

Discovery Express



Volume 15, Number 3

Discovery Owners Association, Inc. — Established 1998 — www.discoveryowners.com

July 2013

It's July – let's celebrate...



July is the time when Americans and Canadians alike celebrate a national holiday. Did you know that July 1 is Canada Day? Their celebrations feature fireworks similar to those experienced by Americans on July 4.



Wherever you are and however you observe your country's national day, may it be safe and fun! Happy Independence Day! Happy Canada Day!

...and then, let's hit the road!

As DOAI president **John Baker** notes in his report (page 2), you could be far from home when this newsletter reaches you.

Wherever you may be, I hope you're having a wonderful and good-weather time. However, unsettled weather has become more common, making driving our big RVs down the road a chore at times. Do you have a CB radio in your coach? If so, you are probably familiar with NOAA and its helpful weather radio service. If you aren't familiar with this road safety adjunct, check it out here: www.nws.noaa.gov/nwr/. The weather updates as you drive down the road could save your life (and they can be helpful when you are camped, as well).



The "Go Green" challenge was met

Dick Tracy's challenge to chapters in the last issue has a winner! The Ozarks Discovery chapter in Missouri, led by **Bruce Plumb**, achieved a 100 percent electronic edition subscription rate for this newsletter. We extend congratulations to the chapter members and say, "Good job!" **Dick** gnashed his teeth a bit because the Mason-Dixons were oh-so-close. However, being a gentleman, he declared that DOAI is the real winner, along with lots of trees.

There's more inside, so keep reading...

Don't miss the detailed national rally information on page 3. Rally master **John Ricciardi** says, "The rally registration deadline will be upon us before we know it. Get your registration in soon. We're looking forward to seeing you in Virginia for a fun week."



In this issue...

President report 2	Rally opportunities 9	RV Education 101 19
Member care report 2	Helpful contacts for D owners 9	Freightliner maintenance tips 20
2013 national rally notes 3	Board/chapter/committee contacts 10	A "Little" light on the subject 21
Computer corner 4	Why does circuit breaker trip? 13	DOAI members free ads 22
Membership director report 6	Good for you! 13	DOAI applauds sponsors 22
Last update on 2013 region rally 6	The great refrigerator switch 14	Troubleshooting RV ACs 23
National rally master report 7	RV refrigerator tips redux 15	Feeding the RVer 24
Merchandise director report 7	Selling your Discovery 16	Travel humor 25
Region reports 7	Be prepared 17	Membership application 25
Chapter reports 8	"Road trip" to Mars 18	2013 national rally reg. form 26



President
John Baker

President report

By now, many of us are somewhere far from home, hearing the road hum under our D's and enjoying the sights of our beautiful country. We are planning not only our summer outings, but also our fall and winter locales. Be sure to include in your plans both the national rally at beautiful Bethpage Camp-Resort, Urbanna, Va., and *Camp Discovery* in warm and sunny Seffner, Fla.

John Ricciardi has lots to say on **page 3** in this issue about plans for the national rally. Registration is currently open at our website, and the form is also on **page 23** if you want to mail it in. Get your reservation in today so they can know how much food to order! I hope to see you there. It is a great place and time to renew old friendships and make new ones.

In next quarter's issue we will be talking more about *Camp Discovery*, which is scheduled the last week in January 2014. I am mentioning it now so you can plan your winter schedule. The board of directors has accepted responsibility for planning and executing this rally. Of course, lots of folks will be involved ... we thrive on volunteerism.

Speaking of volunteerism, last quarter I asked for an attorney to volunteer as our house counsel. My phone must be broken because it hasn't rung once on this topic. We currently have no legal issues, but should any arise, it would be very helpful to get some quick (and free) advice. Please let me hear from you if you can fill this important need.

I give a special thanks to **Bruce Bruce**, who volunteers as our insurance broker. DOAI must maintain a large liability policy in order to use the venues where we have our rallies. All of our chapters are also covered at their official events by this policy. Bruce put his many years of experience in this field to work for us, improved our coverage, and saved us several hundred dollars per year.

There is one other need that we have to fill: our beloved merchandise directors, **Dick and Pat Tracy**, need to move on to another very important volunteer position. That means we must locate another person or couple for this important job. Our folks proudly wear DOAI clothing and we need a way to make that happen. If you might be interested in doing this for a period of time, please contact me or **Dick**. He can tell you a lot more about it than I, and he will happily assist you in learning the ropes.

Thanks again for being a part of our DOAI family



Member care report

We send our sympathies and get-well prayers for our DOAI family members:

Luci Bean, whose husband, **Bill**, died last November

Carol Palmer, whose partner, **Ray Bowyer**, died last November

Ron Kiebler, whose sister, **Mary Margaret Hott**, died in March

Fred Reid, whose wife, **Donna**, died in May

Freddie Perry, being treated for macular degeneration

Mary Anne Weinberg, recovering from eye surgery

Alice Ricciardi, hospitalized after a COPD flare-up from chemotherapy

Please email Editor **Nina Soltwedel** (doaexpress@discoveryowners.com) when a DOAI member is ill or hospitalized, or a death has occurred in a member's family. Thank you!



© 2013 Discovery Owners Association, Inc. (DOAI)

DOAI is not responsible for opinions or facts presented by contributors to this newsletter.

Discovery Express is a quarterly publication (January, April, July, October). Deadlines for copy are November 20, February 20, May 20, and August 20. Members are encouraged to submit articles, tips, questions, and/or comments. *All submissions will be acknowledged.* If acknowledgment is not received within a reasonable time, please call the editor.

If you wish to receive the printed black-and-white version of this publication, instead of the electronic version, please email the editor.

Newsletter Editor

Nina Soltwedel
4736 Harwich St
Boulder CO 80301-4217
303.570.2736

doaexpress@discoveryowners.com

Contact the DOAI membership director as soon as any of your contact information changes; i.e., mailing address, telephone number, email address, Discovery year, etc.

Membership Director

Portia Williams
PO Box 95
St George UT 84771-0095
Toll-free 888.594.6818

doaimembership@discoveryowners.com

DOAI Website

www.discoveryowners.com

DOAI Yahoo! Group

www.groups.yahoo.com/group/discoveryownersassociation/

Access Back Issues

www.discoveryowners.com/newsletters.asp



All Discovery images courtesy of Fleetwood RV, Inc., Decatur, Ind. and used with permission



ARE YOUR DUES DUE?

Find your membership renewal date at

www.discoveryowners.com/login.asp



Rally master
John Ricciardi

2013 national rally plans rolling along

We hope you are planning to attend this year's national rally in Virginia. We have a good start with the number of registrations received so far. The rally team has been hard at work to give you a memorable time. That there are many peripheral historical sites to visit in the area is a given (see April 2013 edition, **page 3**, for details). That the Blue Ridge mountains are spectacular is another given. That DOAI national rallies can be a whole lot of fun is a foregone conclusion. Here are more things to anticipate seeing and doing at the rally:



⇒ DOAI ASSISTS CHARITIES

As is the custom of DOAI, we will be assisting local charities:



Fund Raising – There will be several different ways to raise funds: the 50/50 game, special raffles, and possibly a silent auction. The monies raised from these events will be donated to the local Wounded Warriors program. If you cannot attend the rally but would like to help the Wounded Warriors (or another charity), please send your donation to Registrar **Alice Ricciardi** with a note to which charity the funds are to be given.



Handmade quilts – DOAI's quilt tradition was begun in 2005 in York, Pa. The recipient of this year's proceeds will be announced at the rally. The two quilts shown here are **in progress**; the finished products will be eye-popping and worthy of your consideration (see the electronic edition for color photos). **New this year:** if you can't attend the rally but would like to participate in the raffle, you may purchase tickets for either or both quilts by contacting **Judy Jo Bruton** at 361.537.8986. Tickets cost \$1 each or six tickets for \$5. Purchasers must specify their choice of quilt for those tickets, or how many tickets for each quilt. Of course, raffle tickets will be available for purchase at the rally.



Canned and nonperishable food – Another DOAI tradition is collecting nonperishable food for the local food bank. We will be collecting your donations throughout the week, so please give what you can. Will we exceed the total poundage of last year (508 pounds)? The challenge is on!

⇒ AND THERE'S MORE!



Bethpage – The campground has been named campground of the year by the National Association of RV Parks and Campgrounds. This award recognizes the excellence in customer service, amenities, employee training, etc.

The staff at Bethpage is ready to prepare and serve us delicious meals (in the planning stages right now). After the evening meals, we will be entertained by a local group that was highly recommended by DOAI members. We also have entertainment that has appeared at the Grand Ole Opry in Nashville. We are negotiating for further acts and we know you'll be more than satisfied.



Golf, Tours, Seminars –

- * The golf outing will be at a local course that is not only beautiful, but it is challenging.
- * The fishing tour will take you onto Chesapeake bay for a fun-filled time and, we hope, with some fish on board for the trip home. Everything is supplied – hook, line, and sinker! When you enter Colonial Williamsburg, you will think you have gone back to the 1700s. While there, if you like, you can dine in one of the taverns that was actually there during Colonial times. One of the local favorites is peanut soup. Try it – it's good.
- * There will be informative seminars, and we have invited Fleetwood representative, **Chris Carter** to attend so he can lead us in the feedback forum once again.



In the works right now –

We are still working with Bethpage on events to keep you busy. Some ideas have been given to us, such as having a swap meet, as well as a parade of D's to show our owners' improvements. We are talking with a local Discovery dealer in an attempt to have them bring new motor homes to the rally. We are actively seeking vendors and several have committed already. ❖



Liberty quilt: will be queen size



Blue Mountain quilt: will be king size



Webmaster
Bob Cook

Computer corner

Passwords and Evernote

How you should be choosing and using passwords

Consider this: If I have your email password, it is very likely I can easily steal your identity and your money. Many people use the same password across many websites. But even if you used a different password, almost every online service sends you an email to reset your password. I can quickly scan your old email and likely find out where you bank, shop, etc.

Hackers and thieves have many tools at their disposal to assist them to steal your passwords or your identity. Let's explore some of these and also determine how we can best protect ourselves.

A very elemental password breach is just guessing your password and is called a brute force attack. Most brute force attacks make their job easy by using either a dictionary or password list. While this may seem primitive, it can be quite effective since studies have shown that these lists can contain the correct password at least 70 percent of the time.

However, most often, password hacking is the result of either a phishing attack, a key logger attack or an actual breach of a website server that has your information.

A long time ago, passwords were stored in a database on the server in "plain text," meaning that they were perfectly readable, just as this sentence. Under this scenario, a hacker who broke into a website immediately had your password. As security became an issue, almost all passwords were encrypted using one of several encryption techniques, and some of these encryption techniques are not even very good. But, even a stolen encrypted password may be easily decrypted. Every year, millions of website user accounts are stolen by hackers. It may not take hackers long to decrypt these stolen passwords. Hackers use "rainbow tables" to decrypt the stolen passwords. These rainbow tables are readily available online and they are a list of hundreds of thousands of the most common passwords that have been run through the encryption algorithm listing the encrypted password. Simply input the encrypted password and find the real password.

As a defense, the security community came up with the idea of "salting" the passwords – prepending each password with a group of characters, and running the encryption algorithm multiple times. However, with the help of a rainbow table and powerful processors, a hacker can still eventually break the code, at least for passwords shorter than 13 characters. And, today's powerful and cheap graphics processors and cheap memory almost make this child's play for shorter passwords and short salts. Security experts next devised a process to generate a pseudo-random function to add a recommended 16 character salt unique to each password. This is highly secure, but many websites are still back at square 2, using an encryption process that is easily broken.

Let's stop and drive home a point. No matter what, your password needs to be long (at least 14 characters) **and** complete gibberish. Even choosing a password made up of the first letters of a phrase is of no benefit if the resulting password is short. And, how many of these complex, long phrases can you memorize?

Another way of compromising your password is a phishing attack. In a phishing attack, you are tricked into entering your credentials on a fake website. Another way is through the use of key loggers that have been installed by malware on your computer. A key logger intelligently captures your keystrokes when you log in to selected websites and then the key logger forwards this information to its owner. Even if you have the best passwords in the world, they are useless against these attacks.

How do you guard against a phishing or key logger attack? The answer is to **use a good password manager**. You need a long password, at least 14 characters, made up of complete gibberish, preferably including foreign language symbols. Obviously, there is no way you can remember it, and you certainly don't want to write it down or include it in a Word file. A password manager can be configured to generate long, secure passwords for you automatically **and** fill them in (along with your username) the next time you log in to that website. **In addition**, the password manager also stores the IP (Internet Protocol address – think of it as a telephone number) that is **unique** for each website. So, if you get tricked into visiting a fake website intent on stealing your

password, your password manager will know you are on a fake site and **will not** fill in the form. Also, when on the real website, you are not typing in anything (and your password manager created the password for you; you never typed it), so a key logger on your computer is not stealing your information.

Among the best password managers are IPassword (agilebits.com) and LastPass (lastpass.com). They both use the best security practices outlined above and work on almost every computer/mobile platform. Being cloud-based, LastPass is the easiest to use and secure as long as you tell it to **not** remember your master password.

But, you aren't done yet. If someone manages to get your password, they can still use it. Not a good thing for any sensitive websites you visit. What you really need to protect yourself is two-factor authentication. What is that? For a website to completely ensure that it is **you** who are logging in requires at least two of the following things – either something you know, something (only) you have, or something you are. Right now, I bet your email account, arguably your most important web account, just requires something you know (your password) – this is single-factor authentication. A second factor is something you have (perhaps a unique code sent to your phone or a pre-printed table), or something you are (such as a fingerprint or a retina scan, not currently practical over the

Continued on next page...



Computer corner, continued

Internet). Your inputting your password **and** your one-time, unique code from your phone ensures that it is really you. Check with your email provider to determine if they offer two-factor authentication and turn it on. It is a small hassle, and most providers will let you authenticate each of your devices so you don't need to receive the unique code each time you log on from one of **your** devices. However, you can still log on using a different computer as long as you have your phone (or your pre-printed table) with you. The same thing should be done for your other sensitive websites. Facebook, and others, have implemented two-factor authentication, but you may decide you really only need it for email and financial sites. Insist on it for email, and change to Google if your provider does not offer it. (I highly recommend Google.)

As a side note, two-factor authentication for bank sites is required by federal law, but few banks have implemented it. You are obviously more at risk, but fortunately banks have been covering losses in customer accounts as long as you can demonstrate that you met their security standards (such as not giving someone your password).

Last, about those "security" questions to reset your password: almost always the instructions are emailed to you after you correctly answer the questions. To protect yourself, set up a separate email account just for this (appropriately secured with two-factor authentication), and never use this account for anything else. Second, and very important, **never answer the security questions correctly**. It is very easy to find out where you were born, your father's middle name, etc. Answer the questions with false answers only you know as an additional layer of protection. But, even if hackers are still lucky enough to guess your answers, the website will send reset instructions to an email address the hacker doesn't even know you have, and even if they did, they would not pass the two-factor authentication to be able to read the reset email.

If you have any questions about any of this, you can email me at cookrd1@discoveryowners.com.

Evernote

Scholars tell us we are living in the Information Age and that this vast wealth of information available at our fingertips will somehow enrich our lives. But, most of us suffer from information overload, which results in more stress and dreaming of an idyllic life on a small Pacific island, isolated from everything. Every day there are many things we "need to make a note of" – a great idea, an important receipt, a tip for your D, etc. There is not enough room on my refrigerator for all those Post-it Notes! And, as much as I like to eat, I am seldom in front of



my refrigerator, so they aren't much use anyway. Also, some of my notes are audio, pictures or web pages and it is hard to put that on a Post-it Note. It's also very hard to take my fridge with me when I am not home and need my notes.



This is where Evernote comes to the rescue. Evernote is a note-taking program that runs on a PC, Mac, Android and Apple smartphones. But it is more than a simple text note-taking program. Notes can contain images, video and audio. Web pages can be automatically "clipped" to include only the important info and none of the ads or other fluff. In addition, any text in the image can be searchable. Think about the power of that!

Notes can be saved in different notebooks that you define, such as Computer, Home, RV. Notes can also be tagged with additional descriptors (i.e., software, travel, maintenance), and also tagged geographically. Advanced search capabilities make it easy to find just the note(s) you are looking for.

With such powerful capabilities, it is beneficial to think about how you want to use notebooks and tags before you jump in. There are numerous tutorials, hints and tips available, just do a Google search. But, don't fret; it is also easy to redo how you structure your notes if you change your mind.



Although Evernote is a great place to stash information, I am very careful to **not** use it for any confidential information (I use LastPass for that). Any website or service that can restore your password (such as Evernote) obviously has your password and therefore has at least some vulnerability. But, Evernote is great for storing everything else.

Evernote is available both as a free and paid (\$45/year) version. The free version is probably sufficient for most users. The paid version gets you the ability to scan inside notes. You can view the advantages of the paid version at www.evernote.com/premium/ and sign up for either the free or paid version at www.evernote.com where you can find more information and tutorials.

I have just scratched the surface. Also on the [evernote.com](http://www.evernote.com) website are free programs and browser extensions to enhance the capability of Evernote. In addition, Evernote Trunk (www.trunk.evernote.com) has numerous third-party apps that work with Evernote via your computer or smartphone. Before you know it, Evernote will be your "brain"! ❖

Congratulations!

Bill and Anne Humphrey had three referrals join DOAI and have earned a year's free membership. You, too, can join this happy group of DOAI members who have benefitted from the referral program. All you do is tell non-member D owners about this great club, and give them a copy of the membership form (a copy of the newsletter is a great promotional tool and includes the form!). Put your name in the "who recommended" slot. Questions? Contact **Portia Williams**, DOAI's membership director, at 888.594.6818 or send an email to doaimembership@discoveryowners.com. ❖





Membership director report

Below is the list of new and reinstated members since the last issue of *Discovery Express*. Please make them feel welcome and introduce them to the many chapters we have in DOAI – the best places to meet and make new friends.

We have several members who are one referral away from receiving a year's free membership in DOAI.

Membership dir
Portia Williams

Remember, when you refer three new members to DOAI and they join, you receive a one-year free membership.

Let's watch for those Discoverys in the campgrounds and sign them up. ❖

Bill/Nancy Ables, Van Buren AR
 Matt/Libby Adams, Lockport LA
 Jerry Aschoff, Parker CO
 John/Marianne Ash, Sebring FL
 Steve Asher, Port Clinton OH
 Victor/Marley Asselta, Bailey CO
 Richard/Arlene Bakey, Bethel Park PA
 Brent Baldwin, Dunedin FL
 Russell Best, Westfield IN
 Albert/Rainey Blanchard, Cutoff LA
 Jay/Wendy Bodam, Avondale AZ
 Wendell/Katie Bowie, Statesville NC
 Jamie/Chris Brandt, Port Charlotte FL
 Bill/Debby Brickey, Ridgecrest CA
 Albert/Nina Burns, Las Vegas NV
 Keith/Tricia Byrd, Okemos MI
 Roger/Vanda Calmeyer, Box Elder SD
 Anthony/Ruthann Cantelmo, Wesley Chapel FL
 Ray/Lorry Carr, Sudbury ON
 Ed/Carol Chance, The Woodlands TX
 Don Collins, Hartwell GA
 David/Laura DeGaugh, Vacaville CA
 Edgar Dryden/Diane Stoecker, Secretary MD
 Jimmy/Lori Durham, Littlefield TX
 Don/Bet Eldred, Merritt Island FL
 Jennifer/Michael Ferraz, Port Richey FL
 Mike/Marilyn Field, Ormond Beach FL
 Joe/Kay Fountain, Panama City FL
 David Frensemeier, Ninevah IN
 Mike/Bobbi Gibson, Homosassa FL
 Brian/Carol Goetz, Punta Gorda FL
 Clifford/Pam Gordon, Livingston TX
 Steve/Connie Graber, Bowling Green OH
 Ron/Aniela Hacker, Cincinnati OH
 Troy/Marie Harrelson, Carbondale IL
 Douglas/Terrie Harrison, Clayton CA
 Herman/Renate Hartman, Barryton MI
 Gerald/Susanne Heinzl, Rowland Heights CA

Mark/Jenna Helsel, Dexter MI
 Jeff/Patti Hilliard, Rocklin CA
 Leonard/Mary Holstin, Pensacola FL
 Charles Holsworth/Rochelle Stachel, Emlenton PA
 John/Mary Ann Hooper, Shelby Township MI
 Terry/Joanie Hopper, Tiptonville TN
 Joseph/Margaret Hymes, Gary IN
 Wayne/Jane Inch, Deep River ON
 Frederick Jecks, Deltona FL
 Mark/Peggy Johnson, Mobile AL
 Janell/Ronny Jones, Newnan GA
 Larry/Mackie Jordan, Gaffney SC
 Chris Kamradt, Tomball TX
 Bob/Paula Kavanagh, Bosque Farms NM
 Dan/Kathy Klempel, Bismarck ND
 Mike/Earlene Knight, Georgetown TX
 Ken/Lisbeth Laurie, Waldorf MD
 Derrick Learned, Sand Lake MI
 Richard/Sharon LeClair, Washington PA
 Ben/Lucy Lewis, Montgomery TX
 Harvey/Nancy Lloyd, Chapin SC
 Stanley/Marjorie Lohrenz, Bingham Lake MN
 Michael/Lois Luberts, Spanaway WA
 Kenneth/Diane Lupinacci, Baxter TN
 Darrell/Debbie Luther, McKeesport PA
 James/Sheryl Lyons, Jefferson GA
 David Macioroski, Billings MT
 Dan/Pam Marsh, Maple City MI
 Daren/Helena Mayo, Bayboro NC
 Jerry/Tracie Mayo, Crescent City CA
 Ronald/Karon McCracken, Jacksonville FL
 Karl/Tasha Mears, Denham Springs LA
 Chris/LaVonne Metherd, Wiggins CO
 Charles/Tracey Meunier, Clifton NJ
 Thomas/Eileen Mills, Palm Coast FL
 Michael/Katie Moore, Round Hill VA
 Bill/Patty Murray, San Antonio TX
 Gerald/Betsy Nelsen, Vero Beach FL
 Sharon/Stanley Nieminski, South Barrington IL

Terri/Michael Norton, Cumming GA
 John/Marita O'Malley, Downers Grove IL
 Marcellus/Trisha Osceola, Hollywood FL
 Tammy Osceola/Terry/Tartsah, Hollywood FL
 Rodney Overbeck, El Paso TX
 John Petorock, Bluffton SC
 James/Susan Pinero, The Woodlands TX
 Ann Rehth, Venice FL
 Steve/Barb Richards, Lawrence KS
 Fred/Cindy Roessler, Peotone IL
 William/Linda Russell, Yuba City CA
 Nathan/Kim Schexnaydre, Drestrehan LA
 Dave/Linda Schurg, Azle TX
 Larry/Christine Sexton, Spring Valley OH
 Jim/Cindy Steward, Marana AZ
 Charles/Susan Strobel, Surfside Beach SC
 Ron/Tena Stroup, Canton GA
 Susan/Jim Sullivan, Morro Bay CA
 Don/Mary Ann Swanner, Roan Mountain TN
 Stan/Becky Talbert, Aurora CO
 Brandon Taylor, Roanoke AL
 Steve/Verna Timura, Port Charlotte FL
 Lee/Pauline Tomsick, Broomfield CO
 Trebor/Paula Tomsu, San Antonio TX
 Thomas Tozzer, McCleary WA
 Robert/Caroline Tracey, Fort Lauderdale FL
 Elizabeth Tran, Syracuse NY
 Bradford/Anna Varner, Yuma AZ
 Ernesto Villegas, Corpus Christi TX
 Kent/Laura Wallace, Scottsdale AZ
 William/Meredith Welsh, Colorado Springs CO
 Fred/Jay Wightman, Cudjoe Key FL
 Michael/Katherine Willis, Houston TX
 Ross/Maureen Wiltse, Lisle IL
 Karen Wisdom/Gordon Conti, Houston TX
 Dennis/Denise Wood, Monroe Township NJ
 Thomas/Angie Worrall, Thornton CO
 David/Jody Young, Davison MI

One last update from 2013 southeast region rally

Bruce Bruce had the honor of presenting a check for \$1,080 to the local American Legion post as a result of the 50/50 game at the southeast region rally in Seffner, Fla., last January. The Legion members expressed their thanks to everyone who participated in this worthwhile fund-raising effort! ❖



Bruce presents check to American Legion post commander



Bruce receives plaque in recognition of DOAI fund-raising efforts



Nat'l rally master
Joe Stewart

National rally master report

The last quarter has been a slow one. The 2013 rally is set to go. **John Ricciardi**, southeast region vice president, has spent considerable effort and time to give us an outstanding rally.

The 2014 national rally, hosted by the northwest region, is well into the "let's do it" stage. The formal announcement of date and location will be announced later this year. The 2015 national rally is to be held in the north central region. I hope they have begun to put some thought as to when and where.

Speaking of national rallies, and probably regional as well, there has been considerable thought about the national board being more active in the planning and working at these rallies. There will probably be a call for all members to be more active in putting on the rallies. More on this in October. ❖



Merchandise dir
Dick Tracy

Merchandise director report

As with prior national rallies, there will be DOAI clothing merchandise available for sale at the 2013 national rally in Urbanna, Va., in October. In addition to the old favorites of long- and short-sleeved chambray shirts, and embroidered polos and jackets in a variety of colors, we expect to offer a few new items that you will want to add to your DOAI wardrobe.

Plan to visit your DOAI merchandise shop early in the rally to take advantage of the fullest selection. ❖



Region reports



NW region VP
Bob Williams

Northwest region

The northwest region has the responsibility for the 2014 national rally. Many locations have been investigated in our region that would be suitable for a national rally. One of our main objectives has been to try and find a location that would minimize the travel distance required for members to attend the rally and increase attendance.

A tentative location has been selected for the national rally, but a little more time is needed to complete our study, as well as gain approval by the DOAI board. We will announce the location of the 2014 national rally in the October 2013 *Discovery Express*. We are still over a year away for the rally and this will provide members time to plan their travel schedule for next year.

In the meantime, we should be planning for the 2013 national rally in Urbanna, Va. Looks like there are many things to see and do in Virginia. This will be an interesting journey for us from Utah. ❖



SE region VP
John Ricciardi

Southeast region

The southeast region has been busy with local chapter rallies. I was fortunate to be able to attend a Blue Ridge Discoverys rally and a Mason-Dixon Discoverys rally. It was great to see the chapter members enjoying their time together.

Not only have the local chapters been busy with their local rallies, but they have been working hard on the national rally at Bethpage Camp-Resort, Urbanna, Va., October 8-12. I thank all the region's members for the work they are doing for this upcoming rally. It is a wonderful feeling to know that if I ask any of the southeast members to do something, I get the help I need. Thank you!

We have a lot of activities planned for the national rally. Check **page 3** for details, and get your registration in soon. We're looking forward to welcoming you to Virginia. ❖

Chapter reports



Chapter prez
Glenn Camp

Blue Ridge Discoverys

Our spring rally was held at the Holiday Trav-L-Park in Chattanooga, Tenn., April 24-28. We had 24 member coaches and one vendor in attendance. Many members came in early, however, the rain was difficult at times during the early days. In addition to the meals at the campground, we had a group dinner at a Japanese restaurant, a group

breakfast at a family restaurant, golf tournament, Volkswagon factory tour, and a Civil War dinner theatre lunch show. The rally hosts were **Bob and Barbara Zumwalt, John and Julie Barry, Ron and Anne Spearman, and John and Carol Smith**. They did a great job with this rally.

Our chapter historian, **Glenda Angus**, distributed our new membership picture directory. As usual, she did a beautiful, super job.

Continued on next page...

Chapter reports, continued

We have added two new members to our chapter since the last report: **Linda Osborne**, and **Stanley and Sharon Nieminski**. That's seven new members added in 2013.

Our next rally will be held in Charleston, S.C., October 16-20 immediately after the national rally in Urbanna, Va. Plans are underway to caravan from Bethpage to Charleston. **Paul and Cecily Hart, Mike and Ann Lecholop and Tom and Katy Lydic** will be the hosts for this rally. Come and join us. ❖



Chapter prez
Claire Weber

Discovery Texans

The Discovery Texans' (DTs) second rally for 2013 was at Miller Creek RV resort, Johnson City, Tex., March 20-23. We enjoyed it so much last year, we decided to return this year and are already scheduled for March 2014! Come and join us ... any time.

There really is a pattern to this group ... we love to eat and play games. Our first night coincided with the park's Wednesday night dinner. They furnished smoked brisket, corn on the cob, pasta salad, and banana pudding for a **very** reasonable price. It was a hit ... very crowded and many of us ate outside at the picnic tables. Several couples made a trip into Fredericksburg for lunch one day and the guys left the girls to shop to their hearts' content. We ate dinner at Blue Bonnet café in Marble Falls ... several had the dessert rather than a meal, since they were still full from lunch. Several of the ladies made a second trip into Fredericksburg for the Peddler Show over the weekend.

Our hosts, **Pete and Martha Palasota** and **Gregg and Deidra Gochneaur**, spoiled us with delicious breakfast and dinner meals Friday and Saturday. Yummy! Thank you all. We had a little zumba dancing after breakfast, many walks around the park, played some Jokers and Marbles, card bingo after dinner, and the men versus women beanbag baseball. Thanks go out to our chapter member, **Don Griffith**, and his brother, **Jeff**, who entertained us with country and western music Friday night.



The Discovery Texans enjoyed their tour of the Stone Hill Winery

April 24-30 was our first "Special Discovery Texans Rally" to Branson, Mo. Our unofficial hosts, **Pete and Martha Palasota**, helped us by providing suggestions of things to see and do while we were there. We met in the mornings to plan our day and to proceed as a group, or sometimes to split off

separately. Whenever we could, we would wear our Texas shirts. There were eight rigs and **Alice, Kathy Pellow's** mom, was able to join our group. **Alice** is always a welcomed addition!



The Texans rode the ducks to close their Branson rally

We went to the Presleys' show, the Ozark Museum, Shoji Tabuchi theatre, toured the dam at the visitor center, and went to the fish hatchery. We drove to Springfield to BassPro and then to Lambert's café (home of the "thrown" rolls). Many of us went to the Buck Trent show ... classic country. We enjoyed the Stone Hill winery tour and tasting. One of the best shows was Jim Stafford ... so talented! We enjoyed a game of miniature golf, Jokers and Marbles, and walks in the RV park. Some of our group toured the Copper Run distillery while others went to the outlet mall. On our last day, we took the Ride the Ducks tour. Our captain let some children "drive" the boat while we were in the water ... along with **Kathy Pellow**, followed by **Gwen Churchill**, before we got back on land. We wound up our rally by going to the Sight and Sound theatre to see "Joseph" – a cast of 45 professional adult and child actors, plus dozens of live animals on stage and in the aisles. It was uplifting. Safe travels everyone. ❖

Report submitted by Elaine Holley

Midwest Discoverers



Chapter prez
Jerald Call

Hello from the Midwest Discoverers. We are working hard on the September 3-8 rally in Port Clinton, Ohio. Wagon masters will be **Jim and Sharon Mills**. We will have the election of officers at this rally and **Dick Holmes** is the nominating committee. If you want to run for any chapter office, please contact **Dick**.

Port Clinton is on Lake Erie and there will be lots to see and do. This year (2013) is the 200-year anniversary of the Battle of Lake Erie and we hope to see some of the tall ships. Also, Lake Erie is a great fishing lake and we will have a day of fishing, plus a lot more. **Jim and Sharon** are doing a great job working on this rally and we all thank them for their work. As information becomes available, we will have it posted on the DOAI website.

We have five new members and we welcome them and hope to see them all at the rallies. ❖

Continued on page 11...

Rally opportunities

You are welcome (and encouraged) to attend any of these rallies! Contact chapter president (see **page 10**). See also the consolidated rally schedule at www.discoveryowners.com.

August 2013 –

T/B/A Mason-Dixon Discoverys, location T/B/A

September 2013 –

3-8 Midwest Discoverers, Port Clinton, Ohio

23-27 Texas Discovery Road Runners, Bullard, Tex.

27-29 D’Zonas, Cottonwood, Ariz.

T/B/A Florida Discovery Sunshiners, location T/B/A

October 2013 –

8-12 **National rally, Urbanna, Va.**

8-12 Northwest Adventurers, Urbanna, Va.

16-20 Blue Ridge Discoverys, Charleston, S.C.

November 2013 –

13-16 Discovery Texans, Bandera, Tex.

T/B/A Desert Rats and D’Zonas, location T/B/A

T/B/A Florida Discovery Sunshiners, location T/B/A

December 2013 –

T/B/A Florida Discovery Sunshiners, location T/B/A

January 2014 –

26-31 **Southeast region rally, Seffner, Fla.**

February 2014 –

21-23 D’Zonas, Safford, Ariz.

April 2014 –

18-20 D’Zonas, Parker, Ariz.

September 2014 –

26-28 D’Zonas, Fool Hollow Lake Rec Area, Ariz.

October 2014 –

T/B/A **National rally, location T/B/A**

T/B/A Desert Rats, location T/B/A

November 2014 –

7-9 D’Zonas, Apache Junction, Ariz.

Looking down the road –

2015 DOAI national rally, North central region

2016 DOAI national rally, Northeast region

Helpful contacts for Discovery owners

Allison Transmission, GM Corp.	800.252.5283	Freightliner Custom Chassis Corp	800.385.4357
Atwood Mobile Products	800.825.4328	Fuel: local U.S. gas prices	www.gasbuddy.com
Camping/travel/rest areas/reviews/tips websites:		General Electric	www.geappliances.com/geac/
.	www.accesscamping.com	Goodyear Tire & Rubber	800.321.2136
.	www.campingroadtrip.com	Intellitec	800.251.2408
.	www.interstaterestareas.com	Kidde Safety products	800.880.6788
.	www.campsitephotos.com/campground-directory/	Kwikee products	800.736.9961
.	www.rvdumps.com/dumpstations	Magnadyne	800.638.3600
.	www.rvparking.com	MCD Innovations	www.mcdinnovations.com
Caterpillar RV engine support	877.777.3126	Michelin North America	800.847.3435
Carefree of Colorado	800.621.2617	Norcold, Inc.	800.543.1219
Carriage Carpets (Shaw Flooring)	877.706.3054	Onan	800.888.6626
CCI Controls	800.521.5228	Power Gear	800.334.4712
Cummins, Inc.	800.343.7357	Riverpark	800.442.7717
Denso (call Fleetwood)	800.322.8216	RVP (Coleman)	316.832.4357
Discovery parts:		RVP (Suburban)	423.775.2131
Fleetwood RV, Inc.	800.322.8216	RV technical help	www.rvtechtips.com
Sullivan RV Sales & Service	800.720.0484, Ext. 6	Spartan Chassis, Inc.	517.543.6400
Walt’s RV Supplies	909.823.0563	Splendide	800.356.0766
DOAI name badges:		Thetford Corp.	800.521.3032
The Signman	407.365.3722	Trojan Battery Co.	www.trojanbattery.com
Dometic Corp.	800.544.4881	Velvac	800.783.8871
Fan-Tastic Vent	800.521.0298	Winegard	800.288.8094
Fleetwood RV, Inc.	800.322.8216	Xantrex Technology	800.670.0707

For other member-recommended helpful contacts, visit www.discoveryowners.com

DOAI officers/chapters/committees/website

BOARD OF DIRECTORS

President

John Baker, 8419 Clover Leaf Dr, Richmond TX 77469-4867; 281.341.7177; 281.814.0004; bakerjohn@swbell.net

Executive Vice President

John Curtis, 21350 Osage Trl, Garden Ridge, TX 78266-2035; 210.651.6818; 210.287.1496; jacurtis3@satx.rr.com

Vice President for Development

Bob Soltwedel, 4736 Harwich St, Boulder CO 80301-4217; 303.530.0775; 303.513.8548; bob.soltwedel@gmail.com

Secretary

MaryAnn Crowell, 207 County Rd 3000, Lott TX 76656-3828; 254.584.2400; 254.644.6225; relxn1@aol.com

Treasurer

Pete Palasota, 8106 Knottingham Dr, Waco TX 76712-3406; 254.772.3791; 254.722.2853; peteandmartha@gmail.com

Vice Treasurer

(position vacant)

National Rally Master

Joe Stewart, PO Box 9100-176, Bandera TX 78003-9100; 830.535.6633; 830.460.0683; retafx@aol.com

Past President/Registered Agent

Marshall Godwin, 8071 Windsor Dr, King George VA 22485-5210; 540.663.3725; 540.379.6767; marshall@megodwin.com

North Central Region Vice President - NC

(IL, IN, IA, KS, MI, MN, MO, NE, ND, SD, WI, MB, ON)
Beverly Kaiser, 34801 Pheasant Rdg, Richmond MI 48062-1834; 586.727.7230; 586.615.2263; bjk601@comcast.net

Northeast Region Vice President - NE

(CT, ME, MA, NH, NJ, NY, OH, PA, RI, VT, NB, NL, NS, PE, QC)
Jack Romeyk, 14 Avondale Dr, Islip NY 11751-4402; 631.889.2731; captjackro@yahoo.com

Northwest Region Vice President - NW

(AK, CO, ID, MT, OR, UT, WA, WY, AB, BC, NT, SK, YT)
Bob Williams, 1103 W Eclipse Dr, Saint George UT 84770-8027; 435.817.3172; rgwilliams@sisna.com

South Central Region Vice President - SC

(AR, LA, OK, TX)
Jay Keneson, 404 Cypress Springs Dr, Spring Branch TX 78070-4640; 830.885.6043; 210.827.1855; jayk@gvtc.com

Southeast Region Vice President - SE

(AL, DE, FL, GA, KY, MD, MS, NC, SC, TN, VA, WV)
John Ricciardi, 477 The Gardens Dr, Crossville TN 38555-0301; 252.619.6485; 252.619.7198; john.l.ricciardi@gmail.com

Southwest Region Vice President - SW

(AZ, CA, HI, NV, NM)
John Bujnovsky, 8129 Bay Colony St, Las Vegas NV 89131-6707; 702.528.2877; jjbrvng@gmail.com

CHAPTERS

Blue Ridge Discoverys (SE Region)

Glenn Camp, 33 Castle Dr, White Sulphur Springs, WV 24986-2205; 304.536.4249; 304.667.7249; campglenn006@gmail.com

Desert Rats (SW Region)

Gary Velasquez, 8608 Grandbank Dr, Las Vegas 89145-4813; 702.255.6014; 702.205.6709; garypatti@aol.com

Discovery Texans (SC Region)

Claire Weber, 15814 Pebble Bend Dr, Houston TX 77068-1210; 281.537.0804; 281.772.3630; ec.weber@att.net

Dixie Travelers (SE Region)

Robert Johnson, 245 Miller Ln, Lawrenceburg TN 38464-6397; 931.762.8763 (email Martha Wilson, chapter secretary marthakwilson@att.net)

D'Zonas (SW Region)

Mike Scott, 7725 N Cortaro Rd, Tucson AZ 85743-8826; 520.579.9931; jamdscoott@earthlink.net

Florida Discovery Sunshiners (SE Region)

Ron Wacker, 1720 Sherwood St, Clearwater FL 33755-2937; 813.240.6552; discovery@rvfunhome.com

Heartland Discoverys (NC Region)

Beverly Kaiser, 34801 Pheasant Rdg, Richmond MI 48062-1834; 586.727.7230; 586.615.2263; bjk601@comcast.net

Louisiana Mudbugs (SC Region)

Fred Reid, 311 Camille St, Alexandria LA 71301-2702; 318.448.8545; 318.446.2339; fmreid@aol.com

Mason-Dixon Discoverys (SE Region)

Dick Tracy, 6 Cambridge Ct, Fleetwood PA 19522-1018; 610.207.2016; dtracy@ptd.net

Midwest Discoverers (NC Region)

Jerald Call, 6825 County Road 16, Butler IN 46721-9417; 260.868.2580; 260.927.5397; jcallnorthpond@netzero.com

Northwest Adventurers (NW Region)

Gilbert (Wally) Wallington, 1729 S Fairway Dr, Pocatello ID 83201-2311; 208.237.4655; gwallington@juno.com

Ozarks Discovery (NC Region)

Bruce Plumb, 4385 State Hwy Y, Galena MO 65656-4604; 417.272.0287; 417.239.4544; bplumb@centurytel.net

Texas Discovery Road Runners (SC Region)

Carol Sturm, PO Box 311, Christoval TX 76935-0311; 806.438.0771; bcrvtravelers@yahoo.com

COMMITTEES AND WEBSITE

Audit

Ricky Keen, 8 Beaver Creek Loop, Roland, AR 72135-9749; 501.247.2124; rkeen120@gmail.com

Founder/President Emeritus

Jim Devine, 10321 Jacob Ct, Fairhope AL 36532-4534; 970.209.4757; f195810@gmail.com

Historian

MaryAnn Crowell, 207 County Rd 3000, Lott TX 76656-3828; 254.584.2400; 254.644.6225; relxn1@aol.com

Membership Director

Portia Williams, P O Box 95, Saint George UT 84771-0095; toll-free 888.594.6818; doaimembership@discoveryowners.com

Merchandise Directors

Dick & Pat Tracy, 6 Cambridge Ct, Fleetwood PA 19522-1018; 610.207.2016; dtracy@ptd.net

Newsletter Editor/Publisher

Nina Soltwedel, 4736 Harwich St, Boulder CO 80301-4217; 303.570.2736; doaixpress@discoveryowners.com

Webmaster

Bob Cook, 876 Higgins Ave, Deltona FL 32738-7971; 386.860.8274; webmaster@discoveryowners.com

Website

www.discoveryowners.com



Chapter reports, continued



Chapter prez
Carol Sturm

Texas Discovery Road Runners

The Texas Discovery Road Runners will have no rallies during the summer months. Most of our members are traveling to cooler areas of the country. This will be the first year in a long time that my husband and I have no travel plans for the summer. However, when the heat returns to Texas, I am sure a trip to the mountains will be in order.

Our second rally of the year was in Marble Falls, Tex., with 12 coaches in attendance. As usual, the rally master, **Robert Martin**, had



Waiting for the Bluebonnet flyer

so many activities planned, it was hard to decide what to do and see. We had a tour of the Longhorn cavern, rode the Bluebonnet Flyer and enjoyed the Bluebonnet festival in Burnet, Tex., as well as a photographic tour of Texas wildflowers. The highlight of the rally was the Bluebonnet air show. As many of you know, **Carl Dykman** had a long and outstanding career in the Air Force. Our rally master arranged for **Carl** to be the guest of honor at the air show. He and **Teri** received a rousing welcome from the crowd as his list of military accomplishments were announced. This rally provided sightseeing, good food and, most importantly,



Carl and Teri Dykman

the opportunity to visit with old friends and make new ones as we welcomed new members **Tyrone and Judy White**.

The next rally will be at K. E. Bushman's camp in Bullard, Tex., September 23-27. This will provide a jumping off point for the national rally. If you are traveling in the area, join us for some Texas hospitality. ❖



Chapter prez
Fred Reid

Louisiana Mudbugs

The Louisiana Mudbugs has had two successful rallies since the beginning of the year. One was at Colfax RV park, north of Alexandria, and the other at Paragon Casino in Marksville, La. Both were well attended. Fun and fellowship was had by all.

The rally at Colfax was a blur for me, and halted when my wife ended up in the hospital. No, it was not the food! Her illness resulted in my not being able to remember too much about the rally except that everyone always enjoys going to the park. It is so laid back and has one of the best meeting rooms of any park that I have ever seen. It has a climate controlled room with a full kitchen that overlooks the beautiful lock and dam and boat launch. I always enjoy looking out over the water with the setting sun over the Red river. I have to admit, what the club likes about the meeting room the most is that it is free to the group. It is great during times when it is cold as it was in February.

The rally in April was in Marksville at the Paragon Casino, which is in the heart of Cajun Country. You have to search hard to find bad food in that area. The problem with the RV park is that it is hard to get some of the members up in the morning after they have been gambling all night.

The casino started about fifteen years ago and has kept growing, now having two hotels associated with it. In the lobby of the hotel is a pool with fish and yes, an alligator. Of course, there has to be an alligator because all of us have alligators in our back yard, since we live in Louisiana, just like all Texans have horses.

Our rallies officially start on Friday, but by Thursday everyone had arrived. I had taken my coach there on Wednesday, but by the time I got there Thursday evening, **Debbie and Ricky Keen** had arrived from Arkansas. **Glenda and Joe Reed, Carolyn and Keith Barnes**, and **Frankie and Don Caldwell** from the Ruston area were present. The rally hosts, **Janice and Tom Ehni** from New Roads were just setting set up as I arrived. New members **Emily and Don Burgess** from Pineville had arrived with their new-to-them coach. They purchased the 2008 Discovery in Florida a month earlier and this was their inaugural trip.

Guests joining us were **Lynda and Jim Foxx** from the Baton Rouge area who are former Discovery owners, but now have an SOB. **Jim and Lynda** are like family and both were very helpful with **Buddy Sykes** during his long battle with lung cancer. It seems like our group has been devastated in the past year with illness, death, and family

Continued on next page...

Chapter reports, continued

problems. In all of this, we have been able to have good attendance at the rallies for such a small club.

The next rally was planned for historical Natchitoches, La., in June. We have been there before, but it seems that we have found the best campgrounds in Louisiana and keep going back year after year. We will report on this rally in the next edition of this newsletter. ❖



Chapter prez
Dick Tracy

Mason-Dixon Discoverys

Our first Mason-Dixon rally for 2013 was held on April 3-7 at Tuck in the Wood campground on Saint Helena Island, S.C. We had five coaches attending: **Bob and Marion Deal, Tom and Martha Hundley, Jack and Darlene Torbert, John and Alice Ricciardi, and Jim and Marilyn Brown.** Everyone enjoyed themselves visiting the local sights, playing games and, of course, eating too much.



L to R by couple: Deals, Hundleys, Torberts, Ricciardis, Browns

Wednesday evening was our welcome dinner, with burgers and all the trimmings. We had one potluck dinner and a “bring your own meat” dinner, grilled outside the activity building where we had our meals, games, etc. We had one dinner at a local seafood restaurant that everyone enjoyed.

The campground where our rally was held is aptly named. It looks a little primitive, but it has all the modern conveniences that we enjoy and is located near some nice sights.

The chapter has just published its first chapter photo directory that provides all of us with not only the name, phone number and address of our members, but includes a recent photo of the members for each of the 37 coaches we now have in the club. Sure makes it easier to look up friends! ❖

Desert Rats



Chapter prez
Gary Velasquez

Being a chapter in the southwest U.S., the Desert Rats do not plan nor hold chapter rallies during the hot summer months. Most of our members usually have their own travel plans during this time period, visiting family and seeing grandchildren on summer break from school, as well as escaping the desert heat for a while. Our rally schedule typically picks up again in the fall.

The Desert Rats are planning a rally get-together in October and a possible joint rally with our sister group in the southwest, the D’Zonas, in November (dates and locations T/B/A). We wish happy and safe travels to you all, and we’ll see you down the road. ❖

Random travel thought

Rest areas are like little cities with a constantly changing population. Most RVers love rest areas. They are good places to stretch one’s legs, walk the dog, or to prepare a grilled cheese sandwich for dining at a picnic table. Sometimes a nap is in order, and they can be especially satisfying on a warm, lazy day. Some rest areas are simply parking lots with a restroom. Others are elaborate with a full-blown restaurant, store and gas station. Rest areas in national forests and along rural highways are often in beautiful settings with trails to walk for exercise, where the aroma of the air can be as captivating as the scenery (sagebrush in the desert or pine in the mountains). Of course, some rest areas are noisy and smell of diesel exhaust, which is further evidence that in life we win some and we lose some. — *Author Unknown*

TOM RAPER RVs
Midwest's #1 Dealer

EXCLUSIVE HOME OF THE DISCOVERY LE

Celebrate Summer with a new Discovery and customize it to be a one-of-a-kind RV.
2014 Discovery LEs are on order. I’m here to help you realize your dream!

Barry Burdette — 800.727.3778, ext. 1333

937.472.8481

765.962.1572 fax

bburdette@tomraper.com



2250 Williamsburg Pike

Richmond IN 47374

I-70 Exit 149A

TOM RAPER RVs: A membership sponsor of Discovery Owners Association, Inc.



Gary Osburn

Why does that one circuit breaker trip all the time?

For me, it's the one outside on the inverter. And I know it happens to a lot of us. It occurs when the coffee maker is on and then something else, perhaps a blow dryer or toaster is switched on. And, since it's outside, it usually trips when it's cold, windy and raining and 6:00am.

And guess who gets to go outside to reset it? The person who turned on the blow dryer? Or is it the person who was quietly sitting, sipping on a nice cup of coffee and watching the television that also just went dead?

I think most of our Discoverys have several outlets that are capable of being powered by the inverter. When we are hooked to shore power, these outlets are powered by shore power, but the circuit still runs through the inverter and the same circuit breaker. Typically, these outlets power the televisions, the microwave and the galley and bathroom.

What happens is pretty easy to explain. The coffee maker takes about 10 amps of power to make coffee, and the carafe heater switches on and off as needed to keep the pot hot. The toaster also takes about 10 or 12 amps, as does the blow dryer. These guys are all power hogs, and switching on more than one at a time will immediately overload the 20 amp breaker. However, what usually happens is that the coffee pot is in "coast mode" when the other appliance is switched on and things are OK for a few minutes. Then, when the coffee pot warmer comes on again, "POP!" goes the breaker.

It's worth noting here that changing the breaker to a heavier-rated one will not work and would be very dangerous. Remember that breakers are there only to protect the wires that are run in the walls and are the appropriate size needed to prevent a melt-down or a fire. Breakers **do not** protect the appliances from over-drawing electricity and **do not** protect you from electrocution. (Ground fault circuit interrupters [GFCI's or GFI's] do that, which is why they are used near water sources or on outside outlets.) A 15- or 20-amp circuit breaker is perfectly happy to conduct enough electricity to kill you or burn down your rig.

However, there is a solution that at least sounds easy – spread the load over several circuits. In practice, though, that may not be so easy. In our D, there aren't any outlets in the galley area that don't go through that one circuit that also powers the microwave, the bathroom outlet and both televisions. For a while, we took care to try to remember to switch off the coffee pot while some other power hog was switched on, but that's not convenient and "we" would often forget to turn the coffee pot back on.

After a while, I came up with a more permanent solution that might work for others. On our D, there is an outlet in the water bay outside, and the water bay is directly under the shower, which actually sits above floor level about six inches and is right across the hall from the bathroom sink. I ran some 12-gauge Romex wire from that plug up into the void under the shower and added a GFCI outlet on that 6" tall wall under the shower. If you decide to do this, remove the shower-drain

access cover and you can see the void (I cringed as I drilled that hole, but there is plenty of room). I just used a standard plug on the other end of the Romex and I leave it plugged in at the water bay outlet. I didn't hard-wire it in because I wanted to be able to use a short extension cord and power that outlet directly from the shore power post, anticipating it would be necessary at a 30-amp service connection. This new outlet is the designated blow-dryer or curling iron outlet.

I do not miss those early morning cold, windy, rainy trips outside to reset the circuit breaker. Now if I could just design a doggy door, maybe under a cabinet, that has access through the floor and then through an outside bay leading down to a fenced area outside, I could stay indoors on those mornings. Oh, and it would also need to be cat-proof. ❖

Gary and Debby Osburn are long-time DOAI members, former full-timers and live at Canyon Lake, TX. Gary became a RVIA Certified RV tech in 2005 and received Master Tech status in 2010.

Good for you!



Occasionally, DOAI members have a great experience dealing with a company or an individual as they seek service or assistance for their Discovery. This is their opportunity to say "thanks" for good work. You, too, can give a thumbs up for good service. Send an email to doaiexpress@discoveryowners.com

Robert Moffitt writes: "After having spent the last 50 years as a truck mechanic or owner/operator truck driver, I have had a lot of dealings with truck shops and parts departments.

"When I bought a 1996 Discovery at **PPL Motor Homes** in Houston, Tex., two and one-half years ago, I found them to be very honest, straightforward, and easy to do business with. They ordered my first *Discovery Express* for me, and it has been very useful to me, especially **Sullivan RV Sales and Service** in Decatur, Ind., and in particular the parts lady, **Cathy**. Cathy has helped me with everything from window channels to AC parts, to paint codes, to how to remove compartment doors."

Steven Wenrick writes: "While on my annual fall trip, I experienced what turned out to be an alternator failure on my D. Also, the six-year-old battery on my Dakota toad decided to give up the ghost at the same time (who would have figured?). And since troubles come in threes, someone accidentally (?) broke my right side blinker/marker light (this happened in southeast Wyoming).

"Luckily, there was a Freightliner dealer, namely **Jack's Truck & Equipment (JTE), Fremont Dodge, and Sonny's RV Sales** in Casper. I figured I would be down for two to three days, but not so. Jack's had the alternator in stock and installed it the same day I took in the D. Sonny's had the light fixture, and it was installed later that same afternoon.

"After spending the night at 'Camp Walmart,' Fremont Dodge had the toad ready the next morning. I highly recommend these three businesses if any D owner has similar problems in the Casper, Wyo., area." ❖

The great refrigerator switch

With all the refrigerator recalls, perhaps you've thought about replacing yours with a residential-type unit. **Bob Parker and Donna Huffer** did it last year, and share their story. Their experiences may inspire you to do the same.

The **Parker/Huffer** Norcold refrigerator died. Actually, after three recalls, it was the clamp that rubbed against the coils that caused its death. After considering the matter, **Bob and Donna** decided to forego replacing it with another Norcold, and began their search for a residential version.

After browsing through the big box stores and several smaller appliance stores, they found a 16.5 cubic foot GE unit (unfortunately, that model has been discontinued). Because it was on close out, they were able to negotiate a great price. They are pleased with the overall size (6" narrower than the Norcold) and its interior capacity (4.5 more cubic feet than the Norcold).

With the help of good friends, they dismantled the Norcold. They then removed one of the side windows, and took out the Norcold through that opening (this same opening was utilized in getting the GE into the rig). Once the old unit was removed, **Bob** modified the space to accommodate the new unit. That included putting the gas line under the box to accommodate the Blue Flame heater, adding screws to the floor and two center supports. He also removed the top rail for added height, and removed the two back rails. With the new

unit being 6" narrower, the AC outlet (powered by the inverter) was moved to the side.

Because they are full-timers, **Bob** modified the battery rack several years ago so that he could install six L16 batteries. These batteries handle the increased draw quite nicely. Even though they boondock, **Bob and Donna** have found the battery drain is less than the microwave! If it's a sunny day, they leave the inverter on; if it's not a good solar day, they run the generator an hour in the morning and an hour in the evening. The inverter is shut down when away for the day or overnight, and the inside temperature of the new unit rarely rises more than a degree or two. They can always freeze cooler packs and add to the unit, if desired.

Another benefit: because of the narrower unit, they were able to have the pantry enlarged, thus increasing needed storage space for canned goods, etc. This part of the project was accomplished at Dave & LJ's RV Interior Design in Woodland, Wash. **Bob and Donna** report that the job was beautifully done and they are happy with the overall results. The following pictures tell the story!



Left: Norcold dismantled. Center: Norcold being removed. Right: Modified box for new unit.



Far left: GE refrigerator being brought into rig through window opening (window had been removed). Close left: A view of the old pantry.

Notice the insulation and narrow board **Bob** installed to fill in the space between that and the new refrigerator. The Discovery was now ready to visit the interior design place for installation of a new pantry. Read on!

Continued on next page...

The great refrigerator switch, continued



Top three photos: Left and Center – LJ working on modifying the box to relocate the propane and reinforce the bracing for the new floor; Right – the upper vent closed, insulation installed, and the new pantry and wine rack. Bottom three photos: Left – the finished installation; Center – an illustration of the width of the new pantry (the old pantry door is leaning against the new pull-out storage drawers); Right – Donna was happy to fill up the new pantry. Donna says, "The new pantry holds all that was in our old pantry, plus what was in the big drawer under one of the dinette seats!" ❖

RV refrigerator tips redux

Page 8 of the July 2011 *Discovery Express* included a helpful RV refrigerator tips article by **Roger and Onna Ford**, who own and operate Ford's RV Training and Service in Benton, Ky. They have recently launched the second video on money-saving DIY tips for your RV refrigerator.

The series of videos is geared to help the RV owner troubleshoot and make minor repairs. At the very least, the Fords would like to help RV owners determine if their technicians are truly qualified to make an analysis of the problems and successfully do the repairs. As **Roger** stated, "Our goal is to help them get repairs with the least amount of cost and receive the best warranty."

Roger and Onna make the videos available through YouTube, so there is no cost to you, the RV owner. When you watch the video, you will be able to make a comment, and a response will be addressed to you personally on a subsequent video. Once the RV refrigerator series is complete, the **Fords** will create how-to videos for other RV appliances. Check out the latest video at www.youtube.com/watch?v=txqAHaTpexc. Their website is www.rvrefrigeration.com. ❖

Seeking a new Discovery?

If you were to purchase a new Discovery, wouldn't you rather buy from someone who is a Discovery owner and a Discovery fan? My goal is to offer you the exact Discovery you want. I am not "just" an RV salesman – I know Discovery motor homes from stem to stern. Let's talk!

Barry Burdette, 800.727.3778, ext. 1333

If it's an LE, it comes from me.

Paid Ad

The Ultimate Hub Tool

This tool is used to remove Freightliner's chassis hub nuts on coaches with Alcoa rims. It saves the hubs from unforgiving channel locks and pipe wrenches, plus allows you to remove hubs for cleaning and polishing. It's the only molded hub tool that indicates the proper direction for removal of the hubs. Contact **Frank Cason**, 1917 Stone Dam Rd, Chuckey, TN 37641, 423-552-5257, cason.frank@gmail.com. **\$13 incl. s/h**. You can order on the Internet at www.ebay.com/sch/.html?_trksid=p5197.m570.l1313&_nkw=Ultimate+Hub+Nut+To+ol&_sacat=0

Paid Ad



Newsletter editor
Nina Soltwedel

Selling your Discovery

It's more than just a "for sale" ad

Sooner or later, it happens to each of us: We either want to get a new RV, or we've come to the point that RVing, sadly, is no longer an activity we can pursue. If we opt to sell the unit personally, there are obvious things we would do:

- **Gather** all paper materials which document the entire vehicle (that ubiquitous Fleetwood suitcase stuffed with all those manuals, etc., for starters).
- **List** all the pertinent details about the vehicle, such as amenities, modifications and/or upgrades, any outstanding warranties, new tires and/or batteries, added awnings, etc.
- **Note** current mileage, lack of pets/children/smoke, if it has always been garaged when not on the road, etc.
- **Take** high resolution color photographs of the exterior, and several of the interior.

That's all well and good, but there's one more step *before* taking the photos: **Stage your Discovery**. "What?" you say. "Staging? Isn't that what home sellers do? Why would I want to stage an RV?"

There's a simple reason, and it's the same reason savvy sellers stage their homes: to help the prospective buyer envision himself/herself living there. Like a house, when the RV has been personalized with those accents that make the current owner happy, a potential purchaser may have a difficult time "seeing" it as their space. Many shoppers may not be familiar with our beautiful Discoverys, so it's important to give them an uncluttered view of the coach's assets.

Take a long look at your surroundings

Stand in the middle of your Discovery and slowly turn in a circle. Make note of all the nice touches you've added to your beautiful RV. Obviously, you would never have added them if you didn't like them. But consider this: your taste may not be the purchaser's taste. I happen to be a fan of kokopellis and other Native American designs. If someone who likes Americana décor, for example, looked at our coach with the idea of perhaps buying it, all that Indian "stuff" could prevent them from fully appreciating the D's interior.

So, what do you do? Simply stated, return the coach to its basic, uncluttered condition so that it looks as if no one lives there (apart from a few unobtrusive touches). That means:

- ✓ Remove family photographs and personalized items
- ✓ Remove plants and flowers and throw rugs
- ✓ Remove "themed" decorative items
- ✓ Replace that beautiful quilt on the bed with the original bedcover (if you still have it). If the original is not available, put a neutral cover on the bed.
- ✓ If your coach has a pull-out galley, put it in to show the spaciousness of the interior.
- ✓ Clean - clean - clean. Surfaces (counter tops) should be clear, and so should table tops. If any photo includes the floor, make sure the carpeting has been vacuumed before "shooting." (A previous sale photo on the DOAI website included an empty pop can on the counter and socks on the floor.)



Living area before de-personalization



Living area after de-personalization

"Shooting" the Discovery

When taking interior photographs, turn on **all** the lights and draw the blinds. Make sure you are not facing a reflective surface (the flashback can ruin your photo and the photo will include you). Take a second set of photos with all the blinds up (all the lights still on). The pictures should include views from all perspectives – the front looking back, the middle looking front, the middle looking back, the bathroom, and the bedroom from at least two positions. Take a lot of photos, and then judiciously cull the best for the ad.

When taking exterior photographs, include various views from both sides. Close the door. Take a couple of shots with the awnings out, and then take several with the awnings in. Take photos with the slides out, and then a couple with the slides in. Again, accumulate all the photos and choose one or two that best illustrate the exterior of your coach.

Advertising your coach

As a paid-up member of DOAI, you are entitled to have a free Discovery sale ad listed in this newsletter, and a lengthier free sale ad (with up to three photos) can be placed on the DOAI website. That's a real bonus because the sale page on the web-

Continued on next page...

Selling your Discovery, continued

site is open to **everyone**, not just DOAI members. Your sale ad can be read by anyone seeking to purchase a good used motor coach. Therefore, including as much information in the online sale ad as possible is important. There will be prospective viewers who may not know a Discovery from an Airstream. All the amenities that we take for granted (washer/dryer, Cummins or Caterpillar engine, Allison transmission, slide-outs, Corian® counter tops, etc.) should be listed. And the online ads will be the place potential buyers can see those excellent photos you've supplied.

The print version of your sale ad is brief by design; we have limited space in the newsletter. Also, the newsletter goes to our membership, not the general public, so just about every person who gets the newsletter will know the basics about your coach. We always include a link on the sale page that takes the member to the DOAI website for further information.

There are other venues to advertise your coach: [Craigslist](#), [eBay](#), etc. These have proven successful for some, and if you

decide to utilize them, check each out very carefully. There are also reputable consignment dealers across the country. Again, check them out carefully before committing. (One of DOAI's membership sponsors, [PPL Motor Homes](#), is a consignment seller.)

There's one more caveat to remember: **Seller beware**. Scam artists are "out there" and they are eager to take your money and your coach. DOAI Webmaster **Bob Cook** has included an excellent tutorial at the beginning of the online sale page. I urge you to read it before you put your coach up for sale. An informed seller is a safe seller.

I wish you happy times with your D, and when the time comes, good luck with your selling venture! ❖

Nina is a fan of HGTV's various home-selling shows. She believes that how sellers prepare homes for sale can be a good approach for RV sellers, too. Thanks to the DOAI member who allowed us to publish the "before" and "after" photos.

Be prepared



Tire expert
Roger Marble

I am pretty sure the Boy Scouts were not thinking about RV tires when they selected the motto of "Be Prepared." However, that motto does provide good guidance for RV owners when it comes to their tires and being prepared in the event of a failure, or even better yet, being prepared for travel in a way that can decrease the chances of having a failure.

Most RV owners either keep their rig parked under cover during the winter, or keep relatively warm in our southern states. In either case, there are not many RVs on the road that time of year. But now it's time to get the cover off the rig, dig out the campground guides and start planning the adventures for the year.

I offer some suggestions on a few things to do that can make your life a bit easier when it comes to maintaining your tires, and steps to take that may possibly save you grief down the road.

1. Have your tires inspected

You should be able to find a dealer for your tire brand that is willing to give your tires an external visual inspection. I covered this in detail in this post, "Have your tires checked for free" (www.rvtiresafety.com/2012/01/have-your-tires-checked-for-free.html). They should look for bulges in the sidewall or an out-of-round tread, and for cracks or cuts that exceed the specifications provided to the dealer by the tire manufacturer of your brand of tires. I believe that all competent and properly trained dealers should have a guide with specifications on what would be considered an "adjustable" level for depth or width of crack or cut. Even if the tire is out of warranty, those levels would be a good guide for what the manufacturer considers safe or unsafe.

2. Inflate the tires to the level required for your unit

For trailers, this usually means to the inflation on the tire side-

wall. I covered my suggestion for trailers in depth in a post just for trailer owners (www.rvtiresafety.com/2012/09/what-should-trailer-owners-do.html). I would include all towable units, even dollies in this category. For motorized units, this would probably mean the minimum needed to carry the highest expected load plus 5 to 10 psi "cushion." You can refresh your memory about the importance of proper inflation here (www.rvtiresafety.com/2011/03/tire-loads-inflations-heavy-topic-part.html). If you haven't had your RV weighed and calculated the individual tire loads, I strongly suggest you read this post (www.rvtiresafety.com/2012/12/danger-will-robinson-danger.html). You can check the RVSEF website for the schedule of locations they will be doing RV weighs (rvsafety.com/weighing-schedule/). Here is a site with downloads and worksheets on how to calculate actual loads: www.bridgestonetrucktires.com/us_eng/rv/index.asp.

Continued on next page...

Crystal Lake RV Park

Come join us for a stay in the heart of Florida's main attractions! 60 full-service, 50/30/20 amp, pull-through and back-in premium sites. Groups welcome!

Tenting - extended stay - park models - clean restrooms
- large lake - pool - bath house - rec hall - game room - shuffleboard - fishing - wildlife - bird watching.

4240 Stuckway Rd, Mims FL 32754
888.501.7007 - www.crystallakervpark.com

Be prepared, continued

3. While at the tire dealer, confirm your tire gauge matches the calibrated master gauge the dealer uses

It doesn't do you much good to check your tires if your gauge is off by 10 percent. I covered gauge accuracy in a post (www.rvtiresafety.com/2012/10/gauge-accuracy.html) and you can see the high failure rate observed, based on actual calibration checks.

4. Record your full DOT serial, including the date code (www.rvtiresafety.com/2012/08/dot-date-serial.html)

If you write this information in your record book and file it along with other important papers such as insurance and registration, you will only need to do this once in the life of the tire. If you have this, you can easily calculate the tire age and even check if the tire is on a recall list in the event of a recall or safety campaign.

5. Install your TPMS (www.rvtiresafety.com/2011/05/are-tire-pressure-monitoring-systems.html) and confirm the batteries are working

I hope you all have a safe and enjoyable 2013 RV season. ❖

© Roger Marble, 2011. Reprinted with permission. Before retiring, Roger Marble spent 40 years in the tire industry, working for a major manufacturer developing tires for applications in North, Central, and South America. During his career, he worked on many kinds of tires – heavy truck, passenger, light truck and Indy-car types. Roger's blog, "RV Tire Safety with Roger Marble," is a top-notch informative posting found at www.rvtiresafety.com. You can sign up to receive his blog postings right in your email inbox at no charge. The website carries all his previous blog postings which make very interesting reading to anyone concerned with the tires on their RV, car, truck, or trailer.



"On the Road" editor/publisher Chuck Woodbury

"Road trip" to Mars

Imagine spending about 16 months – 501 days – with your spouse in your RV without the opportunity to step outside, have a visitor, or even open a window for fresh air. And imagine that the view out your window is basically the same every day. Are you thinking what I'm thinking? "No way! We'd kill each other!"

Well, this scenario (hopefully without the "killing each other") may very well happen. But the couple will not be in an RV, but a spacecraft about the size of one – on a trip to Mars and back. The \$1 billion project is being financed by multimillionaire **Dennis Tito**. The launch is scheduled for January 5, 2018, when Earth and Mars will be their closest until 2033.



Tito is a former NASA engineer and successful businessman who paid the Russians \$20 million for a ride to the International Space Station, becoming the first "space tourist."

The biggest physical danger to the crew is expected to be radiation. But the psychological strain may be far more challenging. **Taber MacCallum**, chief technical officer for "Inspiration Mars," envisions the crew as a married couple in their 50s. His reasoning is that being married they could comfort each other as they saw Earth grow smaller and smaller. "If that's not scary, I don't know what is," he said.

Here's how MacCallum's wife, **Jayne Poynter**, described the mission at a press conference: "It's a really long road trip. You're jammed into an RV that goes the equivalent of 32,000 times around the Earth and you can't get out for a year-and-a-half."

The crew will drink the same water and breathe the same oxygen over and over again through recycling urine and sweat and scrubbing carbon dioxide. About 3,000 pounds of food will be on board at lift off.

Once on their way, there is no turning back, and no rescue if something goes wrong. And even if all goes well, the



couple will not even get to land on Mars, just loop around it from 100 miles above. The planned journey involves what's called a free return, where the vessel will use Mars' gravity to boomerang it back home — no matter what the crew's condition.

So imagine 16 months of the same ol' thing — living in a tiny space, no fresh air, no fresh food, no place to escape for a little personal time. When I think about



Spacecraft in Mel Brooks' film, Spaceballs

it, I feel claustrophobic to the max! I have often said if I had the opportunity to be the first person to visit Mars, I'd jump on it. But now, after pondering the details, I think I'll pass.

Oh, there's one more thing: unlike travel by RV, there are no dump stations along the route. So, how does the spaceship go potty? Well, it doesn't. The couple will be required to coat its walls with their own feces to block radiation. "It's a little queasy sounding, but there's no place for that material to go, and it makes great radiation shielding," said MacCallum.

Ready to sign up? ❖

Chuck

RVtravel.com
News, Information & Travel Advice for RVers

© 2013 Chuck Woodbury, RVtravel.com All rights reserved. Reprinted with permission. Sign up for his weekly newsletter jam-packed with helpful information at www.rvtravel.com.



Mark Polk

RV Education 101

Campground ratings

There are over 14,000 places to go camping in your RV. We have a pretty good idea of what we can expect at the public camp sites in our national parks and national forests, state parks and state forests, Army Corps of Engineer projects and Bureau of Land Management areas, but what about all of the private campgrounds out there?

We have actually pulled into some campgrounds when we were traveling and made a quick U-turn and left. It was easy to see at a glance that these campgrounds were not a place you would want to spend the night, not to mention several days, or weeks. Even if you research the campground's website or some of the campground directories before leaving on a trip, there is no guarantee that it will be a safe, clean, quality campground. So what can you do to know in advance that the campground you are planning to stay at offers a clean, safe environment for you and your family?

There are several large, reputable organizations like AAA, Wheelers RV Resort & Campground Guide, Woodall's and Trailer Life which rate campgrounds on an annual basis. These campground ratings are based on important considerations like the campground's facilities and services, cleanliness, visual appeal, user experience and more. The rating systems may be slightly different, using stars or a numbers, but the bottom line is where the campground stands when it comes to meeting industry standards.

Other organizations like KOA do a good job making sure all the campgrounds in their network are up to industry standards in these same categories. I have never been disappointed staying at a KOA.

So, when you're searching through campground directories and websites for that perfect place to stay, check the ratings before you make any plans. These campground rating systems can sure make you feel better about choosing a clean, safe campground to stay at. Here is a brief overview on some of the campground rating systems.

AAA Rating System

AAA inspects and evaluates every campground listed in its

AAA Camp Books. These campgrounds are inspected annually and must meet specified requirements to be listed in their book, using three levels. The levels rate natural elements, site conditions, amenities for campers, additional programs, etc. If a campground displays the AAA emblem, it's a good indicator that the campground provides quality service.

Good Sam Park Rating System

The Good Sam Club rates private campgrounds similar to the way AAA does. Campgrounds that have the Good Sam Club endorsement are good indicators that the campgrounds provide quality service. And Good Sam Club members receive a 10 percent discount at these campgrounds. Visit www.goodsamclub.com/ for more information about this club.

As of 2013, Good Sam's camping information has been combined with **Woodall's** and **Trailer Life Directory** ratings, into one comprehensive annual publication: Good Sam RV Travel Guide and Campground Directory. The new configuration continues Woodall's and the Trailer Life Directory methods of rating roads, restrooms, campsites, hookups, overall cleanliness, visual appeal, environmental quality, and more.

Wheelers Rating System

Wheelers uses a five star rating system. A campground with five stars indicates it is better than average in most services. A three star rating is equivalent to meeting normal expectations, and a one star rating is below average. The ratings are done by VIP Wheelers Reporters who have actually stayed at the campgrounds. For more information, visit the website at www.wheelersguides.com.

Happy camping! ❖

© 2013 Reprinted with permission. *RV expert Mark Polk owns RV Education 101, a North Carolina-based company that produces and sells educational videos, DVDs and ebooks on how to use RVs. Mark has more than 30 years of experience in RV maintenance. He retired from the U.S. Army in 1996 as a chief warrant officer three, specializing in wheeled and track vehicle fleet maintenance operations. He and his wife, Dawn, started RV Education 101 in 1999. They travel with their two sons in a 35-foot class A motor home.*

More from Mark ...

Air conditioner short cycling

When an air conditioner runs, the compressor builds refrigerant pressure. If the compressor is then shut off, either manually or by satisfying thermostat demand, it must stay off for some period of time, usually three to four minutes, to allow pressure in the system to equalize before it can be safely restarted. Trying to restart the air conditioner compressor before pressure equalizes is known as "short cycling." If an air conditioner is "short cycled," the results may be, 1) tripped air conditioner circuit breaker; 2) generator shut down on overload; or 3) tripped air conditioner thermal overload. The air conditioner thermal overload will reset itself after the compressor cools. It cannot be reset manually.

Some, but not all, RV air conditioner thermostats have built-in time delays to prevent short cycling. Short cycling occurs in some RVs when the thermostat is mounted so that cold air blows directly on it. If this happens, the thermostat shuts the compressor off before the cabin has cooled, but quickly warms back up and signals the compressor to restart before refrigerant pressure equalizes. In this case, the flow of air from the air conditioner should be directed away from the thermostat, or the thermostat should be relocated. Short cycling can be prevented by always being sure the air conditioner rests for three to four minutes after the compressor shuts off before trying to restart it. ❖

RV maintenance tips from Freightliner

Recent conversations on DOAI's Yahoo! egroup focused on maintenance issues. The following (with permission of Freightliner) originally appeared in the Spring 2004 edition of *Discovery Express*.

Radiator and charge air cooler maintenance

On chassis equipped with a rear radiator, it is very important that the radiator and charge air cooler be inspected at regular intervals. Cummins recommends inspecting the charge air cooler every 7,500 miles. This should also apply to chassis with Caterpillar engines. This is because air and dust are being blown through the radiator and charge air cooler and can build up and reduce the airflow through the cooling system. This is considered part of normal maintenance.

From the engine side of the radiator, use a flashlight to look into the fan shroud at the face of the charge air cooler. If

there is any dirt buildup, this should be cleaned using a water hose and a mild solvent. If this is not done, the system can become clogged and can result in engine overheating.

Engine compartment maintenance

When camping in remote areas, check the engine compartment for small animals that may have taken refuge for the night before starting your engine. They like the warmth of the engine compartment but will make a real mess if you start the engine while they are nestled in the fan shroud.

Preparation for and removal from storage

When storing your motor home for an extended period of time (60 days or more), and when removing your motor home from storage, the following steps should be taken to give it maximum protection.

Date placed in storage: _____ Mileage on vehicle: _____

PLACING IN STORAGE

- ___ Fill fuel tank and add a high-quality fuel stabilizer to the fuel. **Never** store with a partially full tank of fuel.
- ___ Change the engine oil and filter (used oil does not give adequate protection).
- ___ Cooling system was originally protected with antifreeze to -34° F. If colder temperatures are expected, adjust the mixture. If coolant has been in the vehicle for five years or 100,000 miles, flush the cooling system and fill with an appropriate mixture of antifreeze and softened water, and be sure that the coolant contains a rust inhibitor.
- ___ If it has been more than 18 months or 24,000 miles since the transmission has been serviced, change the fluid and filter.
- ___ Service the fuel filters.
- ___ Run the engine until fully warmed up.
- ___ Operate the air conditioning.
- ___ If possible, store the vehicle in a dry, well-ventilated area, protected from sunlight.
- ___ Check tires for damage and set tire pressure to maximum as indicated on the sidewall of the tire. Clean the tires using the normal, mild soap that you would use to clean your RV.
- ___ If possible, raise the vehicle onto safety stands. **Do not** store the vehicle on the hydraulic leveling jacks. Hydraulic jacks will "bleed" pressure over time, lowering the coach back onto the tires.
- ___ Cover tires to protect from heat and sunlight.
- ___ If possible, release the parking brake.
- ___ Remove and clean the battery. **Always disconnect the negative (-) cable first.** Store the battery in a cool, dry place and **keep it charged.**
- ___ Lubricate all grease fittings on the chassis and drivetrain.
- ___ Cover all engine and transmission openings with moisture-resistant tape.

REMOVAL FROM STORAGE

- ___ Remove covers from tires and thoroughly inspect the tires for damage. Inflate them to the correct pressure for the actual weight on the tires. Consult the Michelin Tire Guide for correct tire pressure. Weigh your coach if you don't know the coach weight.
- ___ Check for fluid leaks. Repair as necessary.
- ___ Check engine oil level. Add oil if needed.
- ___ Check coolant level in reservoir and radiator (**do not** open radiator cap on hot engine).
- ___ Check hydraulic fluid level in reservoir. Add fluid if needed.
- ___ Check engine belts for wear, damage or cracking.
- ___ Check engine fan for damage.
- ___ Check fuel/water separator. If empty, prime fuel system per instructions in your operator's manual.
- ___ Check engine compartment for nesting animals.
- ___ Check for leaks and damage to hoses and wiring.
- ___ Check rear axle lubricant level.
- ___ Lubricate chassis and drivetrain.
- ___ Check the charge level of the battery. Clean ends of battery cables. If batteries need to be removed or replaced, install a clean and fully charged battery. **Always connect the positive (+) cable first** and then the negative (-) cable. Coat the battery terminals and connectors with a protective sealant.
- ___ Turn the ignition to the RUN position. Verify that the fuel gauge and voltmeter are operating properly.
- ___ If stored on safety stands, lower vehicle at this time and set the parking brake.
- ___ Run engine until warm. Re-check for fluid leaks.
- ___ Check transmission fluid level using the Cold Check method in the Allison transmission operator's manual. Add fluid if necessary.
- ___ Check all exterior lights, and replace as necessary.

A “Little” light on the subject

DOAI member Carolyn Little’s light bulb collection is a tribute to Edison

Carolyn Tronolone Little has been fascinated by light bulbs since she was a little girl growing up in New Jersey.

“My grandfather had a really big machinist’s chest. As a little kid I’d reach in, and way in the back I’d find these tiny little light bulbs.”

She was overcome with fascination each time she sneakily held the bulbs in her small hands.

“They’re beautiful works of art,” she said.

Over the past 41 years, **Little’s** fascination for the delicate balloon-shaped objects — and for **Thomas Edison**, the man who created them — has become a life’s passion.

Little owns a historic collection of more than 1,500 light bulbs. As the 166th anniversary of **Edison’s** birth approached on February 11, 2013, **Little** reflected on her prized possessions.

She’s dedicated her office space to her collection, tucked away in a quiet corner of her home in Sun City Shadow Hills.

There are hand-blown pieces, bulbs with intricate designs painted on the surface, and colored bulbs large enough to light up a warehouse. One of the bulbs has traveled to outer space — a tiny electrode that spent eight days in space, on NASA’s space shuttle Challenger in 1984.

The heart of **Little’s** collection is comprised of 16 of her oldest bulbs, all dating back to the 1880s. Some of them have brass or wooden bases, an indication of their antiquity. **Little** is enamored with her growing collection, even now.

“I find myself sitting here many nights, and I just look at them,” she said.

Little used to search swap meets and garage sales to search for unique bulbs.

Her best trade yet? A light bulb straight from the personal collection of the American inventor himself. **Little** traded one of her bulbs with **Theodore Edison**, **Thomas Edison’s** youngest son. **Theodore** shopped around in his father’s personal collection after he passed. One of the bulbs ended up in **Little’s** hands.

The small black bulb sits discreetly on a shelf in her glass case. Although it blends in with the rest, the pride on **Little’s** face when she talked about the bulb reveals its rarity.

“That was my best trade ever,” she said.

“Her love for light bulbs has a lot of facets to it; it’s the history of light and how important it is,” **William Little**, **Carolyn Little’s** son, said. “She’s always stressing how important light has been to the development of our world.”

Though none of her bulbs have names, **Little** has made an exception for a soft pink bulb that resembles a hot air balloon, which she named, “Pink Beauty.” She imagines the antique light bulb once belonged to a prominent family like the **Vanderbilts**.

“I see it in a ballroom with many people dancing around,” she said.

For **Little**, each light bulb has a unique story to tell.

“It’s like a magic carpet ride. You just pick up one of the bulbs and you go there.”

Though her personal love for electric light bulbs will never waver, **Little** recognizes that their use is waning and is being replaced with LED and CFL bulbs, which use much less energy and are more cost-effective.

“LED bulbs use a tiny fraction of what an incandescent bulb uses. They last a lot longer as well,” **Vanessa McGrady** of Southern California Edison said.

“LED and CFL bulbs also don’t emit as much heat as electric bulbs, which cuts down on cost of air conditioning,” she said.

But **Little** hopes to carry on the legacy of the electric light bulb, in honor of **Edison** and his genius.

“I’m impressed with his mind,” **Little** said. “He was so creative.”

“She’s really a passionate person and she’s never wavered from her light bulb collection,” **William Little** said. “There’s something in her — her love for invention, her love for brilliant minds — it’s all wrapped into her love for **Thomas Edison** and for what he’s done.”

While many might question why **Little** would be so captivated by such a simple object, **Little** is quick to answer.

“They’re just fascinating. Try to think of a day without them.” ❖

Editor’s Note: Carolyn was interviewed by staff reporter Tatiana Sanchez of The Desert Sun. Charter members of DOAI, Carolyn and her husband, Bill live in Indio, Calif. The photos are by Jay Calderon of The Desert Sun.



Carolyn is reflected in the case that holds her large collection of light bulbs.



Carolyn holds the “Pink Beauty” bulb from the collection at her Indio home. She has hundreds of them on display.

DOAI free-to-members classified advertising

Detailed information about these Discoverys for sale (**including photos**) may be found at www.discoveryowners.com/classifieds.htm

Discoverys **FOR SALE**

2000 37G: 38k mi, clean, no pets/smoke, fully equipped, W/D, one owner. Chic Rideout; 352.598.6248 **\$31,000 OBO**

2002 37T: 154k mi, no smoke, always garaged, exc. cond., digital TVs w/custom cab., vinyl tile thruout. Frank McClermon; 417.883.8948; mcclfrnk@sbcglobal.net **\$54,900**

2002 37U: 54k mi, clean, with Roadmaster Blackhawk tow package. Sam Hatcher; 850.387.0105; samhatcher@cs.com **\$55,000**

2002 37U: 55K mi., perf. condition, no smoke/pets, new tank monitors, LCD TVs, batts. Dennis Peacock; 843-422-4959; dpeacock41@gmail.com **\$53,000**

2002 38P: Low miles, mint condition, always garaged. Ray Martin; 513.777.7507; franraymartin@cinci.rr.com **\$68,500**

2002 38P: 53k mi, garaged, no smoke/kids/pets, perfect condition, new LCD TV in front. Jim Todd; 636.448.3372; abrasv@aol.com **\$60,000**

2004 39J: 60k mi, 6 new tires, new batts, new pass. windshield, all maint. recs., no kids. Ray Wittschen; 609.408.9320; vetdream@comcast.net **\$75,000 OBO**

2004 39S: 43k mi, always garaged, no pets/smoke, excellent condition, front bra. Max Beidler; 731.431.3126; maxbeidler@charter.net **\$89,999**

2005 39L: 55k mi, new tires/batts, no smoke/kids, very good condition. Sue Garten; 847.366.8888; sgarten@netscape.net **\$98,000**

2005 39L: 47k mi, new tires/batts, no smoke/pets/kids, custom shades. Carrie Searle; 540.314.1745; msearler@comcast.net **\$90,000 OBO**

2006 39L: 47k mi, new tires/batts, W/D, no smoke, all maint. records, remainder ext. warr. David Soderberg; 970.209.8692; dsoderberg@frontier.net **\$90,000 OBO**

2008 40X: 28k mi, custom built for full-timing; optimal exterior storage; beautiful condition. Murray Hunter; 503.680.8315; huntermgs@msn.com **\$134,500**

2010 40X: 5k mi, 350hp Cummins, many upgrades, remainder of factory warranty. John Ward; 419.656.4929; cj2003vett@yahoo.com **\$161,000**

RV-related items **FOR SALE**

Carefree sun screens: Fits 2005-2007; three pieces plus wiper covers, like new. Orig. \$400. John Didich; 419.685.0494; jdidich@verizon.net **Best Offer + shpg.**

Brake Buddy Classic braking system. Includes Alert system. Will ship or have at Urbanna rally. Bob Angus; 931.624.3816; angusr@charter.net **\$500**

RV lot: Hilton Head Motor Coach Resort, S.C. Outstanding resort; walk to venues; close to beach. Dennis Peacock; 843.422.4959; dpeacock41@gmail.com **\$52,000**

Roadmaster braking system: Five years old, all parts incl. Can pick up in Penn. or I will ship. Bill Stiles; 610.799.3978; pirate40@gmail.com **\$700 + shpg.**

Washer/Dryer: Bendix model WDS1043M, never used. Henry Casey; 863.644.8503; hc Casey@juno.com **\$400**

Rear wheel cover: 2001 D, 47¾" wide, 31⅝" high. Robert Wilkins; 419.753.2502; nkvet@yahoo.com **\$200 + shpg**

DOAI applauds membership sponsors

DOAI is grateful to these fine dealers for supporting our club by paying for a year's membership for each purchaser of a **new or used** Discovery motor home:

Lazydays

800.500.5299

www.lazydays.com

PPL Motor Homes

.800.755.4775

www.pplmotorhomes.com

RV World

800.762.7448

www.rvworldyuma.com

Tom Raper RVs

800.727.3778

www.tomraper.com

If you would like to join this elite group or have questions, details are available from DOAI Membership Director **Portia Williams**. Call toll-free 888.594.6818

or send an email to

doaimembership@discoveryowners.com

Discovery Owners Association and Discovery dealers ...



... a cooperative venture with two-way benefits!



Chris Bryant, RVIA
Master Technician

Troubleshooting rooftop RV air conditioners

RV rooftop air conditioners pack an amazing amount of cooling power into a unit that is lightweight, will run off 120 volt AC power, and will survive the rigors and vibrations of over-the-road travel.

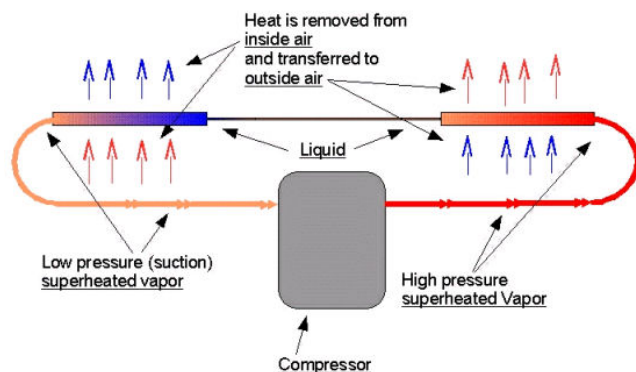
No matter which brand you have – Coleman, DuoTherm, Carrier AirV, Emerson Quiet Cool, or another – they all work on the same principal. To understand what can go wrong, let's first look at how they work, with some basic theory.

Theory of operation

Like a refrigerator, an air conditioner operates not really by cooling the air, but rather by removing the heat from it and dumping the heat outside. While this may seem like nit picking, it is a very important concept in the operation of the unit, and vital to understanding how it works.

The basic parts of an air conditioner are the sealed system (consisting of a compressor, a condenser, an evaporator, and the tubing used to tie it all together), the air moving system consisting of a motor (only one in a typical rooftop unit), and two fan assemblies (one to move air across the condenser, the other to move air across the evaporator). The sealed system contains the refrigerant, which in this case is R-22.

We will start the heat removal process at the compressor, which, as the name suggests, compresses the refrigerant (which at this point is a vapor), at the same time adding heat to it. This superheated vapor then travels to the condenser (the "outside coils"), at which point the heat that was added by the compressor is removed (by the air flow from the condenser fan), cooling the vapor and causing it to condense to a liquid. From here the liquid travels through a capillary tube, which regulates and restricts the amount that can flow through it, into the evaporator (the "inside coils"). The liquid refrigerant is then able to expand, but in order for it to expand, it has to absorb heat from the air being passed across it by the evaporator fan. As the refrigerant reaches the end of the evaporator, it has absorbed enough heat to vaporize it, and it turns into a superheated vapor. From here the suction side of the compressor pulls this superheated vapor in, compresses it, and the cycle starts over again.



Basic compressor-based refrigerant cycle

From this explanation we can see that there are only a few requirements for a properly operating air conditioner. A properly designed system (which is a given), a properly charged system (we'll get to that in a bit), and adequate airflow over the condenser and evaporator, so that the evaporator can absorb enough heat, and the condenser can dump the heat outside.

A major part of the refrigeration process is the fact that it takes far more energy (heat) to change a substance from one state to the other (by state, I am talking about solid, liquid, or gas). When talking about air conditioners, we measure energy in the form of BTUs. A BTU is the energy required to raise the temperature of one pound of water one degree Fahrenheit. Therefore, to change one pound of 32°F water to 33°F water requires 1 BTU. However, to change one pound of 32°F ice to one pound of 32°F water requires 144 BTUs. The same principal holds true with the refrigerant in air conditioners; the heat is absorbed in the process of changing the refrigerant from a liquid to a gas. If the unit is not properly charged, the change will take place too quickly, or not at all.

The reason that I point this out is not to have people run out and have their service man "check the Freon®" for two reasons: 1) the system is sealed with the proper charge from the factory, and the proper charge is usually around 13 ounces of R-22. With this small amount of refrigerant, if there is a leak in the system, odds are that it will be empty, and not just low; and 2) it takes a lot of care and a scale to weigh the refrigerant to properly charge one of these units. I'm not saying that it cannot be done with simple gauges, but the likelihood of getting a proper charge is very low, and 95 percent of the time the refrigerant charge is fine.

All right all ready – how do I fix it?

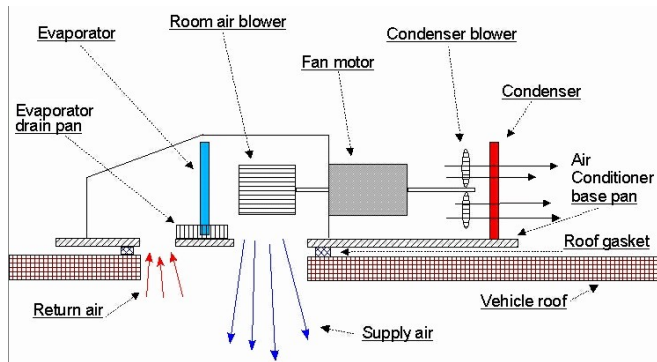
Now that we have seen how an air conditioner does the work, let's look at the mechanics involved. We can see that there are two main systems in a rooftop air conditioner: the sealed refrigeration system, and the air handling system. In addition to these systems, there is, of course, the control system (thermostat and fan switches). For the sealed system, all brands – Coleman, DuoTherm, Carrier, Intertherm, and others – work the same, using the basic principals of refrigeration.

In the sealed system, the main component is the compressor which, by itself, is not serviceable, but there are some components that are external to it which are serviceable. For now, let's look at the most common and easily repaired problems.

The one major compromise that rooftop air conditioners all have in common is the fact that they all have to route both the return and supply air through a standard 14" by 14" cutout in the roof. This is even more amazing when you realize that the average 13,500 BTU air conditioner has just over one ton of cooling capacity; a 15,000 BTU model is around one and one-quarter tons. A motor home or large trailer that has two 15,000 BTU air conditioners has two and one-half tons of air conditioning, or enough capacity for many houses.

Continued on next page...

Troubleshooting rooftop RV air conditioners, continued



The two most common complaints are “not cooling enough” and leaks. [Editor’s note: Please see Chris’ article on air conditioner water leaks in the July 2012 edition of this newsletter, **page 11**.] Let’s look at “not cooling” first – not blowing cold air.

The first thing to determine is if the compressor is coming on. If it isn’t, it is likely a control problem with the thermostat or relay board (if you have a wall-mounted thermostat). If the compressor is coming on, then you need to look into the airflow of the unit. Whether or not the compressor is coming on, you need to check the voltage. Like every appliance on board, the air conditioner needs adequate power to operate. If the voltage is 110 volts AC or below, the effectiveness of the unit will start to suffer. After verifying correct voltage, we need to look at how the air conditioner does its job. It requires adequate air flow over both the inside (evaporator) and outside (condenser) coils. If the air filter is clogged, refrigerant will not be able to pick up enough heat from the inside air, and if the condenser coils are blocked by leaves, it will not be able to give off enough heat to the outside air.

Most RV rooftop air conditioners have washable filters, which can be vacuumed or rinsed off in a sink to clean. If you are in summer weather where the air conditioner is running 24 hours a day, the filters should really be at least vacuumed once a week. Note that if the filters have been neglected, the evaporator coils probably need cleaning as well. These can be seen when you remove the air filters, and possibly the inside air box. Likewise, the condenser coils can be seen after removing the upper shroud. Note that some air conditioners

draw air in from the back, and some blow air out the back. You will need to determine which yours is, or just check both sides of the condenser.

An unavoidable drawback to being able to mount an air conditioner in a 14" by 14" roof vent cut out is that both the supply air and the return air are in very close proximity to each other. This can be a problem if the two are not sealed well from each other. If the cold supply air can re-circulate into the return side, the evaporator coil can easily freeze up, plus that is cold air that is just going to waste. Note that this is normally more of a problem with ducted type air conditioners than the standard exposed air box type, but it is something that you need to be aware of in all cases. A fairly easy way to check is to simply carefully put your hand into the return air duct and feel for cold air. If you can feel cold air, you need to take care of the air leak.

The last problem we will talk about is heat gain. One compromise that most RVs make is in the insulation department. After all, if they had 6" thick walls for good insulation, there wouldn’t be much living room left. So, in very hot weather, and direct sun, the amount of heat that the RV will pick up may be greater than the amount of heat the air conditioner will pump back out. In this case, shade is the answer! Whether you use an awning, or an oak tree, keeping the direct sun off the RV in very hot weather will greatly increase your comfort. ❖



© 2011, Christopher D. Bryant, Bryant RV Services LLC, DeLand, Fla. Reprinted with permission. Bryant RV Services, owned and operated by Chris and Patti Bryant, was established in 1991. Chris earned his RVIA Master Technician certification in 1998, and has maintained the certification, as well as attending factory training by Dometic, Norcold, Carefree of Colorado, Winegard, KVH, and many others. They continue to offer the best, honest and fairly-priced service, with many customers driving hundreds of miles for service. By specializing in coach systems and appliances, and doing no chassis work, they are able to keep the quality of work at a very high standard, though not wanting to hire helpers keeps the couple busy nearly around the clock. Check out their websites: <http://bryantrv.com> and <http://rx4rv.com>.

Feeding the RVer

Neva Jardine shares a favorite recipe, taken from her Biggers’ family cookbook, which belonged to her mother. This easy-to-make treat is perfect for your Discovery kitchen!

Blueberry Crunch Cake

Heat oven to 350° F. Butter or Pam® spray a 9"x13" baking dish. Spread the following in layers in this order:

- 1- 20 oz. can crushed pineapple (undrained)
- 3 cups blueberries (fresh or frozen)
- ¼ cup sugar
- 1 box yellow cake mix
- 2 (½ lb.) sticks margarine or butter, melted

- 1 cup pecans, chopped
- ¼ cup sugar, sprinkled over the top



Bake 40-50 minutes or until it tests done. Increase baking time if the blueberries are frozen. After 20 minutes of baking, take a fork and punch holes in top so the blueberries will come through. ❖

Travel humor

In the last issue, we published photos of signs that, upon second glance, contain a bit of humor. Here are a couple more. In your travels, if you come upon a sign that makes you chuckle, take a snapshot and email it to the editor (and feel free to add your own humorous caption). These photos are reprinted with permission of CampsitePhotos.com. ❖



If you're old enough, you may remember the radio show "Duffy's Tavern." Each episode began with a man answering the phone, "Duffy's Tavern, where the elite meet to eat. Duffy speaking." I guess this isn't **that** Duffy's.



Of course, questions must be asked: What is an unnecessary noise? Could it be the RV engine starting? Could it be a cat fight? I suppose the honk of our Discovery horns would surely not pass muster. Oh well, shhhhhhhh.....

Discovery Owners Association, Inc. membership application

Discovery Owners Association, Inc. is a premier non-profit organization intended to foster social opportunities and information exchange among all members.

Membership classifications:

Regular - a private individual owning a Discovery motor home. **Dues** (payable in U.S. funds only): **\$20** for the first year (includes one-time **\$4** administrative fee); **\$16** for one-year renewal; **\$45** (**\$49** new members) for three years; **\$75** (**\$79** new members) for five years.

Commercial - Discovery dealer, RV campground/resort, or an RV-related for-profit business. **Dues** (payable in U.S. funds only): **\$20** per year, or **\$75** for five years.

Questions? Call DOAI Membership Director toll-free 888.594.6818

Mail the form below with your check payable to *Discovery Owners Association, Inc.* to: **Portia Williams, Membership Director, PO Box 95, St. George UT 84771-0095.** You may also join/renew online at www.discoveryowners.com

Last Name _____ First _____ Spouse/Partner Name _____

Business Name, if joining as Commercial Member _____

Address _____

City, State/Prov., ZIP+4/Postal Code _____

Home Telephone _____ Cell Telephone _____

Email Address (check box on right for electronic newsletter) _____

Discovery Year/Model, if joining as Regular Member _____

Who recommended DOAI membership to you? _____

Check enclosed for \$ _____ representing (check one): One year Three years Five years

From the Mountains to the Ocean



DOAI 2013 National Rally

From the Mountains to the Ocean

October 8 through 12, 2013 (Depart October 13)
 Bethpage Camp-Resort, Urbanna, Virginia
 Latitude 37.6489 — Longitude -76.5854

REGISTRATION FORM

Enter information as you want it to appear on your rally name badge

Pilot's Last Name _____ First Name _____
 Co-Pilot's Last Name _____ First Name _____
 Street _____ City, State/Prov., ZIP+4/Postal Code _____
 Home Phone _____ Cell Phone/s _____
 Email/s _____
 Emergency Contact/s _____ Emergency Phone/s _____
 DOAI # _____ DOAI Region _____ Chapter to be parked with _____
 Need handicap parking? Yes No First national rally? Yes No
 Guest/s Name, City, State _____

REGISTRATION:

\$350.00 per coach with two adults (October 8 through 12) \$ _____
 \$275.00 per coach with one adult (October 8 through 12) \$ _____
 \$75.00 each additional person/child (October 8 through 12) × ____ person/s = \$ _____
 \$35.75 pre-rally (up to three nights beginning October 5) × ____ night/s = \$ _____
 Arrival date _____
 \$20.00 DOAI membership (if not already a DOAI member) \$ _____
 \$45.00 per day golf cart for your rally site
 Start date _____ × ____ days = \$ _____

OPTIONAL TOUR, GOLF TOURNAMENT, EXCURSION:

Wednesday, October 9 – Williamsburg Tour (includes transportation) \$50.00 × ____ person/s = \$ _____
 Thursday, October 10 – Golf Tournament (includes golf cart) \$45.00 × ____ person/s = \$ _____
 Thursday, October 10 – Fishing Excursion (includes equipment) \$50.00 × ____ person/s = \$ _____

MAKE CHECK PAYABLE TO: DOAI Total \$ _____

MAIL CHECK AND REGISTRATION FORM TO:

Alice Ricciardi, Registrar, 477 The Gardens Dr, Crossville TN 38555-0301

Questions? Contact Alice (252-619-7198) or John Ricciardi (252-619-6485); jonaL135@yahoo.com

REGISTRATIONS MUST BE RECEIVED BY MONDAY, SEPTEMBER 7, 2013

Full refund cancellation may be made up to Sept. 7, 2013 – **AFTER SEPTEMBER 7 – NO REFUND**

→ → → KEEP A COPY FOR YOUR RECORDS ← ← ←

You will receive a confirmation of your registration via email.