

# SIGNAL SEEKER

Quarterly Newsletter of the Mid-Atlantic Chapter, National Corvette Restorers Society



Winter 2011

Volume 29 Number 4

**MAC**

# SIGNAL SEEKER

Articles about chapter events and the members present, technical subjects, and personal experiences that would be of interest to the Mid-Atlantic Chapter (MAC) membership are welcome for inclusion in the *Signal Seeker*. In addition classified advertisements may be submitted for inclusion as space permits. Email is the preferred means, but we have the ability to scan both text and pictures if you send them by mail.

## **Signal Seeker Schedule**

Issue Date	Articles Due	Publish Date
<b>Spring</b>	March 15	March 29
<b>Summer</b>	June 1	June 15
<b>Fall</b>	September 1	September 15
<b>Winter</b>	December 1	December 15

## **Business Card Advertising**

Business cards must be no larger than 2-inches by 3.5 inches. Yearly Rates; MAC members: \$20.00, non-members; \$30.00

## **Commercial Advertising**

	Full Year (4 issues)	Single Issue
<b>Full Page (8.5" x 11")</b>	\$250.00	\$65.00
<b>Half Page</b>	\$140.00	\$35.00
<b>Quarter Page</b>	\$75.00	\$20.00
<b>1/16 Page</b>	\$50.00	\$15.00

Member corvette related classified "Wanted and Parts for Sale" are free; however, they cannot be carried over to the next issue unless requested before the issue deadline.

### **Advertising requests should be sent to:**

MAC Chairman:  
K.C. Strawmyre at [suestrawmyre@embarqmail.com](mailto:suestrawmyre@embarqmail.com)

Cc: Signal Seeker editors at [jocarpenter@comcast.net](mailto:jocarpenter@comcast.net),  
or [secarpenter@comcast.net](mailto:secarpenter@comcast.net)



# 2012 MAC Board of Directors

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\* \* \*

Contact MAC Chairman,  
**K.C. Strawmyre**  
at  
[suestrawmyre@embarqmail.com](mailto:suestrawmyre@embarqmail.com)  
for more information

\* \* \*



## MAC Membership

Reid Newcomb

### Welcome New Members

For detailed contact information on new members, please email Reid at [newcomb.reid@comcast.net](mailto:newcomb.reid@comcast.net)

**Lawrence Halley**  
Chesterfield, VA

**Vito Serror**  
Virginia Beach, VA

**Ellen Strawmyre**  
Newburg, PA

We at MAC take great pride in welcoming our new members. Our chapter has been growing and striving to meet new challenges since 1982. Our members come from a variety of backgrounds, some with expertise on restorations, some with knowledge of Corvette history and some who just enjoy taking an occasional drive on a Sunday afternoon. Whatever your interests may be, please take some time to mark your calendar with our upcoming events and activities. As always, we look forward to seeing you and your family attending MAC events (your car or cars to be included of course). Should you have any membership questions, please call Reid Newcomb at (410) 726-2045, email [newcomb.reid@comcast.net](mailto:newcomb.reid@comcast.net) or contact any MAC officer.

### Changes to the way you receive *Signal Seeker* in 2012

To cut rising production and distribution costs and be more in line with other NCRS chapters, we have eliminated the option to receive a printed version of the newsletter on the membership form. Beginning in 2012, *Signal Seeker* will be distributed to members via e-mail. If you are a member without e-mail, please contact Ron Wilson and he will send you a printed copy. The resulting savings will be shared with the membership through various means now under consideration.

# 2012 MAC Schedule of Events

<b>Jan 25 - 28</b>	<b>34th Annual Winter Regional</b> Kissimmee, FL
<b>Mar 8 - 10</b>	<b>Arizona Regional I</b> Old Town Tucson, AZ
<b>Mar 24</b>	<b>Charity Tech Session and Judging School</b> Shippensburg, PA K.C. Strawmyre
<b>Apr 14</b>	<b>Klick Lewis Chevrolet Tech Session and Judging School</b> Palmyra, PA
<b>Apr 21 - 22</b>	Hampton, VA
<b>May 3 - 5</b>	<b>Northwest Regional</b> Seaside, OR
<b>May 12</b>	<b>Chapter Meet</b> Hampton, VA
<b>June 7 - 9</b>	<b>North Central Regional</b> Rochester, MN
<b>June 23</b>	<b>ZIP Tech Session and Judging School</b> Richmond, VA
<b>June 30 - July 4</b>	<b>NCRS National Convention</b> San Diego, CA
<b>Aug 24 - 26</b>	<b>Corvettes at Carlisle</b> Carlisle, PA
<b>Aug 25</b>	<b>10th Annual Picnic</b> Shippensburg, PA K.C. and Sue Strawmyre (717-423-6735) Mike and Connie Hair (717-263-0792)
<b>Sept 6 - 8</b>	<b>Pennsylvania Regional</b> Altoona, PA
<b>Sept TBD</b>	<b>Air &amp; Space Museum Udvar-Hazy Restoration Facility</b>
<b>Oct 18 - 20</b>	<b>Texas Regional</b> Frisco, TX
<b>October 27</b>	<b>Fall Annual Meeting and Road Tour</b> Hampton, VA
<b>Dec TBD</b>	<b>Holiday Party</b>



## Chairman's Message

K.C. Strawmyre

**H**ello and I hope everyone is enjoying the season. We have had a great year for our Mid-Atlantic chapter. I would like to thank all the members that came to the Annual Meeting and Tech Session in Front Royal, VA. We had a good turnout for the tech sessions at Jack Evans Chevrolet. Thanks to Bill Sangrey and Duane Ravenburg for the Coke can presentation, Jeremy Turner for his windshield and door glass session and Bill Sangrey for giving us information on the NCRS archives. And, as always, thanks to Jack Evans Chevrolet for providing those great subs again this year. I would like to thank Bill Herbaugh for arranging the event. I think we all had a good time and it was great to have so many members in attendance. I would also like to thank Bill for conducting the meeting in my absence, as I had a prior commitment for the afternoon and evening part of the day. Thanks to all of the out-going officers and welcome to the new ones.

The western region hosted a Christmas party at the Bedford Springs Resort. Thanks go to Ron Wilson for making all the arrangements. We had a great time and great food. The facility was beautiful, all decorated for Christmas.

As we proceed in preparing for the 2013 National Convention, we will need lots of input and help exploring the Hampton Roads area and choosing the events for participants. We will have more on this subject throughout the year; please contact John Yglesias if you would like to be involved in the tour selection process.

Please remember to renew your dues; the form is in this issue, all our members are important.

In closing I would like to thank everyone who has helped in all our events this year. We had a great year of activities and a lot of fun along the way. I hope 2012 will be just as good maybe even better. Please try to become involved in our events. I would love to see all of you. Merry Christmas and Happy New Year!



### Mid-Atlantic Chapter

mourns the passing of these members in 2011:

**Evelyn Maxwell**

(wife of Tom Maxwell)  
Gaithersburg, MD

**Harold Ralston**

Springfield, VA

**Bill Thompson**

Linthicum, MD

## How to Get Published

You don't have to create a novel. An article for *Signal Seeker* is all it takes.

A short paragraph for "tech tips" or a "did you know?" blurb works great. Few subjects are taboo. Have you found a great road to ride or have you discovered what *not* to do when working on your restoration? Feel free to send us a small article about a small project or a large article about a large project or even a large article about a small project! Pictures are always welcome with those stories. If you haven't got the time or desire to write an article, send us an outline. We'll write the story and send it to you for your review and blessing. And you get the byline and the credit! Remember, another MAC member is facing an issue like you did and your help will be appreciated more than you can imagine.

Your *Signal Seeker*  
Editors,  
John and Sue Carpenter





## Editor's Note

John Carpenter

As 2011 draws to a close I'm happy to say it's been a great year for MAC. We enjoyed many technical sessions and judging schools, a great picnic or two, fun dinners and many smiles and fun conversations with friends. **Corvettes at Carlisle** was well represented by NCRS and actually gave me some much-needed enthusiasm to get back on my '66 restoration. It is important to never forget and always appreciate the MAC members and sponsors who are willing to step up and host an event for us. If you've never done it give it a try. It's lots of work but most rewarding, not to mention how much you can learn. As co-editor of your newsletter I am always most appreciative of all the MAC members who contribute technical articles, stories of interest and experience, photos and *feedback*. Yes, *feedback* is emphasized because the primary way we can improve *Signal Seeker* is through your suggestions, recommendations and corrections. Thanks to you, MAC members, *Signal Seeker* is worth reading.

In an effort to efficiently use your MAC dues, and after performing in-depth research, the MAC Board of Directors

has voted to make changes to the way you will receive *Signal Seeker* in 2012. Printing and distribution costs have risen consistently every year; MAC is now spending over \$3000 every year to provide you a printed copy. The U.S. Post Office plans to raise postage rates again which will further increase costs. To cut rising production costs and be more in line with other NCRS chapters, we have eliminated the option on the membership form to receive a printed version of the newsletter. Beginning in 2012, *Signal Seeker* will be distributed to members via e-mail. If you are a member without e-mail, please contact Ron Wilson and he will send you a printed copy. The resulting savings will be shared with the membership through various means now under consideration.

I've enjoyed being your editor for the past two years and hope, as we look forward to hosting the NCRS National Convention in 2013 in Hampton Roads, VA, that many of you will be happy to raise your hand to volunteer. Only through the participation of all MAC members can we have a Best-in-Class event. I wish you the best in 2012.



## NCM Ambassador Report

Dick Schmid

So much has been happening at the National Corvette Museum it's hard to know where to begin, but probably the biggest event was in honor of our military heroes. Veterans from all over the U.S. came to the home of America's sports car for the **2011 Vets 'n Vettes** event. Wounded warriors were brought from Fort Knox for some fast fun, while we celebrated the freedoms paid for by these brave young men and women.

The National Corvette Museum was one of the check points for the Chevrolet-sponsored **2011 Fireball Run**. This rally supports efforts to locate the thousands of children who go

missing every year. The Museum has for some time now been sponsoring the **Museum in Motion**, bringing events to different areas of the country. The most recent one was started in California on the Pacific Coast Highway for the R8C (museum delivery) group. This is well covered in *America's Sports Car*, the Museum magazine with some great pictures. Additional information and pictures are available using your smart phone to scan the QR code. This recently-added feature adds a new dimension to the magazine.

The **NCM Motorsports Park** is doing "due diligence" on the 114 acres they are seeking to acquire. The Phase I environmental assessment, traffic study, and wetlands determination were to be completed by November 30. The goal is to request rezoning with a public hearing and close on the parcel by April 1st, 2012. Many clubs are buying full or part acres. Already 38.25 acres have been sold.

Naomi and I hope that all of you had a Merry Christmas and will have a Happy New Year.

# A Fine First-time Judging Experience

by Steve Snyder

It was back in August of this year during the Strawmyre's annual Valley Pride picnic when Bob and Martha Baird, along with Jim Hofferbert, asked me to enter my 1966 Corvette in the upcoming chapter meet in Hampton Virginia. I never had the experience of having a car flight judged and the thought of having this car judged in its present state never even crossed my mind, it wasn't a restored car and I had a long list of things I wanted to do to it before I would have even considered entering it in a meet. Prior to 2009 this car had sat dormant for over 30 years and had only been driven on small trips close to home. I had gone over the entire car mechanically before putting it back on the road, but still the 400 mile one-way trip seemed risky. They all made their sales pitch that night and after a few days of thinking it over I decided to make an effort to take the car. I scrambled to take care of some last minute maintenance preparations, ordered some parts, and checked the car over mechanically one more time.

The weekend of the meet approached and so did a troublesome-looking weather pattern moving up the coast thanks to Tropical Storm Lee. Later that week our area got hit very hard with flooding. Thursday morning we were literally trapped at home without electricity. With a tree and power lines across the road in one direction and flooding every other possible way out, things did

not look good for making it to Hampton! That non-refundable room rate wasn't looking like such a good idea now either! Later that evening I was relieved to find that there was a crew working on my downed power lines. There may be hope after all!

By Friday morning power was back on and the route to the interstate was reopened, so it looked like we were cleared for takeoff. After loading the car up with essentials, my wife Marie and I were ready to go. We hit a few storms on the way and even came across another midyear coupe traveling along the interstate, and here I thought I was the only nut driving one in such poor weather! Admittedly I was apprehensive about the drive, but a few hours into it my confidence was building, the car was performing well, the weather was looking better, and we had some great scenery traveling along Virginia Route 17. I was even pleasantly surprised after a few fuel stops to find that the car was averaging about 16 mpg. Much better than what I thought the old big block would do! We arrived at the hotel Friday evening, met with and spent the rest of the evening with some great fellow MAC members and then called it a day.

Saturday morning we started out with a nice breakfast at the hotel before the owners meeting, followed by the judges meeting. Being this was the first time I



Above: Steve and his wife, Marie, run through a few storms on the way to Hampton, VA., encountering another midyear coupe traveling along the interstate: another "nut" driving one in such poor weather!



Left and above: Saturday dawns bright and clear. As both Judge and "Judgee," Steve jumps between evaluating others' cars and talking with the teams working on his car.

entered a car into flight judging and also the first time I participated as a judge, I had much to learn. The process went very well. The judges scoring my car were all very courteous, knowledgeable and helpful, and I had many positive comments on the car. As the day moved on I jumped between judging and talking with the teams working on my car. In judging I had the pleasure of being teamed with seasoned veteran Mike McCagh, who is a wealth of knowledge. If only I knew half of what Mike forgot over the years! After judging we had a tour of the Convention Center, which I'm sure by now most everyone is aware will be the home of the 2013 National and looks to be an excellent choice. Later on we had the awards presentation and no one was more surprised than I was to hear them call my name for a second flight award! I never imagined the car would do as well as it did! It was a good day for sure.

Sunday morning soon arrived and we were packed up

and prepared for our chapter road tour, we were soon on our way and had a nice route to take with stops at a few historical points of interest. We had a nice lunch in historic Williamsburg and then decided it was in our best interest to break off and head home. There was a long drive ahead of us and we both had to work the following day, so we said our goodbyes and headed north.

The trip home again went without a hitch, we got caught in a few storms but all in all I loved the drive. Once safe and sound at home I recalled the events of the weekend and how great of an experience it was, and also how glad I was that Bob, Martha and Jim talked me into doing it. So if you are reading this and have a car you thought wasn't a candidate for flight judging, you just might want to reconsider and bring it out to a chapter meet. It's likely you will learn some things you didn't know about your car and you just may be surprised to find it does better than you thought!



**Above: A view of the Chapter Road Tour over the dashboard.**

**Below: A surprised and happy Steve poses in front of the Hampton Roads Convention Center with his Second-Flight award-winning '66 coupe.**



# A Better Air Compressor Hose

by Ron Dill

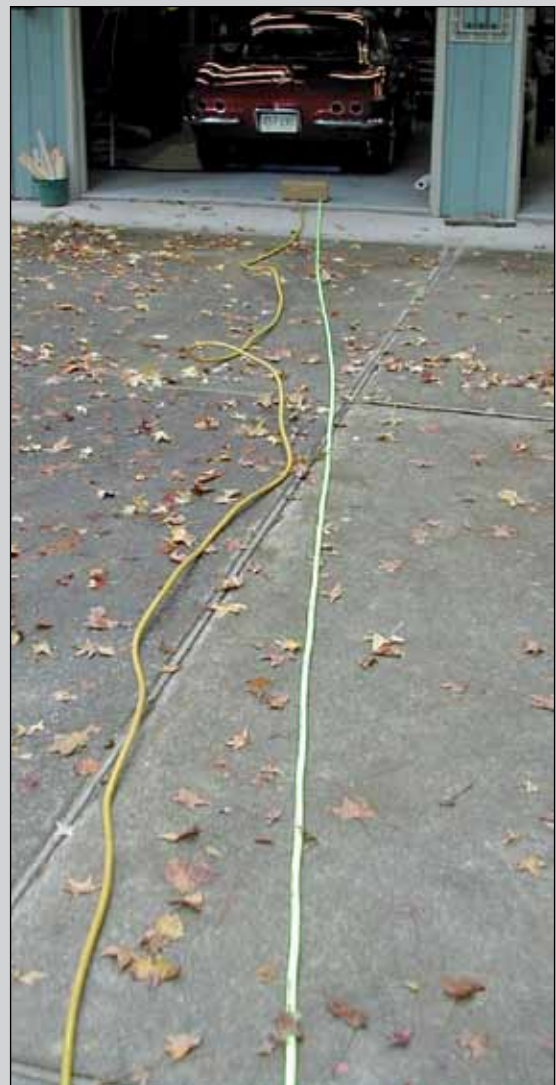
When I installed my air compressor I bought some PVC-based air hose. It worked fine and was cheap – but I was never happy with it. The stuff had a serious memory problem: whenever I rolled it out I'd have kinks and coils all over the place. I knew there had to be a better product. I noticed that the construction workers building the addition on my house had some long green hoses for their nail guns. These hoses laid flat on the floor and it took about 10 seconds to roll them out or roll them up. I thought these were really nice and decided to see where to get them. (Most of these guys speak Spanish so I was waiting for the appropriate time to find an English speaker.) Then I discovered a nice article in

*Wood Magazine* about compressors with a discussion about air hoses. Lo, and behold, their favorite and recommended hose was the same green ones that my builders were using.

The hose is made by Legacy and is called Flexzilla. I ordered a 50' and a 25' hose from Amazon.com (shipped free, of course). The product name and product number is: Legacy Manufacturing, HFZ3825YW2 Flexzilla 3/8" x 25' Zillagreen Air Hose with 1/4" MNPT Ends and Bend Restrictors. I'm looking forward to replacing my old PVC hoses with these new ones.



The Legacy Flexzilla air hose has extreme all-weather flexibility from -40° to 150°F and comes with a 2-year warranty. Right: A side-by-side comparison shows the Flexzilla, on right, with its kinky counterpart.



# Two Stories of Investigation

by Bill Sangrey

1

## *It's déjà vu, all over again...*

I was recently asked to inspect a '66 convertible. There was no engine in the car – or a transmission for that matter. The owner said he wanted to put the automatic back in with a “restoration” 327. He wanted a nice driver to enjoy with his wife. Now, before I get fully into the story, just let me tell you this is actually a case of déjà vu. Steve Ferry can confirm this. More on that later but first more of this story.

The owner and I agreed to meet at the car storage location for the primered '66 convertible. It looked like it had a black interior—well worn black leather no less—and both tops to boot. The owner said “It has a 6200 RPM tach. And I said to myself “whoa!” and went around to the driver's side to investigate. He was partially right: 6200 was where the *yellow* started but with a 6500 RPM redline. We needed to look further. Close inspection showed the small block hood to be a replacement after market hood with a big block core support. I should mention that a 400 small block that came out of the car and the radiator was not there. The owner likes Corvettes (has 3) but really does not know them very well—that's why he wanted me to look at the '66. He did not know what radiator he had at home—big or small block. I expected we'd find it was for a big block.

Looking under the car I saw a small block rear—“U” bolts not caps at the differential stub axles. But there was the rear sway bar (really an anti-roll bar) that only came on 427 cars. It looked like a 9-leave rear spring but frankly I did not crawl under the car to count it. The front sway (anti-roll) bar looked to be the standard bar—not the 15/16th F41 bar that came only on about half of the 425 HP 427s. I figured I'd check those items more carefully when I had the car at my place.

I looked for but did not see the TI wiring harness clip often under the left (driver's) side hood latch—TI having been standard with the 425 HP engine. There is a possibility that not all 425 HPs had that clip. I also failed to check for the TI amplifier mounting holes on the left front inner fender but I suspect that evidence might be gone since there had been some serious accident damage repair.

The owner said the car had those big open “hooker” style side pipe on it when he bought it a few years ago. He removed them with the engine. Feeling along the exposed edge of the birdcage rocker I found the slots cut by the factory to clear the side pipe cover and rocker molding screws. There were no rocker molding hangers—not even ones that had been cut off. A quick look at the Trim tag showed the car to be a St. Louis-built body (“S” preceding the “BODY” number). I also saw “TRIM 402AA” and “PAINT 900AA.”

So there it is: a black/black, leather, two top, side pipe 425 HP '66 convertible. What more could you want in a '66?


And what about that “déjà vu” comment? I remember sitting on the door sill of Steve Ferry's yellow '66 small block coupe (his first one) and noticing that the tach was a 6500 RPM red line. That observation and further investigation led to the conclusion that Steve's car was a 425 HP car and that fact drastically altered his restoration plans, which may happen with a certain black/black convertible.

2

## *Put it away hot for the winter and leave it alone*

*First a comment: Much of the following relates to the care of older collector cars such as my '63 coupe. But many of the comments and much of the advice also applies to our newer cars that are not driven during the winter months such as my '03 Z06.*

I am one who does the following: In late fall, I change the oil, drive the car until it is thoroughly and completely warmed up. Then I put it away for the winter. I do not start it up during storage. I keep a battery tender on it. In the Spring I get it out. Otherwise the car just sits. I started doing this when we lived in Ohio where you simply do not drive the Vette between early November



and late April. This has been my approach for 30+ years with no trouble. (The Columbus weather forecast on November 1st was typically: “Clear this morning, turning cloudy this afternoon, some precipitation tonight, snow accumulating tomorrow. Clearing April 1st.”)

Recently I was discussing oil changes and winter storage with some friends in another car club—a Ford product of which lots have been replicated. Many of those owners drive as we do; driving perhaps 3000-5000 or fewer miles every year. My questions concerned oil change interval, timing of those changes relative to the storage periods and the types of oils—regular or synthetic? The latter area concerns the older cars since Corvettes have come from the factory with Mobile 1 since the mid ‘90s.

Assume a normal drive is 10-100 miles each time you take the car out; no track use. Car stored in garage; maybe heated; maybe not. What is recommended? The following advice is from Greg Guinther who offered to share his knowledge and expertise in this area with fellow auto enthusiasts.

“The limited amount of driving suggests an annual oil change interval would be sufficient, but oil breakdown can be a pretty complicated subject. In some cases 10,000 miles barely stresses the oil while in others, 3,000 miles completely breaks it down potentially affecting engine life. The factors I would consider when making a recommendation include: average trip length, fuel metering system, ambient temperature, and driving style. To be safe I would recommend changing the oil every six months, in the fall and in the spring. The one piece of info most useful for owners is when storing the car for the season, to run the engine at least 30 minutes to get the oil up to temp.

Short trips are about the worst kind of service as you accumulate a lot of moisture and fuel in the oil that never has a chance to boil off. Water and fuel combine to dilute the viscosity and promote oxidation (i.e., rust) of iron

surfaces. Lower viscosity in key areas like bearings and camshafts lobes can promote premature wear. Contaminates in the oil will also lead to rapid depletion of key additives and cause the oil to break down. In extreme cases distinct layers of water and oil can form in the sump with water being on the bottom closest to the oil pump pick-up. This means that on initial start-up the first thing the bearings will see is a slug of water. In some recent cold start-up testing using fuel containing ethanol we accumulated over 1 quart of material in the sump in 48 hours!

The type of fuel system is important because carburetors tend to over-fuel and have unequal fuel distribution throughout the cylinders, leading to fuel dilution of the engine oil. Because it’s a continuous process of fuel addition and removal there tends to be more fuel in the oil with a carburetor than with a closed-loop fuel injection system because carburetors are not as efficient with fuel metering. As mentioned earlier, fuel will readily mix with the oil which lowers the viscosity, and in the case of E10 causes water to accumulate in the oil. Ethanol loves water and will combine with the moisture that’s coming through with the blow-by.

Ambient temperature is a factor because it promotes condensation of moisture in the crankcase and extends the time necessary to warm-up the oil. In some cases it can take 30 minutes to achieve optimum oil temperature for removal of accumulated water and fuel. Very few drivers have trip lengths of over 30 minutes in normal service. The source of moisture comes from the combustion of fuel and resulting blow-by. While piston rings do a great job of sealing the combustion chamber there’s always a small amount of gas that blows past the rings and ends up in the crankcase before being evacuated by the PCV system. Studies of this gas show it to have a composition that is between 50% and 80% water with a pH of 1 or 2. Anyone who has taken a high school chemistry class will recall that a pH of 7 is considered neutral with lower numbers being more acidic. Short trips and low ambient

temperature are a one-two punch to any engine and will lead to an early demise.

Driving style is important if the car is driven hard most of the time. This will cause shear-down of the viscosity modifier, permanently reducing viscosity. The viscosity modifier is what allows the oil to be both “10W” and “30” at the same time. It is comprised mostly of rubber that can be torn apart under extreme use. Hard driving also causes the fuel system to over-fuel, leading to accumulation of fuel in the oil and further decreasing viscosity. Even sophisticated close-loop fuel injection systems that employ O2 sensors in the exhaust will over-fuel when the going gets tough. When designing a fuel system you always err on the side of being too rich since erring on the other side can lead to catastrophic engine failure by premature detonation.

Now a suggestion for a terrific new engine oil that's about to hit the market: Quaker State **Defy**. Many guys

with high-output engines have flat tappets and highly loaded valve trains. These engines have a real appetite for oils that contain large amounts of ZDDP. ZDDP is the key ingredient used to reduce wear and it works by decomposing under heat and friction to produce a sacrificial layer in the high-stress contact zone. Unfortunately the “P” in ZDDP is phosphorus and it has been shown to have a negative effect on catalytic converters, and automakers restrict the amount that can be used in modern cars because they warrant the performance of catalytic converters for the life of the vehicle. **Defy** is formulated with 50% additional ZDDP and synthetic base stocks, and is targeted for vehicles with either higher mileage or high-performance engines. It is also specially formulated to reduce oil leaks past seals and has been proven to improve compression. This oil should be available in early 2012 as was announced at the recent SEMA show in Las Vegas.”

Kind of scary.

## VIETNAM VETERANS! Did you serve in country?

**C**orvette enthusiast and Vietnam veteran Charles Bernhardt purchased his first Corvette, a brand new '68 L89 convertible, when he returned home from his first tour of duty. Knowing quite a few Vietnam veterans had also bought Corvettes while in service, he had the idea of creating a patch for them. When he posted the idea on Corvette Forum, the response was terrific. To date, he has made gifts of over 500 patches and has ordered additional quantities.

In addition to the Corvette crossed flags, this design features the Vietnam Service Medal and the Republic of Vietnam Campaign Medal which was awarded only to those service men and women who spent time “in country.”

If this describes you, email Charles at [charlie@carols62.com](mailto:charlie@carols62.com) and let him know your mailing address. Although not required, he would be interested to know what unit you served in, where in Vietnam you served and your dates of service.



Also available: static cling removable decal

# Air Conditioning System Charging— One Lesson Learned

by Duane Ravenberg

This October 5th was a milestone event for me. On that date the three-and-a-half-year restoration of my '70 GTO was finally completed when I drove it to a local shop and had the air conditioning system charged. If you are asking why I'm writing about a GTO in a Corvette publication the answer is simple. Air conditioning systems used in all GM cars during that era were virtually identical especially the components used to charge them and the issues I ran into are the same.

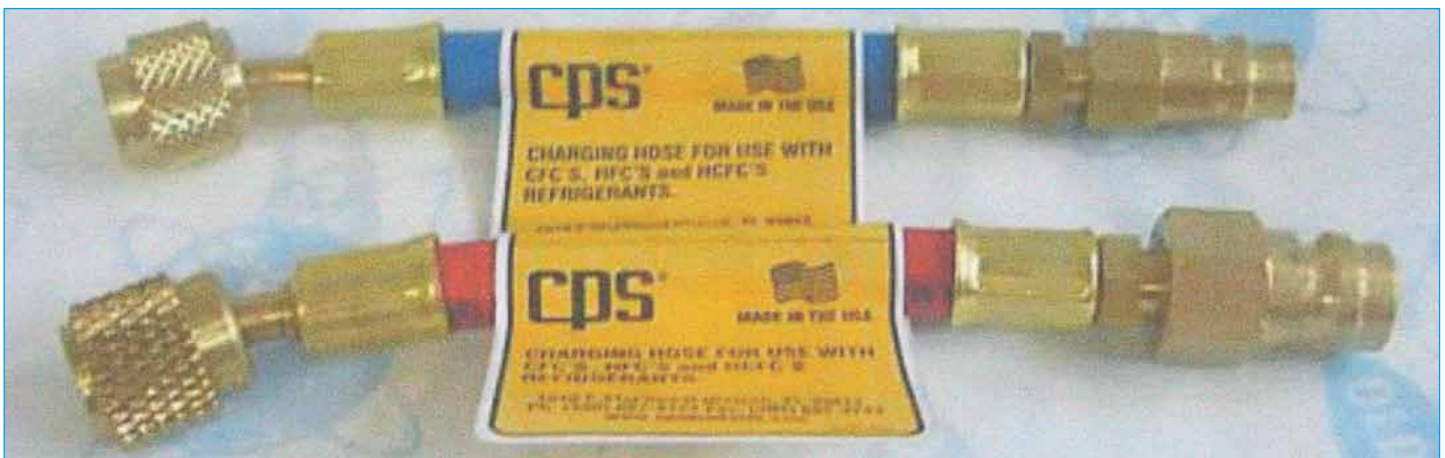
During the restoration process I decided to have the system prepared for R-134A instead of R-12 as original. (Yes, I know you can still get R-12 but it is becoming harder to get, isn't cheap and is not available at the drop of a hat.) Most of that process is not noticeable since it involves installation of different seals and re-adjusting the POA valve for the R-134A. However, Schroeder valves for R-134A systems are slightly larger than those for R-12 and are very noticeable once installed. To keep the car as original looking as possible, I chose to leave the original Schroeder valves (one in the compressor and one in the POA valve) in place and use an adaptor valve when having the system charged.

In preparing for this event I had purchased the adaptor valve long ago and took it with me to the shop. All went well in vacuuming the system and, thank goodness, no leaks were found. The adaptor valve was a perfect fit for the low pressure side Schroeder valve on the POA valve. But of course, that was when I found out that it was smaller than the high pressure side valve in the compressor. Although you can charge the system from the low pressure side, the high pressure can't be

measured which may result in too much pressure that may damage the system.

A quick delivery from the local NAPA store brought an R-134A high pressure valve for the compressor. Have you ever tried to scream "NO!" while gasping for air? Trust me it doesn't work because that's what I tried to do when the tech put in the valve. It looked as bad and out of place as putting a Ford blue oval on the air cleaner lid. The compromise was to leave the valve in temporarily, use it to charge the system with the recommended amount of R-134A while verifying that the pressure was within tolerance, drain the system entirely, reinstall the original Schroeder valve and finally charge the system on the low side using the same amount of R-134A. All that extra effort (and the 25% increased cost over a normal A/C service fee) was well worth it when the air inside the car was cold and the system under the hood looked original.

So, what to do when the system needs more R-134A to keep from going through the same long drawn out and costly process? After getting home, a short trip through eBay gave me the answer. For \$24.99 + shipping I bought a short flex hose adaptor set, shown in this picture, for both the high and low pressure sides that connect the original Schroeder valves to the fittings of the R-134A charging systems. If you look for something similar be sure to read very carefully so that you get a separate adaptor for both the high and low pressure sides and that each adaptor includes a valve release depressor that opens the original Schroeder valves at the POA valve and at the compressor.





# Great Friends and Great Cars at “The Grand Lady”

The Western Region’s 2011 Christmas Outing

by Ron Wilson



Above: The early birds hang out by the tree. From left: Ron Wilson, Sharon Wilson, Rich Brant, Linda Brant, Connie Hair and Mike Hair.

**T**wenty-two MAC Western Region Corvette folks gathered on December 8th at the Omni Bedford Springs Resort in Bedford, PA for an enjoyable evening of fun, food and friends. Ron and Sharon Wilson and Rich and Linda Brant arrived early to check out the hotel and our dining room. We were treated very graciously from the start and enjoyed great rooms with magnificent views.

The area received a few inches of snow the evening before and “The Grand Lady” (as our Friday morning tour guide referred to the hotel) was breathtakingly beautiful to say the least. The entire facility was decked out with decorations for the Christmas season. The hotel has a wonderful history dating back to the late 18th century. It is well worth a visit, just to experience the history within. The latest renovation was completed by the Omni Hotels group in 2007 and has been thriving ever since.

In the background: The long view of the Omni Bedford Springs demonstrates how she got to be named “The Grand Lady.”

Below: Ron Wilson welcomes everyone to the dinner and tells a few stories about MAC’s great 2011. Good reviews are still pouring in from attendees.





**Above: Ron and Sharon Wilson pose before the beautifully decorated Christmas tree at "The Grand Lady."**

**Right: Linda and Rich Brant enjoy the fine food and good company.**



**Above left: Connie and Mike Hair (wearing his "Grinch" tie) smile for the camera.**

**Above right: Sue Strawmyre and an antlered KC enjoy the moment. (Not shown: the Christmas boxers.)**

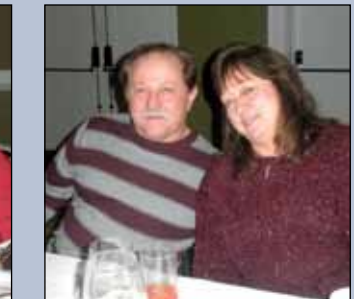
**Below left: Mike and Lea McCagh are in a holiday mood.**

**Below right: Long time NCRS/MAC members Andy and Brenda Ruby strike a pose for the photographer.**

Mike and Connie Hair were the first to arrive. Mike wore his "The Grinch That Stole Christmas" tie which was a real crowd pleaser. KC and Sue Strawmyre arrived shortly thereafter along with KC's dad Howie, daughter Ellen and son Slick. Jimmy McBride joined the party as well. KC kept his holiday attire under wraps, but when he put on his deer antlers he showed everyone his Christmas boxers, so the secret was out. Mike and Lea McCagh arrived with Andy and Brenda Ruby close behind. They brought some MAC newcomers, friends Dawn and Dave Davis, Larry and Connie Meyers and Ed and Sue Richards, who will be joining MAC in the near future.

The dinner was served in the Reagan A room named, appropriately enough, for President Ronald Reagan, as he was one of many presidents to visit "The Grand Lady" in years past. We were served a dinner like no other, a grand feast from start to finish.

Corvettes were the topic throughout the evening as most of us had some interesting stories to tell. We are all looking forward to next year as our Chapter prepares for the National in 2013. The pictures tell it all: we were having a grand time celebrating the holidays and enjoying "Great Friends and Great Cars."



**Above left: Prospective new members Dawn and Dave Davis are becoming familiar faces at our functions.**

**Above right: Having a fine evening, Larry and Connie Meyers are also possible new members.**

**Left: Ed and Sue Richards own a Cobra but the group doesn't hold that against them. They say they are buying a Corvette; time will tell!**



# Tech Session and Annual Meeting

by John Carpenter

**O**n November 18, 2011 Jack Evans Chevrolet hosted another Tech Session and Judging School in the beautiful town of Front Royal, Virginia. Jack's son, John Evans, has been a significant event contributor for many years and is always most hospitable and welcoming. The weather was great and many MAC members showed up to take in the session and attend MAC's Annual Dinner and Chapter Meeting. The day began with coffee and donuts followed by three interesting presentations.

Bill Sangrey led off with an in-depth discussion of how to judge a Coke can. He and Duane Ravenberg thoroughly explored all the situations that could be encountered in Flight Judging and how the Coke cans relate. It's a great learning tool and a fun presentation, too.

Bill is also the NCRS Archives Manager. In this capacity he discussed events involving the

disposition of NCRS archives of engineering drawings, technical service bulletins, manuals, and similar items related to C1, C2, C3, and C4 Corvette manufacturing processes. The National Corvette Museum received the first shipment of copies of original documents on September 20, 2011. NCRS has decided to keep the original documents at the Antique Automobile Club of America (AACA) museum in Hershey, PA. NCRS wants to ensure that free access is maintained for those NCRS members who need them. Bill encourages anyone who has similar documents to please let him know. He is prepared to safeguard all items provided while they are being copied and digitized for future use by all NCRS members.

MAC member Jeremy Turner followed with a demonstration of how to remove and install the various windows in early Corvettes. His



Above: Attendees gather for the first of three segments of the tech sessions at Jack Evans Chevrolet.



Above: Bill Sangrey discusses the NCRS archives of engineering drawings, technical service bulletins and manuals related to C1 through C4 Corvette manufacturing.



Right: They also serve who handle registration... from left, JoAnn Sangrey, Jane Ravenberg, LuAnn Brightbill and Diana Gray.

presentation made it very apparent that these procedures require some luck and an in-depth dose of tricks-of-the-trade, especially involving those pesky front windshield clips.

KC Strawmeyer, MAC's Chairman, gave a training session regarding judging examples for typical "Condition" and "Paint" issues that may be experienced during formal flight judging. Upon completion of the tech sessions members were treated to a great lunch sponsored by Jack Evans.

After lunch everybody met at the local Hampton Inn to view a film about the production of mid-year Corvettes. The film included many photos that many of us had not seen before, at least me. It was very interesting to see the special tools and jigs used to put the fiberglass bodies together. Noteworthy was the lack of protective breathing apparatus for

GM employees doing several hazardous tasks including sanding fiberglass and painting. Boy have things changed!

After the film we were treated to a catered dinner followed by the Annual Meeting. Minutes from 2010 were read and accepted, activities and preliminary planning for 2013 events were discussed, and a suggestion was made to go to e-mail distribution of the *Signal Seeker* newsletter however, no final decision was made. Bob Baird was elected to the position of Vice Chairman; Jim Hofferbert was elected MAC Secretary; and Ken Hartzog was elected to the Judging Chairman position. Mike Gardner was appointed the Charitable Activities board member. Other incumbent officers and appointees were retained in the same positions as 2011. Everybody departed for home on Sunday.



**Above: Jeremy Turner demonstrates how to install and remove windows on early Corvettes.**

**Right: KC Strawmyre discusses Condition and Paint issues that can be experienced during formal flight judging.**



**Above: Tech sessions hold everyone's attention.**



# Cruel Fuel by John Garnett

Here's a picture of the fuel pump assembly from our 1991 ZR1. I could not believe the fuel line damage from this great fuel blend our government is forcing on us. You can't see from the picture but we have a hole in the line so the pump is not able to give good fuel pressure. My first diagnosis was injector failure...done by seat of pants and without checking fuel rail pressure. I pulled the injectors and sent them for a flow test which turned out to be poor and uneven. I installed 16 new injectors and all new "O" rings and then checked the fuel pressure. Still, the pressure was low, so I pulled the pumps and saw one major issue: you can't pump fuel to the front when lots of it leaks out of the line in the tank. I suspect lots of folks will be having the same fun.



### A NOTE TO OUR READERS REGARDING THE TOOLBOX

The tools pictured here are available on loan from the MAC Toolbox and are for the exclusive use of MAC members. If you would like to use one of the tools for Corvette restoration and repair and are not currently a member of NCRS Mid-Atlantic Chapter, we invite you to go to <http://www.ncrsmac.org/index.htm>. Click on Join MAC and enjoy all the benefits of MAC membership.

# MAC TOOLBOX

Bob Baird / (804) 368-8465 / envcons@comcast.net

MAC owns a collection of tools and literature, primarily unique to Corvette restoration and repair, for use by members. Generally these are special use tools needed one time during a restoration/repair project. If you have any suggestions for other unique tools that would make it possible to do your restoration task yourself, let me know and I can present your suggestion to the Board of Directors.



**Engine Stand - 2ea**



**Hydraulic Engine Crane & Tilter - 2ea**



**C1 / C2 Body Lifting Jig - 2ea**



**Solid Axle Rebound Strap Riveting Tool**



**Solid Axle Rear Spring Banding Tool**



**Engine Start-Up "Dash Board" Box**



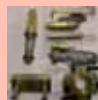
**California Screamin' NCRS Racing DVD**



**NCRS Training 5 DVD Set**  
Judging 101, Ops, Matrix Training, Ref Manual, Paint & Fiberglass



**Coil Spring Compressor**



**Mid-Year Trailing Arm Tools**



**Radiator Stamp Kit**  
"GM" "16 CT" "06A CG"



**Mid-Atlantic Chapter  
National Corvette Restorers Society  
Membership Renewal  
2012**

Name \_\_\_\_\_ Spouse \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip+4 \_\_\_\_\_

Home Phone \_\_\_\_\_ Work/Cell Phone \_\_\_\_\_

E-mail Address \_\_\_\_\_ @ \_\_\_\_\_

NCRS Number (required) \_\_\_\_\_

Corvettes (Years) Currently Owned \_\_\_\_\_

Description (Year/Body Style/ NCRS Awards Earned) \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**Annual Calendar Year Dues: \$30.00**

***\$25.00 for 1 Year; \$50.00 for 2 Years if Postmarked by Jan. 16, 2012***

Make check payable to **Mid-Atlantic Chapter NCRS** and mail to:

**MAC/NCRS  
Reid Newcomb, Membership Chairman  
5387 Royal Mile Boulevard  
Salisbury, Maryland 21801-2324**



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