



THE MONITOR



ECARS Web Page www.qsl.net/ecars

The official publication of the East Coast Amateur Radio Service, Inc.

Happy New Millenium from ECARS

Season's Greetings

by Ike Meredith, K1VBD *ECARS President*

Seasons Greetings to all ECARS members. It's hard to believe that another year has come and gone. Of course with this New Year, we will enter a new century, and I'm anxious to see what it will bring.

The changes that have taken place in our hobby within the last century are truly amazing. Think back to the state of the art only a few years ago, and compare it to what we take for granted today. Of course the one thing you will find in almost every shack today is the computer. This powerful tool which enables me to type this column, correct my spelling, and send it to Mike NIVE. I can look up call signs, check out radio equipment from all of the major suppliers, and check many sources for ham news. I can log contacts, get addresses and beam headings as well. These are just a few of the computer applications that amateur radio operators deal with on a regular basis. It was predicted by some that computers would become the demise of amateur radio. So far this has not been the case, and I don't think it will be. Ham radio has endured from the beginning of man's use of radio waves, and I think it remains popular because of the thrill of the hunt. It doesn't matter whether you're talking across town or around the world, you will always find new and interesting people to talk with.

This is exactly what we on ECARS have been doing for more than a quarter century. We bring people together and help them, whether they are travelling and need weather

Continued on page 2

ECARS Y2K Reunion

by Richard G. Murray, WB3FWL

Once again it's time to start thinking about all the good times in "paradise" and to begin planning for a weekend of fun with your ECARS friends. You talk with them on the air, and now you can celebrate with them in Ocean City, Maryland. Yes that's right, your host Richard WB3FWL, who lives in "the land of pleasant living", will lead you to that great place. Scheduled for the weekend of April 13th-17th, 2000, this annual event will be available as either a two of a four-day weekend.

Continued on page 5

The Fantastic G5RV

by Jerry Wohlgemuth, WA4SOF

The Pennsylvania Dutch have a saying, "We grow too soon old and too late smart".

Two things that I learned after retirement and moving to the Oil City area of Pennsylvania was what a great antenna the G5RV is, and what nice tools a sling shot and fishing reel make for installing it. My antenna sits atop two seventy-five foot oak trees.

I thank both Phil K1HQ and Jim W3KMN for their expertise and furnishing me with information, the characteristics, and various installation configurations of the

Continued on page 4

Radio Storyteller Dies

Mark Grossman K2LON sent us the following information about Jean Shepard K2ORS, who spoke at various ARRL conventions.

Jean Shepard, America's great radio story teller died recently at a hospital near his home in Sanibel Island, FL.

Shep was best known for his late-night radio shows, on which he spun long, golden tales of adventure, real and imaginary. He could pull stories out of thin air, keeping his thousands of listeners glued to their radios throughout the long hours of the night.

Born in Hammond, Indiana, he served in the Signal Corps during World War II and attended Indiana University before launching his radio career as host of "Rear Bumper". Moving from Chicago to New York City, Shepard spent 21 years on the 50,000-watt WOR-AM, attracting a loyal following along the East Coast.


Though best known for his radio work, Shepard excelled as a multimedia performer. His films included the 1983 classic "A Christmas Story, which he wrote and narrated, and which is televised every Christmas. Other films include, "The Light Fantastic" from 1963; Lenny Bruce Without Tears", and "My Summer Story, 1984. His books include "The Ferrari in the Bedroom", "In God We Trust, All Others Pay Cash", and "A Fistfull of Fig Newtons".

Season's Greeting from page one

information or just in need of companionship. We introduce people who might not otherwise meet and friendships are born. If you mention that you need technical assistance with a rig, antenna, etc., people with experience will jump in and offer help.

I have only been a part of this experience for a few years, but they have been great years and I am proud to have had this opportunity to be part of a wonderful organization. I want to take this time at the end of the century to say thanks. Thanks to every one of you who make our net what it is. Thanks for always being there.

I would like to add a special thanks to the Net Manager and all the Net Controllers. You are the ones who give your time to keeping ECARS going. You people do a super job. Keep up the good work. And to all you who listen and/or check in, try your hand at net control once in awhile. It's fun and it's rewarding.

In closing, I'd like to wish you Merry Christmas, and a Happy New Century. See you in 2000, and thanks for being there. 

In the Beginning

By Albert Himmel, K2PUX, West Seneca, NY

Graduation from high school in 1942 was not an event to generate much joy in Mudville. The war now seemed interminable, and the draft loomed eternally over every eighteen-year-old who could breathe. After a summer of youthful loafing, I learned that if one worked in a defense plant, it was possible to avoid the latter and perhaps survive the former. Bickman's made galleys for the victory ships being mass-produced, and night work craters were in demand. It was then that my father gave me a key to the four-room manse, which the family occupied. I felt that I had come of age.

After two months of night work, I managed to get promoted to day work on the loading platform. It was a great job. I loaded the galleys on a truck, climbed on the back with the galleys and rode to the shipyards in Brooklyn, Hoboken, and Perth Amboy. The drivers often financed stops for coffee, and waving to pretty girls was mandatory. Steel tipped boots, leather gloves, and a nickel raise proclaimed my manhood. Unfortunately it all went to my head. I stayed out after one in the morning and the old man took my key away. I got even. I enlisted in the army.

They sent me to radio school at Camp Crowder, MO. All because I passed some silly code test that they gave me at the induction center. Did piano lessons do that to me? Soon I was up to thirty words per minute and it was off to Ft. Monmouth for high-speed school with a mill (that's a typewriter, and yes I had typing in high school). It could have gotten me killed. I soon became an instructor and played on the baseball team. Safe at last. Little do teenagers know about wisdom. They gave some tests to selected individuals and I must have guessed right on the hard questions so they sent me to ASTP and Syracuse University. However they folded that program so they could have fodder for D-Day at Omaha Beach.

Whoever selected Omaha Beach sure didn't think about the GIs. Yes I made it up that cliff, but only because I was about sixty days late. I was now the chief operator in a combat engineer battalion. Radio silence was in order, since one dit could induce a pop or two from the Krauts. All the way to the Elbe River we set up our radio and maintained radio silence. I did have the honor (T/4s were expendable) to do radio watch with a walkie-talkie on a bridge that the men built across the Roer River. How did we win the war? All I saw for two days was a flock of sheep, and every hour I said three words "all's clear". This then is the stuff of which this ham is made. ECARS is merely an outlet for all the money Uncle Sam has invested to get me up to thirty words per minute..... I never touch the stuff now.

Creative Solutions

By Jim Sipprell K2HYQ, White Pine, TN

When you read the many antenna books as well as selective back issues of 73, CQ, QST etc., you begin to realize that the size of your lot, either front yard or back, is not a deterrent to getting a decent signal out on the lower bands. Surely if a 160-meter antenna can be successfully erected in an area as small as 6 feet x 6 feet, a 40-meter version should be a snap. Just how much flack you'll get from the neighbors (not to mention a semi-sympathetic XYL), depends on how you describe this odd looking addition at the very beginning of the project.

First of all, the word "antenna" is not the most favored term. Really folks, lets face it. We're dealing with people who are pre-conditioned to believe that any wire, pole, tower, beam etc., will attract deadly bolts of lightning and will kill them in their sleep. After 40+ years of attempting, I can emphatically state that no amount of explanation of how lightning rods actually work will dissuade them!

What's the alternative you ask? Simple! **BIRDS. YES BIRDS!**

Fact: Birds are loved and protected by even the least enlightened members of our society. Think about it. Haven't you noticed the recent explosion of "wild bird" stores popping up in shopping centers and strip malls? Opportunity has arrived fellow hams, its time to be creative! We are no longer putting up "antennas", we are building bird perches, bird launches, bird stations, bird rests, bird holding centers, bird sanctuaries, migration platforms, and even some ultra modern bird feeders. **YES!** Who in their right mind would complain about such a noble venture? There is an additional step required however if we hope to convince everyone that our ornithological commitment is for real. Yep, we must erect a real bird feeder with a squirrel guard in a conspicuous location (not in the way of any future dipoles, for instance). Now this insurance is not without cost. An adequate supply of sunflower seeds is a must. The birds will show up and our multi-wire loops will go up. With cable TV just about eliminating the TVI problems of yesteryear, lets face it folks, we've never had it so good.

For CW Buffs

From the Fists CW Club newsletter, Keynote
This is fun to send. Try this one.

Bens Best Bent Wire XiXiXi/4

Sent to us from Chuck Fowler, KU4EV, Tapon Springs, FL

OPEN Letter to Fellow Members.

Jim Sipprell K2HYQ, White Pine, TN

Greetings ECARS friends. Retirement has finally arrived and with it, all the benefits and small pleasures that eluded me during my tour in the working world. Yes, operating when the mood strikes me is delightful. Being able to sit down and write this note (undisturbed) is such a joy. Long overdue however.

Growing up in our hobby as a "kid", then a "lid", and then a "space cadet", has afforded me a chance to meet the best and a few of the "not so hot" operators in this fabulous avocation.

ECARS is without a doubt the best self-maintained semi-organized group of first class operators that I've been associated with over these past 45 years on the air. (No, I'm not ready to join QCWA yet thank you). It has been such a treat to meet and visit with some of you during my working "on the road" years. My sincere thanks go to many of you for your hospitality.

Some of you who work DX have noticed the fantastic openings on the upper bands, but have you listened to the CW end of 40-meters lately? The CW story in the October issue of the *Monitor* was interesting. However, there is an entirely new dimension to the value of CW that has arrived in my world. First some background. To say that my XYL is a light sleeper would be no exaggeration. Her ears are so sensitive at night that she can hear a flea crawling across the back of our neighbor's black lab over 300 feet from our bedroom window. She says it's the 36 years of raising four kids at five different QTH's. So to answer the question from our newer members, "Why is CW still useful in this age of the Internet?" The answer is, to maintain some degree of domestic tranquility of course.

PS Additional suggestions for this never-ending tranquility quest will be gratefully appreciated!

In Memoriam

(Sequel to Ecars Monitor Article Dec, 1998)

by Roy Anderson, W1CRD Woodbridge, VA

Phillip E. Kern, WA4UJJ, became a Silent Key on November 29, 1998. Phil was struck by a vehicle last year while walking in Florida. He was ECARS Director for 1994, 1995, 1996, 1997, and 1998. Phil's dad was active on ECARS for many years.

Edward "Ned" Kern KA4FCX became a Silent Key on June 8, 1999 at Colonial Beach, Virginia.

Together again - may Phil and Ned share eternal peace at the best antenna location known to man! I'm proud to have known both of them during my lifetime.

G5RV from page one

G5RV.

I would not use this antenna without an antenna tuner. The antenna will probably resonate somewhere on each band, but probably not in the location that you want to use, though you may get lucky.

I paid \$50.00 for my G5RV, which came completely assembled, including insulators, about seventy feet of RG8X 50-ohm coax. A PL-259 connector was included, but not attached to the coax, allowing me to route the coax to the shack without drilling a large diameter hole.

More information can be obtained from Phil's web site or by contacting either Jim or me. For example, did you know that the dipole section of this antenna is 102 feet long, but can be shortened to only 82 feet by letting 10 feet at each end hang straight down. This will not change the characteristics of the antenna or its transmit and receive capabilities. If you ask around on the ECARS frequency, you will be surprised to hear how many of our check-ins are using the G5RV.

Now for the installation

I went to the local hardware/sporting goods store and bought the most expensive sling shot available with the wrist support. This set me back \$10.95. Next I stole a Zebco fishing reel off my wife's fishing pole. The cost was free, but I paid for it by not getting dinner that night. I suggest that you buy one. I then made a bent bracket out of an old curtain rod and taped one end to the sling shot handle. I mounted the reel on the other end. Be sure to have enough 15 to 20 pound fishing line in the reel to reach over the tree and back down to the ground. I used a one-ounce sinker at the end of the fish line to shoot over the tree. I painted the sinker red, with my wife's fingernail polish so I could see it better. The fingernail polish came with her blessings, just to get me out of the house. I shot the sinker over the tree. Don't try to get it over a particular branch. It will settle down in the branches and will probably be higher than you planned.

After I got the line where I wanted it (this took a few tires). I removed the sinker and tied a light (about 1/8 inch diameter) nylon line to the fishing line and reeled it back up the tree. Again, the nylon line must be twice as long as the tree is tall.

After I completed this procedure on two trees, I was ready to raise the antenna by attaching the ends of the antenna to the nylon lines and pulling it up into the air.

If you decide to give this this method a try, contact me on 7.255 MHz and let me know how you made out. 🙌

Holiday Antenna Nuts

By Jim Sipprell K2HYQ, White Pine, TN

Two Christmas' ago the wife of my best friend called and asked me for some gift ideas with a "radio" theme for her OM. "Gladly", I told her. However, she was shocked at my suggestions. Being a fairly new XYL (their 2nd marriages), she had no concept of just what kinds of things make most of us excited.

"Wire", she exclaimed. "Are you serious?"

"Trust me dear lady". "He'll absolutely flip". "Now, if you add to that a copy of the newest ARRL Antenna Compendium, he will know he's got the most wonderful XYL on the planet".

Now, we all know what happened on Christmas morning right? You can just picture it. Members of both their families gathered around the tree, watching as he slides the last beautifully wrapped box out from under the tree and opens it. The air was so tense with anticipation you could hear a pin drop. Out comes these three magnificent rolls of the finest 12 gauge stranded copper antenna wire imaginable.

Silence! Mouths and eyes wide open with expressions of disbelief on the faces of all her children. Then my friend breaks into a smile so broad that even his own kids were certain he'd finally gone over the edge. "Fantastic! Fantastic! How did you ever guess? It's exactly what I've always wanted dear".

Now what happened next is even more surprising. However, out of respect for our thirty-nine years of friendship, I can not reveal the details without his permission.

The headline might read, "XYL Discovers What 1000 Feet of Antenna Wire Turns Into".

Stay tuned folks

A Few Gentle Reminders

By J.R. "Mac" McDonald ND30, Mechanicsburg, PA

I have been asked to bring the following to your attention.

Procedural Words are Being Misused on Net

Break is to be used only in emergency situations.

Contact is used if you wish to talk to a station that you have heard or is known to be on the frequency. For lengthy conversations move to some other frequency with your contacted station.

Recheck is used if you have lost the station with which you have previously contacted. It is only used to get back into the net. Return to the Net only when the net control station asks for check-ins.

Relay is used if you can hear a station that can not be heard by the net control station. Give the net control station your call and wait to be recognized as a relay. Relay

Continued on page 5

Gentle Reminders from page 4

otherwise causes doubling and confusion.

Info is used if you have information pertinent to the net activity.

Query is used if you have a question pertaining to net activity.

To all ECARS net control stations:

“A little nonsense now and then is relished by the best of men”, but don’t over do it.

Please do not ignore you check-in list while you become involved in a long winded conversation. If you do, your potential check-ins may go away. I do. 🙌

ECARS Reunion from page one**Reservations**

Individuals will be responsible for making reservations with the Paradise Plaza Inn. The toll free number is 1-888-678-4111. Reservations must be confirmed by no later than March 20, 2000. Be sure to identify yourself as being a member of the East Coast Amateur Radio Service, so you can receive the negotiated rate of \$72.00 (plus tax) per night for double occupancy. The rooms have a beautiful view overlooking the ocean and the boardwalk.

We have reserved a block of 25 rooms, and after the 20th of March, the Paradise Inn will release any remaining rooms in our block to the general public. Reservations made after the 20th of March will be subject to availability. To guarantee a reservation, the room fee for one night, including tax, must be sent to the Paradise Inn. Cash, check, or major credit card may be used.

The buffet

Everyone who attended the buffet last year will attest to the great food. The all-you-can-eat buffet will be held on Saturday evening at 6:00. The cost will be that same as last year, \$29.00 per person, including tax and tip. Please note: because the restaurant is not under the same management as the Paradise Inn, do not send your payment to the Paradise Inn for the buffet. Send your check made out to “Richard G Murray” to:

Richard Murray
1811 Mt. Hermon Rd.
Salisbury, MD 21604-9400

More Information

I can assure you that you will be treated to a weekend of fun, as you were last year. So let’s get started with plans for the event now. To learn more about the ECARS reunion in 2000, contact me “WB3FWL on ECARS net (7.255 MHz), or by email at rgmurray@ezy.net

73 and I’ll be looking forward to seeing you in

ULS Registration 101

It Doesn't Get Any Simpler Than This
 by Rick Lindquist, N1RL, with assistance from
 Bart Jahnke, W9JJ

December 2, 1999

The FCC says only a small minority of the Amateur Radio population has registered in the FCC's Universal Licensing System, which was deployed for the Amateur Service on August 16, 1999. If you're unregistered because you're not sure how to register, here's a ULS primer for those registering on-line. In response to requests from the amateur community for simplified, yet detailed, steps to register for the ULS, the ARRL offers the following procedure for individual Amateur Radio licensees: (INTERNET EXPLORER WORKED JUST FINE FOR ME)

Start Netscape Communicator ver 4.5 or later. (Other browsers may work, but the ULS supports only Netscape. It's available free at <http://www.netscape.com> --click "Browsers"). The FCC indicates that the following browsers have been tested and are presently compatible with ULS: Netscape Communicator vers 4.7, 4.61, 4.51 and 4.5. (Note: Your computer must be equipped with a 32-bit operating system such as Windows 95, Windows 98 or Windows NT). Go to the Universal Licensing System home page, <http://www.fcc.gov/wtb/uls> Click "TIN/Call Sign Registration" on the main ULS screen. On the next screen, check "Register Now" and click "Continue". On the next screen, check "An Individual" and click "Continue". upper left. Complete only the "Licensee Information" part of the form--the top part. You do not need to complete "Contact Information." (That's designed for those who deal with the FCC via a communications law firm or other third party.)

The "Taxpayer Identification Number" or "TIN" is your Social Security Number. Enter your SSN without any hyphens or spaces (i.e., 123456789). Complete your name and address information. First name, middle initial, last name, and any "Suffix" such as "Sr", "Jr", or "II", as appropriate. You may provide a PO Box address, a street address, or both. You must include a ZIP code. The system will detect if the ZIP code does not match the state provided.

Form 606 still requires you to put something in the telephone number field, even though the FCC has said that a telephone number is not now required of amateurs and that it will not make telephone numbers public. If you do not wish to give the FCC your telephone number, you can fill this field with zeros or with your area code plus 555-1212. A fax number is not required. The FCC does not require an e-mail address, so if you prefer not to provide it, leave that field blank.

Once you've provided all the "Licensee Information" scroll down to the bottom of the screen. At the bottom of the screen you must pick a password of at least five

Continued on page 6

ECARS Election Results

President	Ike Meredith, K1VBD	98 votes
Vice President	John Calise, W2LKS	55 votes
Vice President	Phil Simmons, KU4GP	42 votes
Secretary/Treasurer	Charles Stampf, N2CJ	65 votes
Secretary/Treasurer	Phil Morrissey, K2HQ	31 votes
Director	George Sadlon, W2ZZJ	41 votes
Director	Henry, Povall, WB2RJO	30 votes
Director	Bob Turner, KA3HBB	22 votes

Congratulations to the newly elected ECARS Officers.

Registration from page 5

characters. We recommend that you do not use your call sign for this. Enter your new password in the "New Password" field. The characters you type will be displayed as asterisks (*) on the screen, so type carefully. Verify the password you've selected by entering it again in the "Verify Password" field. Again, the characters you type will be displayed as asterisks (*) on the screen. Type in a personal identifier in the next field. The FCC suggests using your mother's maiden name, but any word or name you prefer will suffice, provided it fits the field.


If you click "Notice to Individuals" it will tell you that everything but your Social Security Number will be available for public inspection. The FCC has told the ARRL that it will not make telephone numbers or e-mail addresses public. We have no reason to date to believe that this has not been the case. Once you're happy with your choices, click "Submit".

If you leave out anything or make an error, the ULS will list "Error(s)" when you attempt to submit the form. If this happens, go back and correct the errors identified and click "Submit" again.

Once you have the form correctly completed, you'll be asked to submit your call sign(s). Click "Enter Call Signs" and follow the directions. If you are not yet licensed (you don't have a call sign yet) you can click "Continue" without entering a call sign. If you have no call sign yet, skip over the next item. You should now be on the screen that requests you to enter your call sign(s). Enter your individual Amateur Radio call sign in the first space provided. If you are a club station trustee, you may enter your club station call signs, but this is not necessary. The FCC requires a separate registration and an Assigned TIN for club stations.

Once your call sign(s) are entered, click "Submit" at the bottom of the form. You now should be registered in the ULS. Your screen should display a form that shows your "Licensee Information" (name, address, etc) as well as

Licensee ID Number, personal identifier and password. It's a good idea to print this screen and keep a copy in your files for safekeeping (primarily in case you forget your password).

That's it! You're done! You're now registered in the Universal Licensing System. ULS registration is required before amateurs can transact business (i.e., file applications, renewals, vanity call sign requests, address changes, etc) with the FCC. 

CW is not Dead

Chuck Fowler, KU4EV, Tapon Springs, FL

The Fists CW Club encourages newcomers and old timers to use CW as a mode of communication. This organization is dedicated to preserving CW for ham radio. If you need help with your CW they will find a buddy to practice with you. You will find members on frequencies ending with x58 on most of the HF bands. If you are interested in CW drop a note to Nancy Kott, WZ8C, P.O. Box 47, Hadley, MI 48440 and ask for information. I know there are several members who meet on South CARS net, and probably ECARS net as well. Give it a try. Enjoy it.

Roll Call

Don't forget to tune to 7.255 MHz at 11:00 AM on the second Saturday of the month for ECARS roll call. All members are encouraged to check in and show your support for ECARS.

ARES Principles of Disaster Communication

It is impossible to state exact rules that will cover every situation that arises. The good amateur, faced with a disaster situation may, however, benefit greatly from certain rules of thumb. These rules are, or should be, part of his/her training in his/her ARES group. They are presented here somewhat at random and should be reviewed by all amateurs, even those not active in disaster communications preparation.

1. Keep the QRM level down. In a disaster, many of the most crucial stations will be weak in signal strength. It is most essential that all other stations remain silent unless they are called upon. If you're not sure that you should transmit, don't. Our amateur bands are very congested. If you want to help, study the situation by listening. Don't transmit unless you are sure you can help by doing so. Don't ever break into a disaster net just to inform the control station you are there if needed.

2. Monitor established disaster frequencies. Many localities and some geographical areas have established disaster frequencies where someone is always (or nearly always) monitoring for possible calls. When you are not otherwise engaged, it is helpful simply to sit and listen on such frequencies, some of which are used for general ragchewing as well as disaster preparedness drilling. On CW, SOS is universally recognized, but has some legal aspects that should be considered where the need is not truly crucial. On voice, one can use "MAYDAY" (universal, the phone equivalent of SOS) or, to break into a net or conversation, the word "emergency."

3. Avoid spreading rumors. During and after a disaster situation, especially on the phone bands, you may hear almost anything. Unfortunately, much misinformation is transmitted. Rumors are started by expansion, deletion, amplification, or modification of words, exaggeration, or interpretation. All addressed transmissions should be officially authenticated as to their source. These transmissions should be repeated word for word, if at all, and only when specifically authorized. In a disaster emergency situation, with everyone's nerves on edge, it is little short of criminal to make a statement on the air without foundation in authenticated fact.

4. Authenticate all messages. Every message, which purports to be of an official nature, should be written and signed. Whenever possible, amateurs should avoid initiating disaster or emergency traffic themselves. We do the communicating; the agency officials we serve, supply the content of the communications.

5. Strive for efficiency. Whatever happens in an emergency, you will find hysteria and some amateurs who are activated by the thought that they must be "sleepless heroes." Instead of operating your own station full time at the expense of your health and efficiency, it is much better to serve a shift at one of the best located and best-equipped stations, suitable for the work at hand, manned by relief

shifts of the best qualified operators. This reduces interference and secures well-operated stations.

6. Select the mode and band to suit the need. It is a characteristic of all amateurs to believe that their favorite mode and band is superior to all others. For certain specific purposes and distances, this may be true. However, the merits of a particular band or mode in a communications emergency should be evaluated impartially with a view to the appropriate use of bands and modes. There is, of course, no alternative to using what happens to be available, but there are ways to optimize available communications. Long experience has developed the following advantages:

CW Mode

Less QRM in most amateur bands. Secrecy of communications (contents of communications are much less likely to be intercepted by the general public to start rumors or undue concern). Simpler transmitting equipment. Greater accuracy in record communications. Longer range for a given amount of power.

Voice Mode

More practical for portable and mobile work. More widespread availability of operators. Faster communication for tactical or "command" purposes. More readily appreciated and understood by the public. Official-to-official and phone-patch communication.

Digital Modes

Advantages (1) and (2) of CW, advantage (2) of voice mode, plus greater speed in record communication than some of the other modes, and--in most of these modes--error detection. In addition, digital modes offer the potential for message store-and-forward capability from within the disaster site to the "outside world." Finally, packet provides the capability of "digipeating" messages from point A to point Z via numerous automatically controlled middle points.

The well-balanced disaster organization will have CW, phone, and digital mode capabilities available in order to utilize the advantages of each. Of course, one must make the best use of whatever is available, but a great deal of efficiency is lost when there is lack of coordination between the different types of operation in an emergency. Absolute impartiality and a willingness to let performance speak for itself are prime requisites if we are to realize the best possible results.

7. Use all communications channels intelligently. While the prime object of emergency communications is to save lives and property (anything else is incidental), Amateur Radio is a secondary communications means; normal channels are primary and should be used if available. Emergency channels other than amateur which are available in the absence of amateur channels should be utilized without fear of favoritism in the interest of getting the message through.

8. Don't "broadcast." Some amateur stations in an

Continued on page 9

Missing Monitors

If any ECARS members do not get the Monitor, please contact ECARS secretary for a copy. Also, new ECARS members must obtain their copies from the secretary. Please do not contact the publisher or the editor for copies of the Monitor.

Thanks for your Help

Thanks for those who contributed to this issue of the Monitor. You really made a difference. ECARS members contributed many excellent articles. Please continue to send me articles so we can continue to publish a newsletter that is interesting and informative.

Mike Stone, N1VE
32 Carriage Rd
Gilford, NH 03246
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Rechargeable AA's Just Got Better

by Jim Cluett, W1PID, Sanbornton, NH

Several battery manufacturers have just introduced more powerful rechargeable AA Nickel Metal Hydride (NiMh) batteries. You can now get standard size AA batteries rated at 1500 mAh.

If you put these in an AA pack in your handie, you'll probably get better performance per size and weight than the battery pack that came with your handie. The extra capacity represents an improvement of 20 to 25% over what was available a few months ago.

When they were first introduced, several years ago, NiMh batteries were rated at around 800 mAh. Then they were increased to 1200 mAh and they became very useable. Now they're even better. They're good enough to use in a digital camera. I use them in several handies.

The Advantages

NiMh batteries have quite a few advantages over NiCd. They don't show the so-called memory effect. They can be charged anytime and they don't need to be drained periodically to keep in optimum condition. They also have a longer shelf life before self-discharging. They're generally rated at higher capacities and they're non-polluting. A quality battery will take at least 500 charge cycles.

If You Need High Voltage Try Rayovac Renewals

Remember that NiMh AA batteries are rated at 1.2 volts and not 1.5 volts. If you need a rechargeable that's a full 1.5 volts, try the Rayovac Renewals. These batteries have an incredible shelf life and will hold their full charge for months before use. The Renewals won't perform well for

applications that require a lot of current though. The Renewals need to be charged before they're exhausted, or their life will be severely shortened. Never deep discharge a Renewal and be sure to charge it often. They require a special charger but are available at most drug stores.

How To Charge NiMh

The charging characteristics of NiMh are slightly different than for NiCd so you need a charger that is designed for NiMh. Typically both voltage and current are limited. The less expensive chargers put 3 VDC at 240 mAh (charges two batteries at a time). The charge time can be calculated manually by dividing the battery capacity by the charge rate. If you leave the battery in too long, it's not a big problem with the charger just described. These batteries can easily take a charge of 1.5 volts. When they reach that voltage the current drops to nothing.

I charge mine with a solar charger. I put 7 volts on 4 batteries (1.75 volts each). I calculate the time needed to charge them and remove them from the charger. Typically I leave them on charge for four hours or so.

The Maha Charger

When there isn't any sun, I use my Maha Universal 777 charger. I put four batteries in a holder (Radio Shack has them) and I use the optional Maha alligator clips. The Maha charges them in less than an hour. It has a three-stage charge and always does a perfect job. When the charger beeps to tell me they're done, the voltage measures about 1.43... that's exactly correct.

Where to Get the New Batteries

I know of three sources for the 1500 mAh batteries. Their web address is www.yessolar.com or call 800-937-7652. I've bought 1300 mAh batteries from these people. I've been using them for three years and can vouch for their quality. They had the highest rated NiHd on the market for over a year. Radio Shack has its own brand manufactured in Singapore. I just bought four of these to test them. I've used the Radio Shack 1200 mAh batteries for over a year with good luck, so I assume the 1500's will be fine too. A company called Harding Engineering is manufacturing the new batteries under the brand name of Quest. They can be purchased from www.d-store.com or by toll-free phone at 888-313-1587. The Quest part number is OAFGCA. I know the Quest batteries are of excellent quality. By the way, both the Radio Shack and Quest batteries are standard size. Several club members bought NiMh batteries at Rochester a couple of years ago only to find that they were badly sized and didn't fit standard battery holders.

Is This Cost Effective

An AA Energizer is rated at about 2500 mAh and cost \$.75. That represents a price of \$.30 per watt. The 1500 mAh NiHd costs \$6.00 for 750 watts. (1500 X 500 charges) that's less than a penny per watt. And you can easily get 1000 charges out of them. Five hundred is conservative. That's a bargain for any battery!

Inverter Buyers Beware

By Mike Stone, N1VE

Fortunately most ham equipment will operate on 12 volts DC (nominal) and we can lug it with us almost everywhere we go. We all have 12-volt power supplies, battery packs, storage batteries, or automotive electrical systems to run our gear. However, occasionally it's necessary to power a device with 120 volts AC. Personal computers and monitors, antenna rotors, many laptop computer chargers, and some HT battery pack chargers require 120 volts AC. Relatively low cost, portable power inverters are commonly available at electronics and departments stores. I bought a 300-watt inverter at BJ's Warehouse for about \$50.00 and it will provide 120 volts at 60 cycles as advertised. However a problem arises when using the inverter in a vehicle while operating an amateur radio. For instance when running the laptop computer and the Earthmate GPS receiver over long periods of time, requiring 120 volts AC to keep the computer's battery charged, I've had many complaints about a strong noise on my signal. And when operating on HF the inverter generates an S9 signal, making it impossible to hear even strong signals. Running the inverter on an isolated battery has no effect on the problem, so my only alternative is to turn off the inverter when operating my radios.

I suggest the you check out the inverter before you purchase it, or shortly after, so you can return it if it interferes with your transmit or the received signal. 🙌

ARES from page 7

emergency situation have a tendency to emulate "broadcast" techniques. While it is true that the general public may be listening, our transmissions are not and should not be made for that purpose. Broadcast stations are well equipped to perform any such service. Our job is to communicate for, not with the general public.

9. Within the disaster area itself, the ARES is primarily responsible for communications support. When disaster strikes, the first priority of those NTS operators who live in or near the disaster area is to make their expertise available to their Emergency Coordinator where and when needed. For timely and effective response, this means that NTS operators need to talk to their ECs before the time of need so that they will know how to best respond. 🙌

The End

by Mike Stone N1VE

As I write this article, we are approaching the last month of the last year of the last century of the last millenium. The significance of entering a new millenium "hit" me only a month or so ago. I suspect that since my understanding of history leaves much to be desired, the full impact of this magnanimous event won't soon, if ever, really sink in.

Since we consider ourselves to be "communicators" of some fashion or other, perhaps we ought to attempt to predict something about the future of communications. Go ahead.....what will Amateur Radio be like at the end of the next millenium? Considering the enormous changes in equipment, materials, modes, and regulations that have occurred in only the past few years, that question is beyond ridiculous. Even predicting where Amateur Radio communications will be in ten years is a more difficult task than most of us can assume.

We know that more changes in the technology of long-distance communications have taken place in the last 30 years than in the previous 970 years. Long distance communicating has gone from drumbeaters and smoke signalers, to fleet footed couriers and loud-mouthed criers, to the use of solar powered artificial satellites and finger-held transceivers with microcircuits containing components that are too small to see. In the span of just 100 years, radio communications has gone from a few bursts of static, produced by enormous, inefficient transmitters, to the remarkable ability to send color images and sounds across millions of miles of space. Transmitters are now so small and efficient that some use energy gathered from the sun, many times less intense than here on Earth. These signals are sent to and received from planets that are no more than mere specks in our night sky.

Let's try something more doable. Where would you like the East Coast Amateur Radio Service to be in the first decade of this millenium? Let us know, because it's your organization and all club members should be involved in guiding us through the future. Run for office, write articles for the "Monitor", or let one of the club officers know of your thoughts and wishes.

A large number of people have contributed to the success of ECARS throughout its relatively short existence. I have no doubt that this fine organization will continue to actively promote our fantastic hobby. I look forward to working with you in the future.

The Beginning

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