Suggestions for Repeater Etiquette
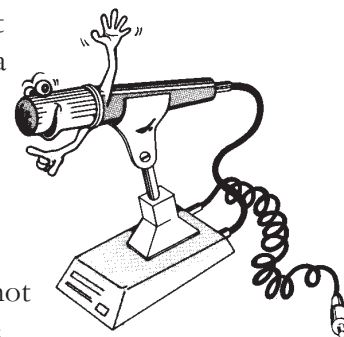
GARA Board of Directors 2012

As amateur radio operators, we are all familiar with the FCC regulation that requires us to transmit our call sign at least every ten minutes and at the end of a conversation on the amateur radio bands. To enhance the use of the GARA repeaters, in addition to the FCC requirements, GARA club policy recommends the following good operating practices:

Give your call sign early in your conversation, on your first transmission... although not a specific FCC requirement, it is GARA club policy. Transmitting your call sign early helps everyone, especially persons new to the repeater. It is not necessary to give your call sign on *every* transmission as long as the 10-minute requirement is fulfilled.

At the beginning of your transmissions, especially when identifying, be certain to wait at least one-half second after depressing the PTT switch before you begin speaking. Remember that there is some latency, and many users' transmissions are missing the first letter or two.

When identifying, speak clearly, annunciate the characters, and leave a break between each character. It is easy to get into the poor habit of "slurring" your call sign, and it can be difficult for someone new to decipher.

Setting Up Your Computer for EchoLink

By Tom Bertolino, KB1P

EchoLink is a program that allows licensed Amateur Radio operators to communicate via the Internet with other Amateur Radio operators. The program allows worldwide connections to be made between stations – or from computer/iPhone/Android - to a station. All you need is a Technician's license (level 2), internet access, a head set with a microphone that can plug into your computer, iPhone or Android, and the EchoLink software. The best part is that the EchoLink software and the apps are free. So you have any of the above equipment, you can contact via EchoLink other Hams all over the world, or check-into any repeater linked to EchoLink. If you are interested in EchoLink and want to install it, below is

NEXT MEETING
Monday, June 25

The next meeting of the Greensboro Amateur Radio Association will be Monday, June 25th, at Captain Bill's Seafood & Steakhouse, 6108 West Market Street, Greensboro, NC 27409, between Guilford College Road and Swing Road. This month's meeting will be presented by Mike Atkins (N4VE), of Triad Electronics Supply, on the subject of buying used gear.

GARA Meeting Minutes

Regular Meeting Minutes May 28, 2011

The Greensboro Amateur Radio Association held its monthly meeting on May 28th, 2012, at Captain Bill's Seafood & Steakhouse located at 6108 West Market Street in Greensboro. GARA President Donna Ferguson, KD4WIK, called the meeting to order at 7:20pm.

Reports from officers

Craig Bondy, N8STA, gave the treasury report stating that we picked up a new member tonight bringing out total membership to 117. Craig said that to date we have received $224.00 in D-Star contributions in 2012. Craig also said that the picnic cost was $210.00 more than what was taken in which was considerably less than last year.

Greg, KG4UQV gave an update on the Field Day preparations.

Roy Smith, N4BYU, gave an update on the soccer tournaments stating that Alan and Madeline Bradley have retired from soccer. With changes in the soccer association and fewer sites to cover the board has decided to stop working the tournaments. A letter was drafted and sent to the soccer association to inform them of our decision. We have not received a response from them.

Bob Mays, KE4MOW, gave a report on the GARA picnic and said that we had a few leftovers and we will cut back more next year.

The program for the night was a video tour of W1AW.

Respectfully submitted by Greg Spencer, KG4UQV, GARA Secretary.

The Greensboro Amateur Radio Association

President Donna Ferguson, KD4WIK
Vice-President Todd Smith, AK4TS
Treasurer Craig Bondy, N8STA
Secretary Greg Spencer, KG4UQV
Financial Al Allred, K4ZKQ
Engineering Chair David Macchiarolo, AJ4TF
Operations Roy Smith, N4BYU
Member-at-Large Fred Lomax, KK4BAW
Member-at-Large Gaither Frye, KD4CTY
Appointed Position:
Webmaster & Newsletter Editor
Brian Wilson, NX4U

For Sale

Board Meeting Minutes June 11, 2012

The GARA board of directors held their monthly meeting on June 11th,2012 at the Benjamin Branch of the Greensboro Public Library. The members present were Donna Ferguson, KD4WIK; Craig Bondy, N8STA; Roy Smith, N4BYU; Fred Lomax, KK4BAW; David Macchiarolo, AJ4TF; Todd Smith, AK4TS; and Greg Spencer, KG4UQV.

Officer reports:

Greg gave an update about the Field Day exercise that GARA is cosponsoring with Guilford ARES.

Fred said that had nothing to report.

David said that the equipment is all working fine, and he is working to limit the amount of log files that are stored as it is filling up the hard disk. We discussed the possibility of welcoming new users to the D-Star repeater.

Arch Archinard, KT4AT, will bring the D-Star agreement to the next meeting.

We discussed the need to have a repeater etiquette program. Roy said we might need to send an email to all club members. Fred said that there has been some doubling that seems intentional. Roy said that he has received both calls and emails from members about repeater misuse.

Craig said that we now have 119 members. We talked about prorating the dues for new members and Craig said that we should make the application form clearer.

Craig said that the non- reimbursed picnic expense was $139.07, which is much lower than last year.

Roy asked about the antenna building class that was proposed a few months ago. It is going to happen as soon as we can get the time scheduled. Craig said that the Technician class that Gaither Fry, KD4CTY, wants to hold would probably be in the fall due to scheduling with the natural science center.

Roy said that he has heard some people say that they do not want the D-Star repeater linked to reflectors during drive time and do not feel comfortable about unlinking it. After some discussion, David said he would turn it off. We discussed the D-Star net and its lack of use.

Todd has been working on a calendar for the website that will show coming events and nets. Greg asked Todd if he could send the sign in sheets to him since Todd's work schedule prevents him from getting to the meetings on time. Todd said that he would e-mail sheets to Greg and Donna.
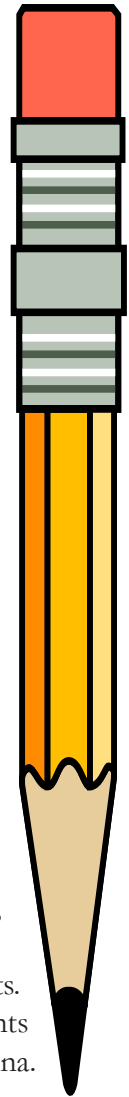
Todd asked about the progress on updating the GARA logo.

We discussed the GARA tee shirts that Todd proposed a few months ago.

Todd stated that the board needs to look at the club expenses and save where we can. He said the phone bill looks high compared to his with similar service.

We discussed that with no one being able to reach Karen Dinkins, KJ4FWR, after multiple tries, and she has not been on the air in a long time or come to any GARA meetings because she is disabled that she be remover from the club roster. Roy made a motion to remove Karen's name from the membership roster, David seconded and the motion carried.

Donna reviewed a couple of emails that came into the website one of which was from the Guilford County School System Technology Coordinator. They are looking for help in contacting the International Space Station via ham radio.

Respectfully submitted by Greg Spencer, KG4UQV, GARA Secretary.

From the President's Shack

From Donna Ferguson, KD4WIK

Wow! It is hard to believe that June is almost over. Where has the year gone? This has been an exciting year so far, I do not see the fun stopping anytime soon, and I have exciting news to share.

GARA has been asked to partner with McNair Elementary School in the Guilford County School System. This is a brand new elementary school. They would like us to help bring Ham radio into the classroom and the community. One of the administrators of the new school has already contacted me. They want us to be a part of the building process. He would like to see the school start with a Ham shack that GARA would use as a teaching tool for the students and assist the students in getting their licenses. All of the details are still being worked out but feel that this is a wonderful opportunity for both GARA and McNair Elementary. McNair Elementary is also on of many schools that is working on a proposal to NASA to be able to talk to the ISS and if selected, we will be helping them make that happen. I am very excited about this chance to work with the schools. This will become a long-term partnership that will be very beneficial to all those involved.

Speaking of the fact that the year is half-gone, we must begin to look to next year. About this time each year, we ask members to step up and be a part of the nominating committee to select next years board members. The job is to seek out members who will agree to serve in the various board positions; President, Vice-President, Treasurer, Financial Planning, Engineering, Operations, Secretary, and two members at large. If you have not been able to participate in other club activities before, this is a great opportunity to give something back to the club and help shape the future of GARA. Please consider being a part of the nominating committee. If I have not had any volunteers by the August meeting, then I will look at appointing some members to do this, as this is a necessary part of the yearly process.

Hope to see everyone at the next meeting!

Until then, 73

This Month's Meeting

We will have a great program for our next membership meeting.

Announcing our guest speaker for the June 25th membership dinner meeting—

We will have a very special program for the June 25th Membership meeting. Mike Atkins (N4VE), of Triad Electronics Supply, will present to the club on the subject of buying used gear.

Some of the topics that Mike will cover include:

- How old is "too old" for a rig?
- How to tell if a rig is in good condition?
- Analog dial versus digital readout?
- What brand or model used rigs to avoid?
- Sources for used rigs?
- Where and how to research a rig?

As the owner of **Triad Electronics Supply** in Winston-Salem (see www.triadelectronicsupply.com), and as a long-time active ham, Mike has tremendous experience with this subject. Don't miss this opportunity for a great learning experience.

The meeting will be held in the meeting room of:

Captain Bill's Seafood & Steakhouse
6108 West Market Street
Greensboro, NC 27409

Those planning to eat should plan to arrive by 18:30, with the meeting beginning at 19:15.

We look forward to seeing you there!

Have questions about buying used equipment?

Engineering Update for June, 2012

From David Macchiarolo, AJ4TF

I usually write this column the week before the newsletter is published, to give you all the very latest information on what's happening. This month, of course, is Field Day, so I am writing this several days early.

VHF Repeater:

Actually, there not much to report this month. The battery change that we did last month appears to be working fine. The digital voice recorder is still playing messages, and "Bill" and "Jane" are still being as chatty as ever. I try to use this repeater at least once a day to see how it is working. I have heard a few instances when propagation allowed us to receive the K4USC repeater in South Carolina (which is on the same frequency pair as ours) but overall everything seems to be running well.

There are a lot of new hams out there using the repeater, so look for a "refresher" on GARA repeater etiquette coming up soon (it may even be in this issue of The Feed Line!)

D-Star Repeater:

I wrote last month about the automatic status reporting feature that I added to the W4GSO D-Star gateway computer. One of the status items that it reports to me every night is the disk space usage. I noticed that it was going up, so I investigated as to what was causing this.

A Linux system (the gateway is running a version of Centos 5) does a lot of logging of data. Nearly every background program creates a log file. Some of the programs are more "talkative" than others, and write a lot of data to their log files. Most of the system log files are managed with a program called "logrotate". This runs once a week, 'rotates' the logs so that it throws out any log data that is more than 5 weeks old. The two main programs for the D-Star gateway, however, are not part of the set of logs that are being rotated, and, those two programs are very talkative... they write data in their log files at least once per minute. One of these two log files was 60 megabytes in size! I restarted both of these programs with new, 'fresh' log files and I am in the process of testing a 'logrotate' entry for them, to try and keep the files from growing so large in the future. One issue is that some programs don't like it when their log files are disturbed while they are running, and these two fall into that category, so this testing is in order before this change gets deployed. I'll let you all know when it is completed.

The other change to the D-Star repeater is that, at the request of the GARA board, I have disabled the automatic linking macros that were setting up automatic links to reflectors 1C and 30C during the day. We had heard that at least one user was hesitant to unlink the repeater because they thought there was some special reason that it was automatically linked to those reflectors. Well, I am here to tell you the answer to that is most definitely NO! This is YOUR repeater, you can command it however you like! Just be courteous and announce your intentions before linking or unlinking.

As always, if you have any questions or concerns about your club repeaters, either VHF or D-Star, please contact me at aj4tf@arrl.net
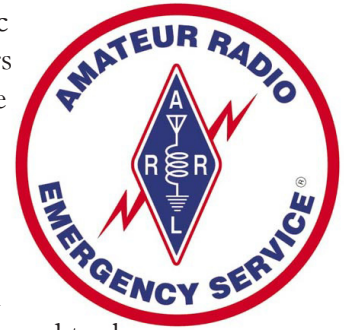
73, David AJ4TF

News Briefs That Effect the Ham Community
ARRL Offers Online Public Service Training

From ARRL

The former Amateur Radio Emergency Communications (AREC) series of three levels of emergency communications courses has been reconfigured into two new courses: An introductory course for radio amateurs who want to volunteer to provide services for public service and emergency communications, and a course for leaders and managers who are responsible for training and coordinating response efforts. The course descriptions for both of these courses that make up the ARRL's ARES® training program can be found in the ARRL Online Course Catalog. Links to register for each course are included in the course descriptions.

Introduction to Emergency Communication

The Introduction to Emergency Communication course (#EC-001) is an update of the former Level 1 course. It is designed to provide basic knowledge and tools for any ham who wants to serve as a Public Service volunteer. It also provides an opportunity for non-hams who rely on communications in emergency situations to learn about Amateur Radio and its unique role in emergencies.

The course is offered online using the Moodle online learning platform. When you register for the course, you will need to demonstrate completion of two FEMA course pre-requisites: Introduction to the Incident Command System (ICS-100 [IS-100.b]) and National Incident Management System (IS-700). The Introduction to Emergency Communication course has six sections with 29 lesson topics. It includes required student activities along with a 35 question final assessment. Participants should plan on completing the course in approximately 45 hours over a nine week period. You will have access to the course platform at any time of day during this nine week period, so you may work according to your own schedule. This is a mentored course. You will be assigned to correspond with an experienced radio amateur who will be your resource for any questions you have about the course content.

The fee for this course is $50 for ARRL members and $85 for non-members and those who register for "Guest" membership on the ARRL website.

Public Service and Emergency Communications Management for Radio Amateurs

The Public Service and Emergency Communications Management for Radio Amateurs course (#EC-016) is designed for Amateur Radio operators who will be in leadership and managerial roles, organizing other volunteers to support public service activities and communications emergencies. In this course, participants will learn how radio amateurs prepare and organize to support local community events and, when working in coordination with governmental and other emergency response organizations, how to deploy their services to provide communications when needed in an emergency.

This course is available online on the ARRL website to all League members. The course can be accessed without a fee or enrollment directly through the ARRL website. To view the course, you must be logged into the ARRL website as a member, or as a "Guest" member. This is a self-study course that you may complete at your own pace.

To enroll for the final assessment for this course and to receive a course completion certificate, documentation of completion of course pre-requisites (you'll find the list in the course description) and a $35 fee is necessary. Depending upon your role and responsibilities, consult your Section Emergency Coordinator or Section Manager to determine if course completion with the final assessment is recommended.
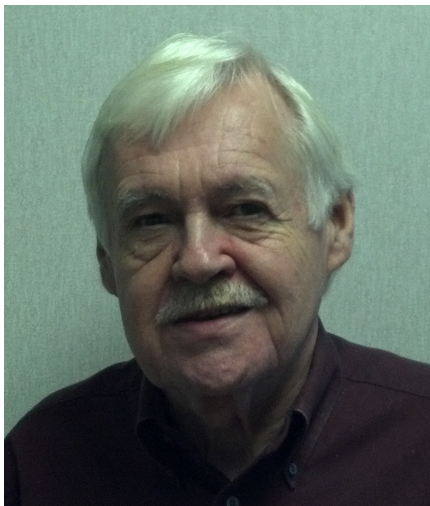
Congratulations! You Passed!

Every month on the second Saturday, except in March when it is the third Saturday, W4VEC holds a testing session for those who live in the area. This provides an opportunity for individuals to be able to test for their amateur radio license or upgrade. Thanks to Glenda Nicholson, AG4NC, and a group of volunteers, each month there are new or upgraded hams in our area.

In June, we had six (6) individuals who passed their test(s) and earned either their Technician, General or Extra class license.

Next month's testing session will be on July 14th at #3 Centerview Dr, Hickory Building, Greensboro, NC 27407 at 9:00am. While walk-ins are welcome contacting the lead VE is preferred. Please contact Glenda Nicholson at (336) 674-3810 or by email at ag4nc@bellsouth.net
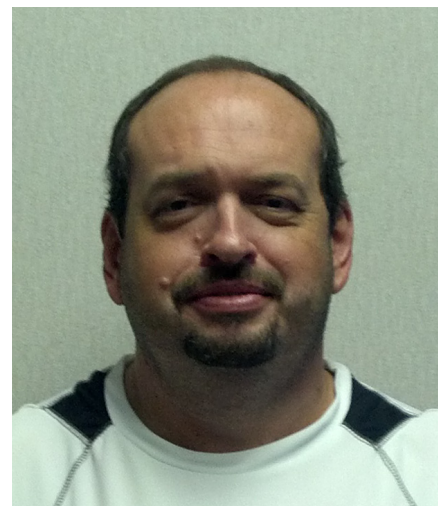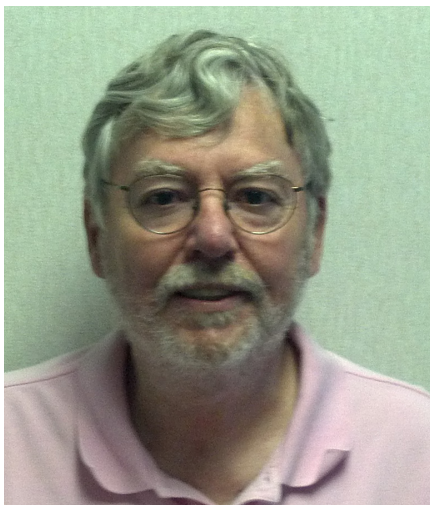
All Photos Courtesy of David Macchiarolo, AJ4TF

James C Yester, Jr. - KJ4WKD - Upgraded to Extra
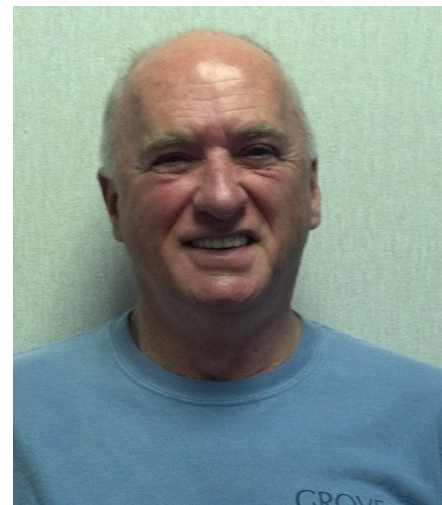
David F Collins - N4CWZ - Upgraded to Extra

James B Jessee - KK4JFF - Upgraded to General

Robert J Darby - KK4JUU - New Tech

Jonathan L Raper - KK4JUW - New Tech

Ralph V DeGenova - KK4JUV - New Tech

Annual Doggett BBQ

September 29, 2012, Save the date for the annual Doggett Picnic.

The Doggett's have being hosting a picnic for many years and started inviting the local Hams. I spoke with John and he gave me the date. The time is usually 6pm. You need a chair and appetite. Some of the best BBQ around.

The Doggett family includes the following hams: Clark, KG4HOM; Jane, KG4ZQK(Wife); John, AJ4DV(son); Mary, KJ4ZQL(Daughter); and Lexie, KI4QNC(Granddaughter)

If you have never attended, you don't want to miss this event. Go ahead and mark your calendars and plan to attend. Even though this is several months away, calendars have a way of filling up. This is a great time of food and fun.

Photo Courtesy of Tom Forrest, N4GVK

Etiquette (continued from page 1)

The 2 meter repeater will automatically ID itself in Morse code during a QSO every 9 minutes. When you hear the ID, [.-- ....- --. ... --- -..-. .-.] it is a reminder for you to identify yourself.

The D-STAR repeater will transmit your call sign on every transmission, fulfilling the FCC requirement, but it is a good habit to identify every 10 minutes by voice the same way as using the 2 meter repeater.

During the Monday thru Friday busy commute times, repeater users should give priority to mobile stations. These commute times are 0700-0900 and 1700-1900. Of course, if you have emergency traffic, use the repeaters at any time.
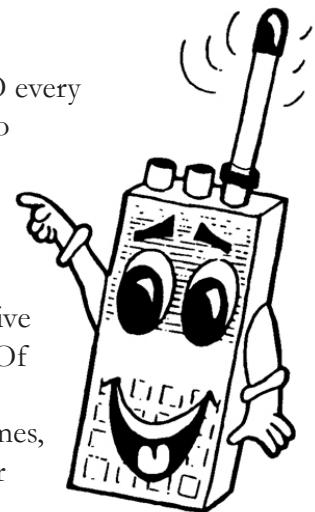
If non-mobile stations need to use the repeaters during the busy commute times, please keep the conversation as short as practical to keep the repeaters available for mobile stations.

Develop the habit of letting the 2 meter repeater drop after each transmission, and waiting a few seconds after the squelch tail ends.

This allows time for another station to request access to the repeater. When enjoying a great conversation with another ham it is very easy to get out of this habit, but good operators develop this habit. For the D-STAR repeater this is especially important, as not allowing sufficient time between transmissions can cause problems on the D-STAR network.

Do not transmit or 'kerchunk' the repeater without properly identifying yourself. Not only is this against GARA club policy, it is a violation of FCC regulations. If you want to see if your radio is working, announce your call sign, and "testing".

Above all, be courteous, and friendly to everyone you may hear on our repeaters, especially new hams, visitors to the area, or people that you have not heard before. Let them know about the GARA club, and let them know that we are glad they are here and using our fine repeaters!"

EchoLink (continued from page 1)

a short [well not that short] explanation that will help with the three step instillation process and how to setup your EchoLink station.

If you have a MAC you will have to go to the following site http://echomac.sourceforge.net/ to download the EchoLink software. If you want to use EchoLink on your iPhone or Android, you will have to go to the EchoLink site to get instructions on how to download the software for your device. I will go over the process for windows based computers. First, I will explain how to download the EchoLink software, then how to validate your license, and finally I will explain how to conduct a firewall/router test and configure your router. Then I will point you in the right direction so you can your EchoLink station information.

You can download the EchoLink software from their web site http://echolink.org/. On the left side of the site, you will see the download tab. Just click on tab and follow the instructions. You might want to take the tour before you download the program. Once you start the download, you will be asked for your call sign and email address.
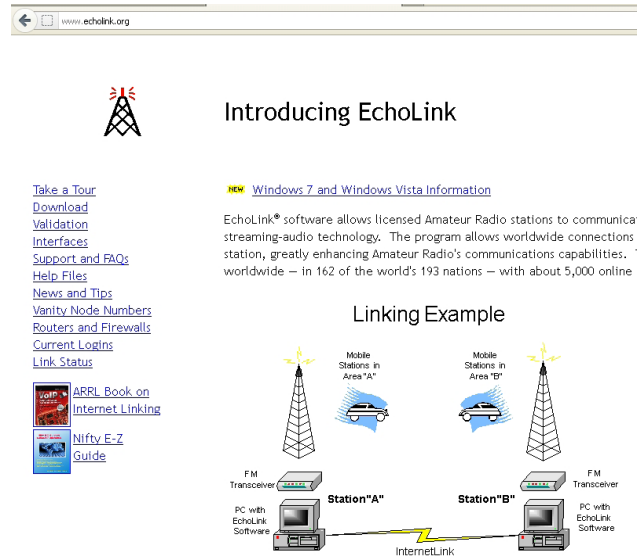
The next step is to have your license validated. You start by going to the Validation page by clicking validation on the left side of the EchoLink home page. Once on the Validation page, enter your call sign and click on continue. You will be asked to send EchoLink a copy of your license showing your call sign and expiration date. The copy can be sent to EchoLink by fax or by scanning it and uploading it. The scan must be in one of the following types: JPG, GIF, TIF, PDF, OR PNG. Complete instructions on how to up load are provided.

Once your call sign is validated the next step to run the Firewall/Router Test. For most people this may be the most frustrating part of the process. Open the EchoLink program, click on the Tools tab. On the bottom of the drop down menu, find Firewall/Router Test. Click on it and the test will run. If you pass, you are ready to use EchoLink. If you fail, do not worry most people do, click on the Help tab in the box, and it will bring you to the Firewall Solutions page. Two things must happen to pass the test. First is allowing EchoLink through your computer's firewall, and the second is configuring your router. The explanation on how to let EchoLink through your firewall is about half way down the Firewall Solutions page just follow the instruction based on your operating system.

Once you have allowed EchoLink through the firewall, the next step is configuring the port forwarding on your computer's router. This is the most frustrating part of getting EchoLink to work, and the EchoLink support team cannot help you with this one. In order for EchoLink to work, your router must be configured to allow inbound and outbound UDP to ports 5198, 5199 and outbound TCP to port 5200. You will have to get into your router's programming to make the changes. You can get in the router that controls your computer by going to the web browser and typing 192.168.1.1. This is the default address for your router. (This works on all computers unless you have changed the address of the router.) Once in you will be asked for a user name and password. Most routers do not have a user name or a password. If you do not know if you need a user name or password, you can find out by going to this site www.routerpasswords.com . Once into the router there should be a menu item called port forwarding or a help section explaining how to change the port settings. If there is no help section, you will have to contact your Internet provider or maker of your router and ask how to do this. The process is called port forwarding. Some commercial routers will have instructions on how to do this in their manuals. This procedure took me more than a couple of times to get it right, and you might have heard me doubting the parentage of my router where you live. Stick with it. It is worth it. If all else fails there is there is a web site www.portforward.com that may be able to help you [for a fee].

Once you have passed the firewall test, go to the Tool tab, click on Setup and then Preference. This is where you enter your call sign and other information. In the EchoLink help section under Configuration there is a Setup section that will walk you through the setup. Then the Preference section will walk you through your preference settings. Once this is done go to the Station tab, connect to the test server, and check your volume. You can adjust your volume setting by going to the Tools tab and clicking on the Adjust Sound Device in the drop down menu. You are now ready to make your first contact on EchoLink. Good Luck.

I know the above sounds overly complicated but stick with it and don't get frustrated. The result is worth the effort.

Area Happenings

FOURTH MONDAY – at 6:30pm, the Greensboro Amateur Radio Association have their regular monthly meeting at Captain Bill's Seafood & Steakhouse, 6108 West Market St., Greensboro, NC 27409. Please plan to gather at 6:30pm for dinner. The meeting is scheduled to start at 7:15pm

CLUB NETS:

SUNDAYS – at 7:30pm, the **Technical Forum** on the 145.150;
- at 9pm, the **GARA News and Information Net.** This net features *NewsLine* and is on the 145.150, W4GSO repeater. Roy Smith, N4BYU is always looking for net controls. Contact him if you would like to help.

TUESDAYS – at 8:30pm **The Triad SkyWarn Net** meets on the 147.225, K4ITL repeater, no tone required.

TUESDAYS – at 9pm, the **D-STAR Net** meets on 442.8625 (W4GSO B and Reflector 17C)

WEDNESDAYS – at 8:30pm, **The Guilford Amateur Society Rag Chew Net** holds their weekly net on the 145.250, W4GG repeater with an 88.5 Hz. tone. Jim Hightower, W4JLH is the net control.

THURSDAYS – at 9pm, The **Guilford County ARES Net** meets on the 145.150 repeater (100 Hz. tone).

OTHER ACTIVITIES :

FIRST MONDAY – The Guilford County **A.R.E.S.** monthly meeting is held at 1002 Meadowood St. off W. Wendover Ave, in the EMS building, beginning at 7pm.

THIRD MONDAY – at 6:15pm **The Guilford Amateur Society** holds their monthly meeting at Tex & Shirley's Restaurant in Friendly Shopping Center. Eat at 6:15pm and the business meeting begins at 7pm.

THURSDAY – at 11:15am, Greensboro Hams get together for lunch. Thursday lunch group is meeting at the K&W Cafeteria, 300 Forum VI Mall at Friendly Shopping Center. Talk-in is on the 145. 150, W4GSO repeater with a 100 Hz. tone.

EVERY FRIDAY – at 8pm (approximately) Greensboro Hams get together for coffee at Starbucks at Edney Ridge Rd.

The W4VEC Testing Schedule
July to Dec 2012

July 14, 2012
August 11, 2012
September 8, 2012
October 13, 2012
November 10, 2012
December 8, 2012

Location: #3 Centerview Dr, Hickory Building, Greensboro, NC 27407
Time: 9:00am
Contact: Glenda Nicholson
Phone: (336) 674-3810
E-mail: ag4nc@bellsouth.net

GARA REPEATERS

145.150 MHz - offset, 100 Hz. tone   442.8625 MHz. + offset, Digital D-Star

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Greensboro Amateur Radio Association
P.O. Box 7054
Greensboro, NC 27417
www.w4gso.org

FIRST CLASS MAIL

The Official Publication of GARA