.90 sq. ft. The slightly higher 0.34 drag coefficient of the Porsche 924 turbo also produced a drag factor of 6.7, because of its slightly smaller frontal area of 19.60 sq. ft. Well, you get the idea.

(Editor's Note: Such figures were published for BMWs in ROAD AND TRACK in August 1982. BMW 3-series (Old) drag coefficient .47, frontal area 19.6 sq. ft., drag factor 9.2. BMW 5-series (New) drag coefficient .40, frontal area 21.7 sq. ft., drag factor 8.7. BMW 7-series (Old Nose) drag coefficient .45, frontal area 22.8 sq. ft., drag factor 10.3. ROAD AND TRACK tests determined that adding a front air dam and rear spoiler reduced drag by about 7-percent.)

It is apparently not too difficult to produce an automobile with a sleek shape, but there are compromises that must be made in the interests of interior ventilation, brake and engine cooling, passenger room, and handling (notably, converting lift to a negative, or downward, force). Advertising claims notwithstanding, progress is at present a trifle slow, says DeMeis.

One area that auto manufacturers seem to have neglected for the most part to date is the underside of the car, where frame members, exhaust systems, suspension components, drive trains, and the like, are exposed to the airstream. An exception here is said to be Saab, which has designed a very efficient underside. The employment of an underpan, after the fashion of some European models, is not recommended because it adds weight, partially offsetting any gain in aerodynamics, and may cause engine cooling problems, as

well.

Even such a seemingly simple device as the outside rear-view mirror presents a tough problem since, due to its location just aft of the windshield, the mirror can encounter an airflow that is about 25% faster than the speed of the car. The flow of air off the mirror along the side of the car provides further interference. Mirrors must be better integrated with the car body, and progress is slow in coming. Before you put that right-hand outside mirror on your car, think about the trade-off.

A ski rack fitted to a VW Scirocco boosted that car's drag coefficient from 0.43 to 0.55; a luggage rack raised the number to 0.49. And, these figures are for empty racks. Opening the windows of the Scirocco raised its drag coefficient from 0.43 to 0.45; tilting the car back one degree, as might occur with a load in the trunk, raised the number to 0.44.

*Three-series handling*—L. (for Leonard) J. K. Setright, a haughty but relatively able British automotive journalist (educated as an engineer, I believe), who sometimes writes for American publications, writes regularly and, I think, more interestingly for *CAR* magazine. In the issue of November 1983 he recounts the safety investigation of the BMW three-series cars (introduced as 1976 models in Europe) by the Swedish Road Safety Office (the "TSV"). In brief, the TSV found the three-series BMWs (recently replaced) to have an accident rate 16 times worse than other "high-performance" cars (which, in Europe, the three-series cars are) of similar power-to-weight ratio. These were typically single-car, skidding accidents, occurring on straight but wet roads, with the car being driven at moderate speed. "For no apparent reason, the tail of the car would swing; if the driver tried to correct the skid by the usual counter-steering methods, he would find that an incorrigible series of counter-skids would develop until finally the car hit something or spun off the road."

Setright reports that an accident by an English owner, while fortuitously driving in front of a police car, helped in the understanding of what was happening. It eventually became evident that "what triggered the familiar sequence of slips and slides was almost always an asymmetrical imperfection in an otherwise decently smooth road surface." Characteristically, Setright finds fault with the Swedish investigation, claiming first that an inadequate knowledge of tire technology pointed the investigators in the wrong direction. The investigators thought the cause of the squirrely handling to be the relative softness of the front springs compared to the rear springs, as well as the rear suspension, the latter having been oftentimes the subject of Setright's criticism and which he thought was partially to blame. The investigators, according to Setright, should have delved into such additional issues as the different camber values obtainable on a low-friction surface and on a high-friction surface and the different responses of different tires, so as to embrace the fact of the three-series car's extreme tire-sensitivity. The investigators also should have studied, among other things, the geometry of the steering and front suspension, as well as the loci of the front and rear roll centers and the location of the center of gravity of the sprung mass, according to Setright.

In any case, Setright reports that hard feelings developed, exemplified by "the shouting match which took place when the bosses of BMW and Volvo ran into each other on one of the stands at the Paris show: von Kunheim accused Gyllen-gammar of trying to damage BMW export sales, and threatened to do the same to Volvo in Germany!" Setright disapproves of such behavior by BMW, but asserts that "their opponents by no means escape criticism." The portion of the article that I find both amusing and pathetic reads: "What

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really upset the Swedes was the occasion when the chief engineer of their National Road and Traffic Institute took a new 320i to a test track, charged into a double lane-change maneuver, and rolled the car three times, hospitalising the Deputy Director of TSV's Vehicle Bureau who rode as a passenger.” Setright, pompously, and, I think, either disingenuously or stupidly, implores that we return to the days of *caveat emptor*, when purchasers of shoddy goods had no recourse and manufacturers escaped responsibility for their mistakes. Setright acknowledges that the old three-series BMW did have “some nasty characteristics”, but he claims that “they differed only in degree from those displayed by far too many” cars by other manufacturers, “German, French, Italian, Japanese, American and British.” Note well that Setright's putative indictment here omits the Swedes. I wonder why.

Setright, writing in the January 1983 issue of *CAR*, holds that the present three-series car has a much improved suspension system and implies that the handling situation for BMWs would be helped further if Continental tires were never fitted. He asserts that it was new ETRTO (a European organization of tire and wheel manufacturers) standards that forced BMW to develop an entirely new suspension system for the three-series. According to him, there are few expressions in the tire man's vocabulary “fouler than ‘BMW rear suspension’, and the new standards which set a limit of five degrees for camber were evidently meant to make it unnecessary ever to use those words again.”

Bill Via

## Sealed Bids by Invitation Only

When BMW AG put the 3.3 litre engine in the new 5'er they had me. Angelic and I had seen the new body style in Holland in the summer of '81 and had been shown a Eurospec 528i, but my 320i wasn't even a year old yet and it didn't make any sense to trade cars. I put the thought out of my mind until Chris Motors called to tell me the 533i was on the way. “I don't have any cars yet,” he said, “but I have the brochure.” I knew I was weakening when I drove all the way to Chris from Roswell just to see the pictures.

While in Phoenix in November I went to Linda (another first-name-only dealer) BMW so my ego could drive the car that my id had already bought. It took about 15 seconds for my tiny mental parts to agree that they would like for me to own this machine.

I have bought 21 cars for my own or Angelic's use and at least another dozen for friends and my employer. I've enjoyed squeezing car salesmen down to the last nickel of dealer mark-up and then walking out when they refused to give me full retail for my trade, but that gets tiresome after a while. My objective this time wasn't to buy the car for the lowest possible price, but rather to buy the car in an unusual way. In fact, I wasn't sure that a discount was available at all, based on reports in *AUTOWEEK* and *ROAD & TRACK* (and BMW advertising) that the 533i was going to be in short supply.

My approach was to try car shopping the way my clients at work now shop for professional engineering services—competitive bidding. I took my list of dealers (in the “BMW Service” glove box booklet) to a dull meeting and circled all the dealerships I had been to or thought I might enjoy travelling to. I chose 111 of the 375 American dealerships.

I wrote a form letter describing exactly what I wanted and,



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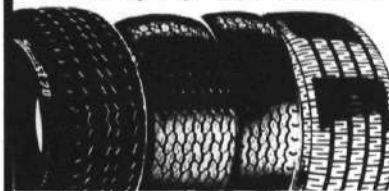
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since the word processor was gone by then, photocopied, hand addressed and mailed out 111 invitations to offer me a bargain price on the car of my choice.

The response caught me by surprise. Within ten days I had 37 offers from dealers with my car in stock. The prices ranged from 6% over list plus transportation to 13% under list and free delivery in Atlanta. That's a spread of \$6200!

The low price was from Don Cross, BMW Sales Manager at David R. McGeorge Car Company in Richmond, Virginia. It would have been a simple matter to call Don and arrange delivery, but during the response period I had decided that only black would do, not black or white as I had specified. The low bid was for a white car so I called him to tell him I had changed my mind. Don told me he could get a black car from another dealer for the same price and "Not only just that, but next Tuesday is the southern region BMW Sales Managers' day at Road Atlanta in the 318i, so I'll drive your car to you at your office."

Altogether this was quite an interesting experience in which all the players were winners. I bought a "rare" car for \$1.25 less than the European Delivery price, a sales manager in Virginia made a sale and a profit he wouldn't have made, a dealer in Florida unloaded a car he couldn't sell. I don't know what I'll do next time. Does anyone have any ideas?

Bill Moxley  
Peachtree Pit

## Radar Detectors and Smokey

Recently, I have experienced close encounters with the state police in various states. In all cases my radar detector has saved me from supporting the state police. But what about those 'bears in the air' and the old style of speed detection such as 'VASCAR'. In these last two situations you must rely on your 20/20 eyesight, which in many instances can fool you.

I was one of those fooled. In February, I was cruising the beltway at around Interstate 95 on the Maryland side when I noticed a peculiar sight about ¼ to ½ mile ahead of me. Not knowing what it was, I slowed down. As I got closer I identified the target (and so did he): it was Mr. Smokey himself.

I began to get very upset, because my detector had not warned me of the situation. After being flagged to stop, the officer informed that he had clocked me by VASCAR at a speed of 79.4 mph. I looked at him in a daze. Noticing how confused I was, he invited me to his cruiser to show me how the system worked.

As he was showing me, I kept saying that I was speeding but that I was not doing 79.4 mph. During the course of instruction, he asked me questions about my car. He looked very interested in the car. (She is very sexy and has a great figure.) I continued to insist that I was not doing the speed his little device told him I was. Finally he told me that he was giving me a warning and that if I say one more word he would give me a ticket. Well that was it. I sat down quietly and not a word came out other than thank you and have a good day.

For those of you who are not familiar with 'VASCAR' I will try to explain. The officer looks out for a good location where he would have a clear view of the traffic. He then measures a distance between two points and enters the data into the VASCAR device in his cruiser. He then waits for his prey.

As he sees a car go past marker 1, he flips a switch. As the car crosses marker 2, he flips the switch back and gets a reading on the average speed between the two points. He then gets out of his car, stands in front of your path and flags

you down. If he has other friends ahead, he will radio the description of your car and they will flag you down.

The moral of this story is that, even though you may own the best detector in the market, don't take for granted that you are safe from detection.

My warning ticket at 79.4 mph? I owe it to my mistress whom I love very much.

Beware of the Bear  
Max Rodriguez

## Club Store

With spring just around the corner the club store is conducting a clearance sale on all items in stock. Everything is on sale at below cost.

	COST	SALE
Purolator 201 oil filter for 4 cyl.	\$ 2.25	3/ 6.00
6 cyl. oil filters (not 528e)	2.50	3/ 7.00
Sparkplugs all (not WR9DS or WR9LS)	1.00	4/ 3.60
		6/ 5.40
Points 320i, 530i, 630i (Bosch 108)	1.95	2/ 3.60
1969-72 6 Cyl + 73tii (Bosch 044)	1.25	2/ 2.20
74tii (Bosch 082)	2.45	2/ 4.40
2002 (75-76), 320i 1978 on (Bosch 119)	4.00	2/ 7.50
Air Filter all 4 & 6 cyl carb.	3.20	2/ 6.00
2002 1972-76	5.50	1/10.00
2002tii	4.00	2/ 7.50
320i 1977-80	7.00	2/12.50
All models 1981 on	10.00	2/17.00
530i (75-76)	6.50	2/11.00
All 6 cyl. 1977-80	10.00	2/17.00
Fuel Filter all carb., tii, 530i	4.50	2/ 8.00
All 6 cyl. 1979 on	14.00	2/23.00
320i 1977-78	9.00	2/15.50
320i 1979 on	16.00	2/24.50

In addition to all of this we have other accessories such as:

Air Horns, Regular \$39.99 Sale Make Offer  
320i Locking Gas Caps \$4.50 Sale Make Offer  
Remote Radar Detector Retails for \$180.00  
Club Price \$99.99

Make offer. Only two left.

Schrick 304 Six Cyl. Camshaft regular \$409.00,  
Sale \$320.00

These are just a few items.

If you want to take advantage of these prices give me a call.  
Max

## Heartbreak!

You're looking at a crumpled mass of sheet metal, aluminum, plastic, and glass. Your BMW has been in an accident. Attempting to locate an acceptable repair shop has always been traumatic, but if you own a BMW it's comparable to a major coronary.

In the Washington Metro area, there are approximately 250 independent body shops listed in the Maryland yellow pages alone. If you include dealerships, there are almost 1,000 shops total in the Metro D.C., Virginia, and outlying area. Here are some pointers to help you find a reputable shop.

The first place to start is to survey the damage and notify your insurance company. Minor damage is, of course, easier

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and any quality shop familiar with BMW can make a competent repair. A major collision involving frame and mechanical repairs will need to be taken to a specialty shop equipped to make major repairs. Therefore, a shop that has a bench system to properly align the body, and MIG welding equipment to install the panels as close to factory spec's as possible, is preferred. The cost of using this equipment is expensive as the fixture requires rental in most cases. The set up charge for various models runs from \$150 to \$1,000 before you get to the actual repair times involved. The shop that can spend some time explaining how the repair is to be completed will give you some idea of what type of repair will be done. The bottom line is the finished product. The paint should be the same type as the manufacturer uses but, bear in mind, exact factory duplication is almost impossible. Most reputable shops that use factory type paint do not have the same paint facility as the manufacturer, who has invested hundreds of thousands of dollars for the paint facility alone and can paint bare auto bodies dust free.

Work with the repair people who will inform you how the vehicle is to be repaired, will show off some of their work, and will discuss how they will go about doing the repairs. Happy Hunting.

*Jack Weisman  
VOB AUTO BODY*

*About the Author . . .*

*Jack Weisman has over 25 years of experience in the body business as a mechanic, manager and appraiser. With VOB since 1969, Mr. Weisman has also owned an appraisal company and served as a fraud investigator for one of the country's largest insurance carriers.*

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# CHAPTER DRIVING SCHOOL APPLICATION

**WELCOME FIRST TIMERS:** Everyone is invited to the driving school as a driver, passenger, observer, or eater.

**CORNER WORKERS NEEDED:** Come spend a beautiful May weekend and observe the driving school first hand. No experience necessary.

**WHERE:** Summit Point Raceway, Summit Point, West Virginia (Only 1 hour from DC).

**WHEN:** Saturday, May 12 and Sunday, May 13, 1984, 7:30 a.m.

**HOW MUCH:** \$60.00 per driver, per day.

Indicate number of drivers sharing same BMW.  
If two, one will be in Novice, the other in Experienced Driver Group.

Please Check:

\_\_\_\_\_ Saturday driving school—\$60 per driver      1 \_\_\_\_\_ 2 \_\_\_\_\_

\_\_\_\_\_ Sunday driving school—\$60 per driver      1 \_\_\_\_\_ 2 \_\_\_\_\_

\_\_\_\_\_ Complete sumptuous steak dinner including beer, wine & soda—only \$8.00

Number of people in party \_\_\_\_\_ × \$8.00 = dinner amount enclosed

Name: 1 \_\_\_\_\_ Age \_\_\_\_\_ Club \_\_\_\_\_

Name: 2 \_\_\_\_\_ Age \_\_\_\_\_ Club \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ ZIP \_\_\_\_\_

BMW Model \_\_\_\_\_ Color \_\_\_\_\_ Year \_\_\_\_\_

Modifications \_\_\_\_\_

Number of previous driving schools: 1st Driver \_\_\_\_\_ 2nd Driver \_\_\_\_\_

Membership Numbers: 1 \_\_\_\_\_ 2 \_\_\_\_\_

Phones: Home \_\_\_\_\_ Work \_\_\_\_\_

Make check payable to: NATIONAL CAPITAL CHAPTER

Mail check to: MICHAEL D. KENSLER, 3306 Graham Road, Falls Church, VA 22042

Questions to: GORDEN KIMPEL, (703)-790-8008 (work) or RICK FOSTER, (301)-788-6253 (home)

## -----IMPORTANT-----

**HELPERS URGENTLY NEEDED:** Preference will be given to drivers who bring workers their day of driving. Workers need to be at the track by 8:15 a.m. I am bringing the following people to work:

1 \_\_\_\_\_ 3 \_\_\_\_\_

2 \_\_\_\_\_ 4 \_\_\_\_\_

**PLEASE NOTE:** A self-addressed envelope with \$.37 postage (or more) **must** accompany your check and application so you can be mailed your tech sheet. No SASE, no drive! This information packet will confirm your registration or place on the waiting list. Maximum of 45 drivers each day.

## Pop Tops!!!

I've had several inquiries from club members about the pop-up sunroof I had installed in my '74, 2002. At the time I didn't have much information to pass along, so I rummaged through my archives and compiled this article.

The sunroof is manufactured by Car and Concepts, Inc., 12500 Grand Ave, Brighton, MI 48116. The only shop in the metro area that carries this is Paymer and Phillips, 8527 Georgia Ave., Silver Spring, MD. Their telephone number is 588-3737.

This sunroof is different than most. The opening is 19" by 31", it has two open positions and pops out. The sunroof's matte black frame is as thin as a dime and is only 1/2" wide. Inside the frame there are drain tubes that run down the front pillars into the engine compartment. There's no ugly hardware protruding from the glass, which remains flush with the roof line to give it a factory appearance. I have seen a lot of sunroofs that appear to sit on the roof like a camper top.

I talked to the folks at Paymer and Phillips late last fall, and they told me that an installation, because of drain tubes, would take a full day. They sell other styles of sunroofs, but they seem to favor this model. The cost installed is \$395.00, which isn't too bad considering the "camper top" style that I've priced start at \$225.00. If you are interested in a sliding glass or metal sunroof, manual or power sunroof, I've been told that there are shops in the area that can install one for about \$1300-\$1400. What better way to spend your tax refund and get ready for spring?

*John Fowler*



## Bimmer Care

During the past few months, I have learned quite a lot from people such as Lother from VOB, Terry and Neil and the rest of the gang at Quality Car Service, Tom from London Auto Service, Gary Smith and Bill Loftin at club events such as the driving schools, attending the tech sessions, and reading the Roundel, Popular Mechanics, Autoweek plus other periodicals and, last but not least, our own newsletter.

Needless to say, all I have learned has been most useful in maintaining my car in excellent condition. I try to perform all mechanical work myself, leaving those items I can not perform to the experts.

My latest accomplishment was to replace the front rotors as well as the pads and bearings. At first, I was hesitant but after realizing the amount of money I was going to save, I got the courage and began to tackle the task.

The first thing I did was to consult my shop manual. Second was to refer to Stan Sims column in the Roundel called 'Shade Tree Topics'. Third was to gather all parts and tools needed for the job.

Rather than rewrite what Stan Sims has written, I will just outline the trouble spots and how to make it easier.

Follow your shop manual and Stan Sims instructions carefully (Roundel October and November issues).

To remove the rotors from the hub, you will require an 8mm hex wrench. Your rotor is held to the hub by 5 hex bolts. (6 cylinder models, refer to shop manual). Don't kill yourself by using the hex wrench which you turn to by hand. Go to Sears and buy yourself a 1/4 inch socket with an 8mm hex head. If not available get a 1/4 inch with a 5/16 head.

Work on only one side at the time, but remove the other wheel so you can use the assembled rotor and caliper as a guide.

Keep all the bolts and nuts in a container, so you don't lose anything.



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I heard about BMWCCA from: \_\_\_\_\_

Your check made payable to BMWCCA must accompany this application

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## CHANGE OF ADDRESS

Please send this form and your old mailing label to:  
Bill Ross, NCC  
P.O. Box 685, Arlington, VA 22216

NAME \_\_\_\_\_

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CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP \_\_\_\_\_

## WORDS OF WISDOM

Don't be intimidated by the type of work. It is very easy. Of course as Stan Sims states, the first side will take you longer than the second.

All in all, the whole process took four hours and that included half-an-hour to go to Sears and buy the socket hex wrench. (2½ for the right and 1 for the left).

For those of you who are planning to participate in our driving school, make sure that you begin to prepare your baby for this event. Get your brakes, suspension, steering and other areas of importance reviewed by your mechanic, in order to have a good and safe driving event.

Good luck and if you need help, let me know.

*Max Rodriguez*

## MARKETPLACE

**WANTED:** Set of 4 factory alloy wheels for 1974 2002 tii. Must be in perfect condition.

Michael Diandrea, 7085 Leestone St.

Springfield, VA 22151

Eves. (703)-354-1949

**WANTED:** Highly experienced and motivated BMW mechanic with tools for busy Rockville Shop.

Potomac Motor Works

340-8688 Paul

**FOR SALE:** Factory steering wheel for 5, 6, or 7 series BMW \$60. 4 factory steel wheels 6x14" in excellent condition with chrome trim rings and Michelin XVS 195/70 HR 14's included. \$160. Jerry Rich W (703) 560-0312, H (703) 250-2733

**HELP WANTED:** Parts driver, shop helper and cleanup person at Autooy and AutoWerke. Contact Dave Toy 468-4850.

**WANTED:** Sales person/manager to take charge of rapidly growing auto boutique specializing in BMW and Porsche accessories in Rockville, Maryland.

The Drivers Store

881-2230 or 774-9442

**WANTED:** The names of firms other than advertisers in this newsletter who offer club discounts. Object future article on discounts. Contact Bill Ross days 382-4642, evenings 654-7987

**WANTED:** 2000CS parts, especially front sheetmetal (nose panel); early tii cylinder head (121 ti with 46mm intake valves). Also looking for CS parts/parts cars, any year, 4 or 6 cyl. Bill Riblett (703) 671-2609 home, (202) 389-3075 office

**FOR SALE:** '71 2800CS—restoration project, has typical CS rust, but also has installed 3,500 mi. '79 528 engine/4 spd transmission. Car is white, has blue vinyl interior, A/C, P/W, original alloys, and KYB shocks. Asking pretty firm \$4,000, or might part out. Bill Riblett (703) 671-2609 home, (202) 389-3075 office

**FOR SALE:** 2002 sheet metal and other parts, 528i complete exhaust system (3,500 mi.) \$200, injectors \$20 ea., Bavaria glass, 2500/2800 engine parts, etc. Bill Riblett (703) 671-2609 home, (202) 389-3075 office

**PARTS & SUPPLIES:** Recaro Seats, Now more affordable, very much at home in your BMW and also in your office. Brochures and special discounts to club members. Sensible seating. 4308 Montgomery Ave. Bethesda, MD 20814. (301) 652-7788



# ATTENTION: TECHNICIANS

Heishman BMW, one of the foremost BMW dealerships in the United States, has expanded its service facilities again. This expansion has created immediate full time employment opportunities for several exceptional BMW technicians

Heishman BMW's service reputation is without equal. Our team of professional BMW technicians thrives on the highly - charged, productive atmosphere of our service facility and they enjoy the benefits of steady, year 'round work.

If you are a highly qualified, trained BMW technician, call Mr. Strother at (703) 684 - 8500 for more information on a career as a technician with

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# LATE NEWS...

NATIONAL CAPITAL CHAPTER



has arranged with

ANTON BMW

for a showing of  
the new 325e



Date: April 7, 1984

Time: 11:00 a.m. to 4:00 p.m.

Place: Anton BMW

9010 Liberia Ave.

Manassas, Virginia

Several 325e's will be available  
for you to inspect and test drive.

A buffet will be provided.

Directions: From the Beltway take I-66 west to  
Route 28 south, 6.0 miles to Liberia Ave.

Left on Liberia Ave., approximately 50 yards  
to Anton BMW on the right.

Reservation requested: call John Fowler, Club Ambassador to  
Anton BMW, 703-368-7315 after 7:00 p.m.



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