



The Greensboro Amateur Radio Association

Feed Line

Providing Amateur Radio news for the Triad

Brian Wilson, NX4U, Editor

www.w4gso.org

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What's Going on with GARA

GARA Amateur Radio Open House

Photo courtesy of David Macchiarolo, AJ4TF

GARA held an Amateur Radio Open House at the Greensboro Science Center on Saturday, April 20th. While the details are still coming in, it appears that the event was a success. For a photographic summary, see the photos on page 8.

GARA Picnic

GARA is planning its annual picnic on Memorial Day weekend, May 25th. The cost will be \$7.00 per adult (12 and over). Children 11 and under will be free. So that we can get an idea of how much food to buy, we would like members to confirm with Roy as soon as possible.

We are still looking for someone to cook. Let us know if you would like to cook. Please contact Tom Bertolino, KB1P, if you would like to assist in this way.



This Month's Program

Our April Meeting will be held on Monday, April 22nd at 7:00 pm in Captain Bill's Seafood & Steakhouse located at 6108 West Market Street in Greensboro. Come early, have dinner and catch up on the latest club info.

The presentation topic is Raspberry Pi. (Raspberry Pi is a credit-card-sized single-board computer developed in the UK by the Raspberry Pi Foundation.) The presenter will be David Macchiarolo, AJ4TF. David will present the following: a brief history behind Raspberry Pi; explain what it takes to program the computer; and how it can be adapted by the user to work within the amateur radio hobby. So come to the meeting and find out if this inexpensive computer option is for you.

Also a reminder: February was the start of our Join /Renew ARRL membership through GARA campaign. If you chose to join/renew your ARRL membership through GARA, you can do it at this meeting Craig Bondy, N8STA, GARA's treasurer will have the forms with him. See you at the meeting.

NEXT MEETING

Monday, April 22

The next meeting of the Greensboro Amateur Radio Association will be Monday, April 22nd, at Captain Bill's Seafood & Steakhouse, 6108 West Market Street, Greensboro, NC 27409, between Guilford College Road and Swing Road. This program for this month's meeting will be about Raspberry Pi. David Macchiarolo, AJ4TF will present information on Raspberry Pi, which is a credit-card-sized single-board computer developed in the UK by the Raspberry Pi Foundation.

GARA Meeting Minutes

Regular Meeting Minutes March 25, 2012

The Greensboro Amateur Radio Association held its monthly meeting on March 25th, 2012, at Captain Bill's Seafood & Steakhouse located at 6108 West Market Street in Greensboro. GARA vice-president, Tom Bertolino, KB1P, called the meeting to order at 19:15.

The meeting started with each person giving their name and call sign.

Officer reports

Roy Smith, N4BYU, spoke about the Ham Radio Expo coming up on April 20th that GARA is hosting at the Greensboro Science Center.

David Macchiarolo, AJ4TF, spoke about the N4G special event station that was held on March 16 & 17. David said that we made 443 contacts, which is 130 more than last year. David thanked everyone who helped with the event. David said that we are working on QSL cards now and they will be sent out soon.

David also gave a report on the GARA repeaters. David switched the VHF repeaters and found the backup repeater had a problem, so he switched back to the primary repeater. David said the D-STAR repeater is working fine at this time.

Craig Bondy, N8STA, said that as of now we have 79 paid members.

Gaither Frye, W4GCF, will host a Technician License Class on April 6th at Fire Station 13.

David spoke about the ARISS contact that is scheduled for the week of April 29th at McNair Elementary School.

The GARA picnic has been scheduled for May 25th at Hagan Stone park shelter 5 from 5 to 8pm.

Tom, KB1P, reminded the club that membership dues are now due.

Roy, N4BYU, spoke about the K4NSC station at the Greensboro Science Center.

Roy said that ARES will be conducting an exercise on April 13th and will be using the W4GSO 145.150 repeater.

Brian Wilson, NX4U, made a motion to approve the minutes as published in *The Feed Line*. Patrick Moore, K2CPR, seconded and the motion carried.

Tom gave the presentation on ARRL's Logbook of the World.

David, AJ4TF, made a motion to adjourn; Brian, NX4U, seconded and the motion carried.

The meeting ended at 20:10.

Respectfully submitted by Greg Spencer, KG4UQV, GARA Secretary.



The Greensboro Amateur Radio Association

President Donna Ferguson, KD4WIK
Vice-President Thomas Bertolino, KB1P
Treasurer Craig Bondy, N8STA
Secretary Greg Spencer, KG4UQV
Financial Todd Smith, AK4TS
Engineering Chair David Macchiarolo, AJ4TF
Operations Roy Smith, N4BYU
Member-at-Large Gaither Frye, W4GCF
Member-at-Large Chan White, KJ4ADX
Appointed Position:
Webmaster & Newsletter Editor
Brian Wilson, NX4U

The Feed Line is ©2012 by the Greensboro Amateur Radio Association and published monthly. Our address is P.O. Box 7054, Greensboro, NC 27417. The purpose of the newsletter is to provide the club and prospective members information about the club and amateur radio in general. Material and information should reach the editor by the first Friday of the month for the next edition of the newsletter. Opinions expressed in "The Feed Line" do not necessarily represent the views of the officers, directors, editor or members of the Greensboro Amateur Radio Association. Material may be reproduced, provided proper credit is given to GARA.

Board Meeting Minutes April 8, 2012

The GARA board of directors held their monthly meeting on April 8th, 2013, at Captain Bill's Seafood & Steakhouse. The members present were: Donna Ferguson, KD4WIK; Craig Bondy, N8STA; David Macchiarolo, AJ4TF; Roy Smith, N4BYU; Chan White, KJ4ADX; Tom Bertolino, KB1P; Todd Smith, AK4TS; and Greg Spencer, KG4UQV.

Officer reports

Craig and Tom spoke about the progress of the 501(c)3 non-profit status.

Craig said that people who have not paid their dues for 2013 will no longer receive *The Feed Line*.

Tom made a motion that any special membership considerations should be kept between the board members, David seconded and the motion carried.

Chan said he would like to thank everyone for their care and concern due to his illness at the GARA meeting.

Roy said that there were 4 new techs after the class that Gaither Frye, W4GCF, taught recently.

The GARA club picnic is scheduled for May 25th at Hagan Stone Park Shelter #5 from 5 to 8pm, and the board discussed who could do the cooking. Todd said that he may be able to help with the cooking.

Greg asked if it would be possible for the Field Day GOTA station to use the W4GSO call sign again this year. The board reported that would be fine.

David spoke about the repeaters and status of the search for a cheaper internet supplier. David also spoke about the status of the ARISS contact coming up on the week of April 29th

Donna said that she had received an email from the daughter of a silent key who is looking to sell her dad's equipment.

Todd said that he is still concerned about GARA's funds. He would like to research some fund raising ideas. Tom said we should recruit a fund raising committee.

Tom spoke about the presentations that are coming up at the GARA meetings in the next few months. We discussed the possibility of helping to sort QSL cards.

Tom went over the 501(c)3 filing process, and the board discussed how we would use 501(c)3 if we get it.

David made a motion to adjourn, Craig seconded and the motion carried, the meeting ended at 20:34.
Respectfully submitted by Greg Spencer, KG4UQV, GARA Secretary.

List Public Service Events Here

By Tom Bertolino, KB1P

As the weather gets better we are approaching the beginning of a new Public Service Event season. In an effort to support area public service events and assist ham coordinators with their recruitment efforts *The Feed Line* will publish a list of Public Service Events held in the Triad area. The event will appear in *The Feed Line* until the event's date has passed. It will contain the event name, date, where the event will take place, and the ham coordinator's contact information. If you want to list your event in *The Feed Line* please contact Tom Bertolino at kb1p@arrl.net with the following information: name of event, date of event, where the event takes place, and your contact information and any special radio equipment required or if you know of an upcoming event please send me the ham coordinator's contact information.



From the President's Shack

From Donna Ferguson, KD4WIK

The Space Shuttle Is Coming! The Space Shuttle Is Coming!

I know everyone has heard a lot about this over the last couple of months and it is almost time. Things are coming together. The antenna has been installed and the children have been briefed. Now we just need to install the equipment and wait for our date.

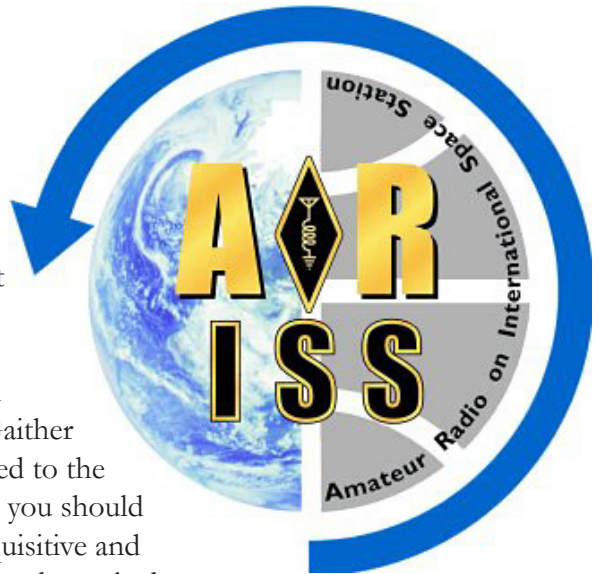
Gaither had the pleasure of talking to the 2nd, 3rd, and 4th graders at McNair Elementary on the 9th, 10th, and 11th and both of us went on the 17th to talk to the 5th graders. Gaither taught them the technical side of ham radio, and how it related to the ARISS contact. I spoke to the hobby of Ham radio, and why you should become a Ham. I had an absolute BLAST! The kids were inquisitive and attentive. Some of them really surprised me with the questions they asked.

It's amazing how much knowledge kids absorb and their thirst for more. There were several children that I think we will see at a future testing sessions.

The kids at McNair are extremely excited about the upcoming contact, and I am excited to be a part of it. Ever since this all started, I knew this was a wonderful opportunity for GARA, but it really didn't sink in until I got to talk the kids and see their expressions and hear their comments. If they had let us, Gaither and I could have talked all day. I think the kids would have listened with genuine interest (at least until they got restless like all 5th graders do).

Once contact is completed, I am hoping that I will have more opportunities to visit McNair and work with the kids. This is the next generation of ham radio operators and I look forward to helping fuel the excitement and lead them in the right direction.

73s, Donna, KD4WIK



For Sale

I have a **Yaesu FT-5100 VHF/UHF** radio \$125.00 Has never been mobile always in the house. I also have (2) **Yaesu FT-212RH** 2 meter VHF radios \$75.00 each. All radios are in good working order they all have the vehicle mounting brackets. The condition on all the radios is good. Please contact Tom Willis at thomas.j.willis@earthlink.net or you can call at 336-510-4996.

Yaesu FT 101 EE. Had additions done to bring it up to FT 101 E and has standard hand held mike for it. D104 Mike, AC Plug, DC Plug, 80 Meter wire Antenna, Manuel for the Yaesu FT 101 E, other items to go along with it: 1 HQ connector, 2 HQ Insulators, about 150' of G59 cable Was for my tower in PA. There are other incidentals that I have kept. These are all included as a package since I will not need them. Have not operated since I got here in 1990. Goods have been packaged up and move twice with me since. I would like to get \$350 for the whole match. Pictures are available. Please contact Gene Mandarano, WB3HMY, at phone: 336-706-5171 or email: oversixtyfive@bellsouth.net

Info from Around NC

From North Carolina Section News by Bill N2COP

DEREK BROWN, W4DTB, RECEIVES HIRAM PERCY MAXIM AWARD – 16 year old Derek Brown, W4DTB, from Chapel Hill, received the Hiram Percy Maxim award at the Carolinas DX Association (CDXA) dinner in Kannapolis on March 8th. The Hiram Percy Maxim award is ARRL's annual recognition of the most exemplary Ham under the age of 21 in the nation. Derek was honored for his work in DXing and contesting (he has almost 200 countries confirmed), his position as an Asst. Emergency Coordinator for ARES in Orange County, and his leadership as an ARRL appointed Public Information Officer (PIO) in developing outreach programs for younger Hams through the Youth Amateur Radio Club of America (YARCA) and its website www.yarca.org

SECTION EMERGENCY COORDINATOR FIRST NON-GOVERNMENT EMCOMM REPRESENTATIVE – Section Emergency Coordinator (SEC) Tom Brown, N4TAB, has been named to the North Carolina State Interoperability Executive Committee (SIEC). Tom is believed to be the first representative from a Non-Government Organization (NGO) in the nation to be appointed to a SIEC. Tom's appointment is based largely on the rapid development of AUXCOMM (Auxiliary Communications) of which ARES is a contributor along with MARS, Military Auxiliary Radio System.



NORTH CAROLINA AND TENNESSEE LEADERS IN EMCOMM – North Carolina now has 540 ARES members who have passed FEMA's Incident Command Structure (ICS) courses 100, 200, 700 and 800, the four basic ICS courses. North has the second highest concentration of ICS credentialed Amateur Radio operators in the U.S. behind Tennessee, which has over 600. North Carolina Emergency Management (NCEM) and virtually all county emergency management organizations have made ICS training mandatory for government communications deployments and assignments.

NORTH CAROLINA QSO PARTY – Hundreds of North Carolina ops were on the air for the annual North Carolina QSO Party on Sunday, February 24th. Logs are due next Monday, April 1st but 25% more logs have already been submitted over last year. For more details go to http://rars.org/ncqsoparty/ncqp_rules.php Results will be announced in April.

FIRST LOCAL GOVERNMENT LIAISONS NAMED IN N.C. – ARRL has had the position of Local Government Liaison (LGL) for years but none were appointed in the North Carolina section until now. State Government Liaison (SGL) Chuck deCourt, W3WZN, has appointed Dr. Karl Bowman, W4CHX, and Cliff Broughton, W4FT, as LGLs to work with officials in the City of Raleigh in the redesign of its zoning ordinances affecting Amateur Radio antennas. The North Carolina state antenna laws are almost six years old, and only recently have counties and municipalities begun to look to bring their ordinances into alignment with state law.

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 Roy Smith, N4BYU, and a group of volunteers, each month there are new or upgraded hams in our area.

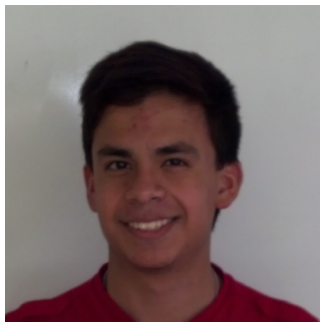
In April, we had five (5) individuals who passed their test(s) and earned either their Technician, General or Extra class license. We also had four (4) individuals who took advantage of a Technician Class held on April 6th, and passed their test.

Next month's testing session will be on May 11th at Hinshaw United Methodist Church, 4501 High Point Road, Greensboro, 27407, at 9:00am. While walk-ins are welcome contacting the lead VE is preferred. Please contact Roy Smith at (336) 312-0647 or by email at n4byu@arrl.net

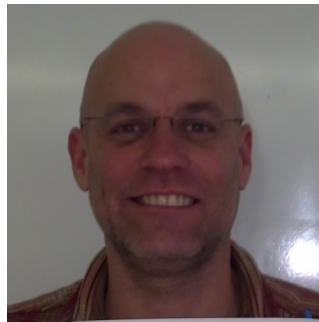
If you cannot make it to this test session, W4VEC holds a second test every month in this area. Test sessions are held the last Saturday of month at the Red Cross High Point Chapter, 815 Phillips Ave., High Point, NC 27726. Walk-ins are welcome. Contact information is Bob Williams, KB4TWG, email bobwilliams@northstate.net, phone (cell), 336-812-5500.



Photos Courtesy of David Macchiarolo, AJ4TF



*Luis Zamor-Jimenez, KK4QDA
Passed Tech*



*Miguel (Mike) Kerkado, KK4QCW
Passed Tech*



*Margarita Kerkado, KK4QCV
Passed Tech*



*Alisa B. Chapman, KK4QCU
Passed Tech*



*Daniel Rodriguez, KK4QFN
Passed Tech*



*Natalie Kerkado, KK4QFM
Passed Tech*



*Jeff Martin, KK4QEL
Passed General*



*Jack Heath, KB4NDR
Passed Extra*

Engineering Update for April, 2013

From David Macchiarolo, AJ4TF

Last month, we talked about the repeater site getting hit by lightning on Thursday, January 17th. Recently we have noticed that the RX sensitivity of the VHF repeater seems to be lower than normal. This could be a result of latent damage to the repeater from the lightning strike, or it could also be due to the periodic interference issue that we see about once a year or so. We will try to measure the antenna SWR soon and I will report on that procedure in a future column. A visual inspection (by binoculars) of the antenna did not show any abnormalities.

Here is the status of the projects I told you about last month:

1) Investigate replacement controller: As you know the existing repeater controller, while it works well, is obsolete, and in the case of a hardware failure, we do not have a backup controller on hand. Ken and Layman are still looking at the differences between the controller commands for the existing controller, and a proposed replacement controller.

2) Replacement for AR Newline Phone Patch: We are looking for an audio playing interface connection to the VHF repeater controller. Craig has built up the circuit that could connect into an unused port on the VHF repeater controller to perform this, and I have done enough work on a Raspberry Pi computer that has convinced me that this could be the right interface platform to actually access and play the audio. Look for a club meeting presentation on the Raspberry Pi this month.

UHF D-Star Repeater:

Last month I told you about some programming that I need to do on the gateway computer. There is indeed an automatic restart function running in the operating system for the gateway software which needs to be shut off during a system backup, to prevent the database from changing in the middle of the backup (the database updates every 15 minutes, the backup can take an hour or more).

The method I am going to use to prevent this from occurring will involve modifying the restart scripts to include a 'test' for the existence of a specific temporary file in the file system which will tell the scripts that a backup is in progress, and prevent them from executing. Once the backup is complete, the temporary file will be removed, and the scripts will again run normally. The Linux 'bash' shell has exactly the command that can do this easily:

```
if [ -e FILENAME ]    # if FILENAME exists
then
    exit              # stop running this script
fi                   # end of "if" command
...                  # continue with the rest of the script
```

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

73, David AJ4TF

2013 GARA Amateur Radio Expo

Photo courtesy of David Macchiarolo, AJ4TF



ARRL Membership Through Affiliated Clubs Drive

By Tom Bertolino, KB1P

GARA is looking at ways to cut the Club's expenses and increase the Club's revenue. One way to increase the Club's revenue is to take advantage of ARRL's Membership Through Affiliated Clubs program. This program allows an affiliated club to retain a proportion of ARRL's membership dues when a club member renews his ARRL membership or joins ARRL for the first time through his Club. The affiliated club receives \$2.00 for every ARRL membership renewal and \$15.00 for every new member. A new member is defined as anyone who has never joined ARRL or someone who has let his membership lapse for more than two years.

If you are a member of ARRL you can help the GARA by renewing your membership through the Club. If you are not a member of ARRL, and plan to join ARRL in the future please consider joining through GARA.

Since a renewing ARRL member can renew at any time, before their current membership expires, GARA will conduct an ARRL Membership Through Affiliated Clubs drive every 3 or 4 months. This allows the Club to cut the monthly expense of processing renewals/new memberships and insures your renewals/applications arrive in a timely manner to ARRL. We will start our first drive in February. So if your membership expires between April and the end of June or if you want to join ARRL please consider renewing/joining through GARA during our drive in February.

How do you renew/join through GARA? You fill out an ARRL Membership Application form (attached at the end of newsletter). Then you give/mail the application along with your ARRL dues to the Club's Treasurer. (The Club's address is: Greensboro Amateur Radio Association, P.O. Box 7054, Greensboro, NC 27417.) The Club then submits all application forms to ARRL less the Club's commission.

If you have any questions about this program you can contact me. My contact information is: email kb1p@arrl.net ; phone 781-608-6186



Reminder Club Dues are Due

Just a reminder your Greensboro Amateur Radio Association dues is due in January 2013. Club membership runs from January to December of each year. You can pay your dues at a club meeting or fill out the GARA Dues Form 2013 and mail it along with your dues to the address on the top of the form. You can download the form by going to the club's web site at: <http://www.w4gso.org/> and click on "Join GARA" on the left side of the page, then follow the instruction.



RFMD Amateur Radio Club presents



Talk In
145.250MHz
PL 88.5Hz

Freegate 2013

A free tailgate swapfest!

NO admission fee, NO space rental! All profit is yours!

We provide a paved parking lot and indoor toilets. You provide everything else:
tables, canopies, power, drinks, food, and merchandise.

When:

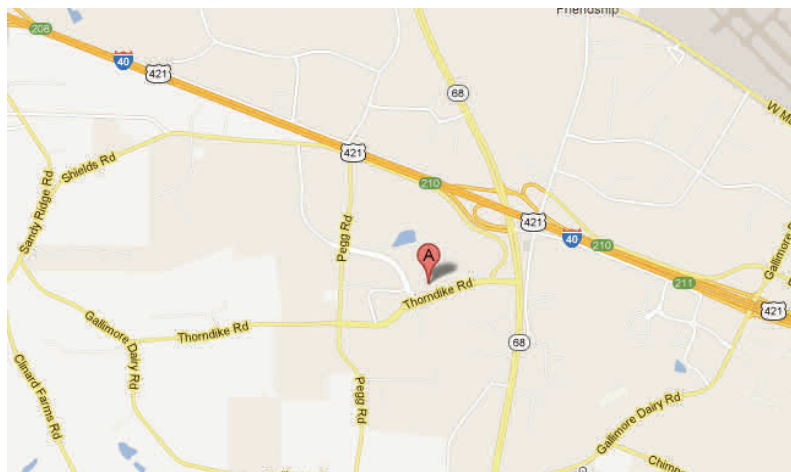
Saturday, May 18, 2013

8:00 AM—11:00 AM

Check KD4RF.org for updates

Where:

RFMD Headquarters –
BACK parking lot ONLY
7628 Thorndike Rd.
Greensboro, NC 27409



Vendors

- dBj Electronics



**ATM
on
site**

NO firearms, NO pornographic material permitted on site!

RFMD Amateur Radio Club

7628 Thorndike Rd
Greensboro, NC 27409

E-mail: info@kd4rf.org

Calendar of Events

April 27	VE Session (Red Cross Building, High Point)
April 22	GARA General Meeting (Captain Bill's, Presentation: Raspberry Pi)
May 11	VE Session (Hinshaw United Methodist Church, Greensboro)
May 13	GARA Board Meeting
May 25	GARA Picnic (Shelter #5, Hagan-Stone Park)
May 17-19	Dayton Hamvention 2013 (Dayton, Ohio, hamvention.org/)
May 25	VE Session (Red Cross Building, High Point)
May 27	GARA General Meeting (Captain Bill's, Presentation: Field Day)
June 8	VE Session (Hinshaw United Methodist Church, Greensboro)
June 8	Winston-Salem Classic Hamfest
June 10	GARA Board Meeting
June 22-23	Field Day (Tannenbaum Park Greensboro)
June 24	GARA General Meeting (Captain Bill's Seafood & Steakhouse, Greensboro)
June 29	VE Session (Red Cross Building, High Point)
July 8	GARA Board Meeting
July 13	VE Session (Hinshaw United Methodist Church, Greensboro)
July 20	Mid-Summer Swapfest (Cary, NC)
July 22	GARA General Meeting (Captain Bill's Seafood & Steakhouse, Greensboro)
July 27	VE Session (Red Cross Building, High Point)
July 27	WCARS Hamfest (Waynesville, NC)
Aug 3	15th Annual Cape Fear Amateur Radio Swapfest (Fayetteville, NC, www.cfarsnc.org)
Aug 10	VE Session (Hinshaw United Methodist Church, Greensboro)
Aug 12	GARA Board Meeting
Aug 24	VE Session (Red Cross Building, High Point)
Aug 26	GARA General Meeting (Captain Bill's Seafood & Steakhouse, Greensboro)
Aug 31	Shelby Hamfest (Shelby, NC, www.shelbyhamfest.com)
Sep 9	GARA Board Meeting
Sep 14	VE Session (Hinshaw United Methodist Church, Greensboro)
Sep 23	GARA General Meeting (Captain Bill's Seafood & Steakhouse, Greensboro)
Sep 28	VE Session (Red Cross Building, High Point)

This purpose of this calendar to provide information on events in and around our area that might be of interest to our readers. As you might expect, there are many more events (public service, hamfests, flea markets, etc.) taking place in North Carolina and around the Greater Greensboro Area. If you know of an event that would be of interest to our readers, please contact Tom, KB1P at kb1p@arrl.net.

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 March to Aug. 2013

May 11, 2013

June 8, 2013

July 13, 2013

August 10, 2013

September 14, 2013

October 12, 2013

Location: Hinshaw United Methodist Church, 4501 High Point Road, Greensboro, NC 27407,

Time: 9:00am

Contact: Roy Smith

Phone: (336) 312-0647

E-mail: n4byu@arrl.net

GARA REPEATERS

145.150 MHz - offset, 100 Hz. tone

442.8625 MHz. + offset, Digital D-Star



Greensboro Amateur Radio Association

P.O. Box 7054

Greensboro, NC 27417

www.w4gso.org

FIRST CLASS MAIL

The Official Publication of GARA