



The Greensboro Amateur Radio Association

# Feed Line

Providing Amateur Radio news for the Triad



Betty Williams, KC2BFN Editor

www.w4gso.org

info@w4gso.org

## This Month's Program

With the onslaught of cheap HTs and bargain-priced mobile radios, everyone's getting a new rig. The big problems come when it's time to program in a memory or adjust the PL tone; most radios require multiple levels of menus to adjust the appropriate settings and can be frustrating. Many of the big manufacturers have software available that makes programming the radios easy if you use your computer, but one open-source application has become the go-to standard that works with radios from most any manufacturer: Chirp. Despite Chirp's ubiquity, many people have found it difficult to understand and use, and this month we aim to help with that.

In this month's presentation we'll show you what Chirp is, some of its common settings, and how to use it to program your radio. We'll give demonstrations to explain how to save the memories from your radio, manipulate them to change the stored settings, and then upload them back to your radio for you to use. We'll also talk about the various types of cables you may need to do this. Hopefully you'll be encouraged to go home and try Chirp for yourself and see what it can do to help make your ham life easier. We hope to see you there!

- ❖ John A. Zeller has submitted a contact request.  
Subject: Searching for Joe Howie

When I grew up in the Hillsdale area in the 1960s there was a young boy at Murphey Elementary that was a ham. Does anyone know if he's still alive? John Zeller, N4ATB [tanbigo@hotmail.com](mailto:tanbigo@hotmail.com)

- ❖ GARA has new name badges. If you do not have yours, you can get your name badge at any meeting.
- ❖ There is a new ARRL-affiliated club in the NC Section! The new club is the Greater Gaston Amateur Radio Society of Gastonia, NC. Congratulations and welcome!

### NEXT MEETING Monday, Sept. 26th

The next meeting of the Greensboro Amateur Radio Association will be Monday, Sept. 26th, at Captain Bill's Seafood & Steakhouse, 6108 West Market Street, Greensboro, NC 27409, between Guilford College Road and Swing Road. This month's program:  
CHIRP

## GARA Meeting Minutes

### Board Meeting Minutes – Sept., 2016

**There was no Board meeting in September.**

### Regular Meeting Minutes - August, 2016

The Greensboro Amateur radio association held their regular monthly meeting on August 22<sup>nd</sup> 2016 at Captain Bills seafood located at 6108 W. Market Street in Greensboro.

Cameron Conover AJ4TW was out of town and could not attend the meeting so Scott Toth KV4UP officiated the meeting in his absence. Scott opened the meeting at 7:15 PM.

Scott asked everyone to identify themselves.

Scott asked if anyone had anything for show and tell, there were several responses.

Scott said he is working on a program for September.

David Bond KK4VCG gave the treasury report.

Tom Bertolino KB1P sad we need to start thinking about club officers for 2017, the elections will be here soon.

Betty Williams KC2BFN said it will be time for the open house soon and asked if we wanted to hold one this year. Betty also said to let her know if you are not receiving the feed line newsletter.

Chris Thompson K4HC said the Quorvo Free gate has been rescheduled for September 24<sup>th</sup> 8:00AM until 2:00PM see the KD4RF web site for more information.

Scott said this coming Saturday is license testing in High Point

#### **The Greensboro Amateur Radio Association**

President Cameron Conover, AJ4TW

Vice-President Scott Toth, KV4UP

Treasurer David Bond, KK4VCG

Secretary Greg Spencer, KG4UQV

Financial Patrick Moore, K2CPR

Engineering Chair Jesse Lindley, K4AX

Operations Chair John Strandberg W4DX

Member-at-Large Ed Miller, AD4YB

Member-at-Large Thomas Bertolino, KB1P

*Appointed Position:*

Public Information

Officer

Newsletter Editor

Betty Williams KC2BFN

Scott said the program for this meeting was Show & Tell.

Christ Thompson K4HC made a motion to adjourn, Greg Ray KK4MHY seconded and the meeting closed at 8:00 PM

Respectfully submitted by;

Greg Spencer KG4UQV

GARA Secretary

### Board Officer Nomination Time

*The Feed Line* is ©2016 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

## From the President's Shack

President's Shack September 2016

Fall is here. Kids are back in school, the days are getting shorter. The grass stops growing soon, after the leaves are up we'll all have plenty of time for radio, right? I hope so! I'm looking forward to some long winter nights on the radio. But before we do that we have some work to do! It's time for GARA Board Officer Nominations again. We want to encourage everyone in the club to step up and get involved in the administration of the club. If you have the desire to help guide the club through 2017, even if you are just curious about what we do, please get involved. We could use your help. My year next year is most likely going to be full of travel, this year has been light in comparison to the travel I'm expecting next year, which means I'll probably hand the torch over to someone else. I'm still interested in being on the board if there is a place for me to help the club, but I may be gone on several Monday evenings next year and I don't want to be an absentee president. Right now this next coming up meeting is up in the air for me, I may be traveling to Georgia on the 26<sup>th</sup> and not able to attend for the second time in as many months. I hate it when that happens, but there isn't much I can do when duty calls. So, at any rate, please get involved, start thinking about what you love about GARA and what you think might need to be improved, either one could use your involvement on the board, or as a volunteer in any capacity.

GARA rented a table at Shelby Hamfest this year, we decided that a big hamfest like Shelby would be a great way to liquidate some of the donations we'd received through the year and raise some money for the club, which we did indeed do. No one really had the capacity to store all of the stuff or the time to try and figure out what was in working condition and what wasn't, so off to the fest it went. We were able to raise about \$1200 for GARA's general budget by selling donated equipment. We also acquired an HF rig in a trade, we traded a dual band VHF/UHF multimode base radio for an HF rig. That gives us one more rig for operating events, etc. or maybe we could sell it if we decide we don't need it. But, either way I think it was a pretty decent swap. It sure was fun going down to Shelby, I saw a bunch of club members down there. I also ran into tons of guys from our neighboring club Alamance ARC, I really enjoyed catching up with those folks as well. Anyway, I was pretty happy with the results of our efforts at Shelby, especially when you consider that \$1200 is about 50% of what we raise every year in dues. I think we can make this a tradition as a fundraiser for the club. If you or anyone you know has some old equipment that you don't want to fool with anymore, consider donating it to GARA, it could go a long way toward helping us insure the future of the club and putting together events or activities for us all to enjoy. I hope I get to see you on Monday night, but I also hope you will understand if I have to go out of state to earn a few bucks.

See you soon!

73

Cameron, AJ4TW

## September Engineering Update

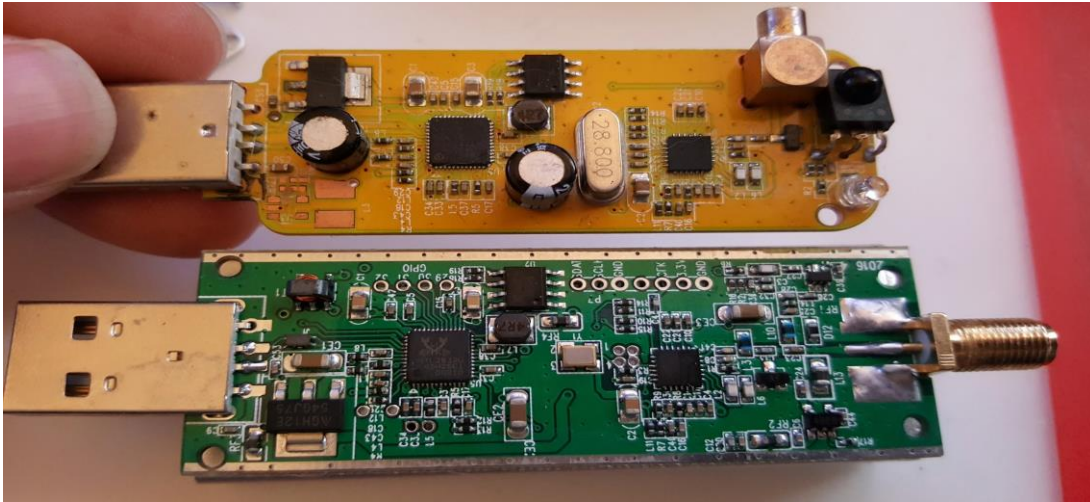
September is always a great month for ham radio NC because it starts off the Shelby hamfest, which is held in Shelby where it belongs. I enjoyed going to Shelby this year, I caught a ride with Cameron AJ4TW and Scott KV4UP. I think we all woke up right as we arrived there. We met up with Patrick K2CPR that was running the G.A.R.A. table in one of the buildings so we were able to stay out of the sun whilst we tried making people buy everything at the table so we did not have to bring it home.

The weather at Shelby was great this year, normally it's very hot and humid, this year it wasn't so humid and the temp stayed under 90 degrees which is a nice change from the past. It made walking the rows much easier. If you haven't been to Shelby I suggest you go, especially if you have a fever for boat anchor rigs or just older rigs in general. No other hamfest I have been too other than Dayton has so many rigs, test equipment, junk (stuff) and just strange odds and ends. I think the last time I was at Shelby the coolest thing I saw was an old computer hard drive about the size of a record player, with 8 disks. Disk size was probably less than ten megabytes. This year I went with nothing in mind to buy, I just came home with some hardline jumpers that were extremely cheap. I had a great time seeing some members of the club as well.

This past month I picked up yet another RTL SDR usb dongle. This one is sold by [www.rtl-sdr.com](http://www.rtl-sdr.com). RTL "SDR" dongles are digital broadcast TV receivers that several years ago someone figured out how to make a driver for it that turns it into a SDR receiver with the right software and a computer. Most are just sold to be used as receivers in Europe and other parts of the world, and come with a remote and a very short antenna, and software to receive TV on the computer. RTL-SDR.com designed their RTL dongle from the ground up to be a better receiver, using a metal casing, better grounding and filtering, a temperature compensated oscillator, bias T output to power a preamp if wanted, direct sample HF reception, 24mhz low pass filter, diplexer for HF/VHF/UHF rx from the same connection, metal housing and standard SMA connector, ext. clock connection, and probably a few things I'm missing. For 20 dollars you have a RX that works from about 1 MHz to 1.6 GHz, all modes. Only thing needed is antenna/s and a computer with speakers to hear the audio. Most RTL dongles only work above 24 MHz, this one has the ability to work below if direct sampling is selected in the software and it works pretty well. It's not on same level as my Flex-5000a on HF, but heck, it's better than the two portable SWL rigs I have, with much better filtering ability. They are sold on Amazon, and if you have prime you get it in two days. Check out [www.rtl-sdr.com](http://www.rtl-sdr.com) for more info, they have a store link at the top of the page. Really handy to have a receiver for the local repeater in the shack if you don't already have a VHF/UHF in there, or local FM broadcast, heck with the right software you can decode and listen to Dstar, DMR, and P25 signals.

Below is a picture showing the standard DVB-T dongle and RTL-SDR's v3 RTL RX, I'll let you figure out which is which, it should be obvious.

**Continued on page 5**



VHF 145.150

I have hardly anything new to report this month on the DR1x repeater. It's working fine, and seems to be performing well. The winter months are coming, and I'm curious to see if the crackle and scratch comes back. I'm almost sure it will, as I think either it's a local noise source, or pop and crackle on the towers rust when the repeater is transmitting and the RX is picking it up. I.E. duplex noise. We had some interesting openings this month, with repeaters down on the coast, and users down at the coast getting into our machine in the mornings.

Arcom has upgraded the processor in the RC210, doubling its performance and memory. Since they are only going to be supporting this new processor in the future with firmware updates I've decided to kill two birds with one stone, get it upgraded to the new processor and to have it checked out to see if we have a faulty controller interface. The upgrade and install price is very cheap and worth the capabilities it will bring, and of course the continued support by the manufacture.

UHF W4GSO Dstar.

As usual the report on Dstar usually involves computer stuffs. And this month just like last month it's been very smooth sailing. I've yet to have to go out to the site for a DSL modem reboot, the web IP power strip is doing its job for sure, and keeping the modem during the summer days with air blowing on it has seemed to help. Steve K4SQI and Scott KV4UP have been keeping the gateway computer updated. This month we had to update the SSL certificate for the gateway status and registration page, as well as the standard Linux updates.

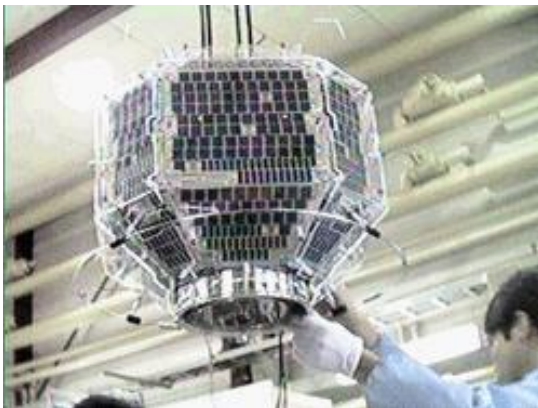
One thing we are keeping an eye on and an ear out for is what other Dstar repeater owners doing with their gateway computers next year when the version of Linux they run on will no longer be supported.

RF performance of the Dstar machine is unchanged from previous months and is working well. Easily keyed up anywhere in town in 100mw on a HT and solid coverage to the 40/85 split to the east and Winston Salem to the west, basically just like the VHF machine.

73 K4AX Jesse Lindley

## FO-29 Satellite Turns 20

It's been 20 years since the Fuji-OSCAR 29 ([FO-29](#)) satellite launched on August 17, 1996, from Tanegashima Space Center. Its 100-kHz-wide analog Mode V/U transponder continues to serve the Amateur Satellite community, although its packet BBS and digitaalker no longer function.



With an apogee of 1323 kilometers, FO-29 provides satellite operators with excellent DX opportunities every few months. Intercontinental contacts are regularly reported, including contacts between Japan and Alaska and between North America and Europe. While the theoretical maximum range at apogee is 7502 kilometers, the transponder's excellent sensitivity and solid 1 W downlink signal allow that distance to be stretched when conditions are right. The longest distance covered via FO-29 was an unscheduled 7599.959 kilometer (approximately 4712 mile) [contact](#) on August 27, 2015, between Dave Swanson, KG5CCI, of Little Rock, Arkansas (on Shinnal Mountain in EM34), and Christophe Lucas, F4CQA, in Trouy, France (NJ17). Swanson answered F4CQA's CQ.

The 2015 K1N Dxpediton to Navassa Island made 29 contacts during two passes of FO-29, activating that extremely rare DX entity on satellite for the first time since 1993, when Don Roland, VE1AOE, reported logging between 400 and 500 contacts as part of the W5IJU Dxpediton to Navassa – making the bulk of them on AO-13.

FO-29 remains the most widely used linear transponder satellite and an ideal starting point for beginners. Uplink for the mode V/U (J) inverting linear transponder is from 145.900 to 146.000 MHz, SSB or CW. The downlink is 435.800 to 435.900 MHz. The CW beacon transmits on 435.795 MHz.

JARL offers an award for confirmed QSOs with 10 different stations via FO-29. – *Thanks to AMSAT News Service*

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**CLYDE SAWYER, JR, WC9CW, NEW NET CONTROL STATION FOR TAR HEEL EMERGENCY NET** – Clyde Sawyer, WC9CW of Albemarle has volunteered to become the Net Control Station for the Tar Heel Emergency Net on Wednesday evenings. Clyde WC9CW has just been appointed Assistant Emergency Coordinator for Stanly County. The Tar Heel Emergency Net (THEN) is looking for a Net Manager and additional Net Control Stations. All individuals with ARES appointments – Assistant Emergency Coordinators, Emergency Coordinators, and District Emergency Coordinators – should consider participating as the Net Manager or as a Net Control Station. For further information, see <http://www.ncarrl.org/nets/THEN/index.html> or contact Karl Bowman, W4CHX, ARRL NC Section Manager, at w4chx at arrl dot org. Again, thanks to Clyde WC9CW for supporting the Tar Heel Emergency Net!

(source: NC ARRL website)

## Congratulations! You passed.

September 10th Test Session Greensboro



Donald A. Brown KM4WOM  
Technician



Matthew T. Flyer KM4WON  
General



David G. York KM4WOO  
Technician



Samuel A. Roberts III KM4WOQ  
Technician

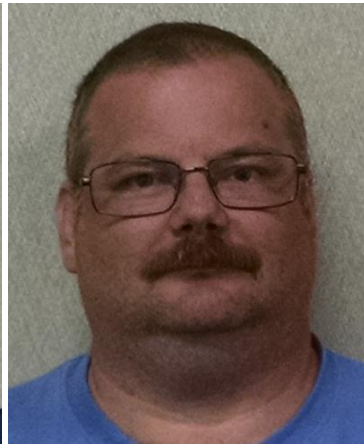
August 27th Test Session (High Point)



Joe Frazier Sr. KM4WHZ  
General



Martin E. Wall Jr. KM4WIH  
Technician



Timothy Scott KM4WII  
Technician

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 David Macchiarolo, AJ4TF, and his team of volunteer examiners for taking time out of their busy schedules each month to help new or upgraded hams in our area.

Next month's testing session will be on October 8th at Hinshaw United Methodist Church, 4501 High Point Road, Greensboro, 27407, at 9am. While walk-ins are welcome contacting the lead VE is preferred. Please contact David Macchiarolo, AJ4TF, email [aj4tf@arrl.net](mailto:aj4tf@arrl.net), phone (cell), 336-420-9424.

If you cannot make it to this test session, W4VEC holds a second test every month in this area. Test sessions are held at 10am on the last Saturday of each month at the Red Cross High Point Chapter, 815 Phillips Ave., High Point, NC 277262. Walk-ins are welcome. Contact information is David Macchiarolo, AJ4TF, email [aj4tf@arrl.net](mailto:aj4tf@arrl.net), phone (cell), 336-420-9424.

GROWTH IN NEW AMATEUR RADIO LICENSEES AHEAD OF LAST YEAR'S – The ARRL Volunteer Examiner Coordinator (VEC) reports that 20,447 new US Amateur Radio licenses have been issued since January 1. For further information, see <http://www.arrl.org/news/growth-in-new-amateur-radio-licensees-ahead-of-last-year-s>

(source: ARRL website)

## Local Silent Keys

### Obituary for Mr. Barry Bennett

*Mr. Barry Bennett, 66, of Archdale, passed away Monday, September 19, 2016 at his home, surrounded by his loving family.*

*Barry grew up in High Point and was a graduate of the High Point Central High School class of 1968. He enjoyed NASCAR, wood working projects of all kinds in his shop, grilling outside, and talking with his HAM radio friends.*

The family of David W. Montgomery wishes to acknowledge his departure from this life on September 5, 2016. He leaves behind his wife, Betty B. Montgomery, daughter Christy Montgomery Whitelaw (Edwin) of Christiansburg, VA, brother Donald P. Montgomery of Lady Lake, FL, stepdaughters Syvella Coomer of Clemmons, NC, Angie Cofer (Bill) of Winston-Salem, NC, stepsons Tom Lee Elam, Jr. (Pamela) of Blountville, TN and Mark Elam (Grisel) of Winston-Salem, NC. He will also be missed by three nieces and two nephews and by eight grandchildren and eight great grandchildren to whom he was known as "PopPaw." David was preceded in death by his son, David W. ("Buddy") Montgomery, Jr. David was reared in Greensboro, NC and attended Greensboro Senior High School. In 1959, he graduated from the University of North Carolina School of Pharmacy and began his career, spanning over 50 years, serving the community via that profession. **David was an avid amateur ham radio operator and was a member of the High Point Amateur Radio Club. His call sign, WD4MKS, will be retired.**

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### ***EMCOMM EXERCISES TO BE HELD IN NORTH CAROLINA DURING NOVEMBER AND DECEMBER***

– In the NC Section, ARES – NC AUXCOMM Society will conduct two (2) emergency communications (EMCOMM) exercises this year.

The first exercise will occur in mid-November and the second will occur in mid-December. Both statewide exercises will emphasize digital communications, with a focus on HF Winlink. Units with VHF Winlink capability and VHF/UHF voice capability can also participate. The exercises will encourage Hams to learn and use the Winlink system, and ICS messaging, as they are employed in NC. The training and experience gained in these exercises will help Hams develop the skills needed to make a difference when NC faces EMMCOMM challenges. Additional information regarding the EMMCOMM exercises will be posted on the NC ARRL and NC AUXCOMM Society websites, see <http://www.ncarrl.org/ares/> and <http://auxcomm.us/main/> Please note that the NC Section will not be participating in the 2016 ARRL Simulated Emergency Test, which is scheduled for October 1-2, 2016. Thanks to Tom Brown, N4TAB, ARRL NC Section Emergency Coordinator, for providing this information!



## Calendar of Events

Aug 22	GARA General Meeting (Captain Bill's Seafood & Steakhouse, Greensboro)
Aug 27	VE Session (Red Cross Building, High Point)
Sep 03	North Carolina State Convention (Shelby Hamfest, Shelby, NC, <a href="http://shelbyhamfest.org">http://shelbyhamfest.org</a> )
Sep 10	VE Session (Hinshaw United Methodist Church, Greensboro)
Sep 12	GARA Board Meeting
Sep 24	VE Session (Red Cross Building, High Point)
Sep 24	FreeGate 2016 (Greensboro, NC, Qorvo Amateur Radio Club, <a href="http://kd4rf.org">http://kd4rf.org</a> )
Sep 26	GARA General Meeting (Captain Bill's Seafood & Steakhouse, Greensboro)
Oct 8	VE Session (Hinshaw United Methodist Church, Greensboro)
Oct 10	GARA Board Meeting
Oct 24	GARA General Meeting (Captain Bill's Seafood & Steakhouse, Greensboro)
Oct 29	VE Session (Red Cross Building, High Point)
Nov 11	JARSFest 2016 (Benson, NC, Johnston Amateur Radio Society, <a href="http://www.jars.net">http://www.jars.net</a> )
Nov 12	VE Session (Hinshaw United Methodist Church, Greensboro)
Nov 14	GARA Board Meeting
Nov 26	VE Session (Red Cross Building, High Point)
Nov 28	GARA Elections/General Meeting (Captain Bill's Seafood & Steakhouse, Greensboro)
Dec 10	VE Session (Hinshaw United Methodist Church, Greensboro)
Dec 12	GARA Board Meeting
Dec 31	VE Session (Red Cross Building, High Point)
Jan 9	GARA Board Meeting
Jan 14	VE Session (Hinshaw United Methodist Church, Greensboro)
Jan 23	GARA General Meeting (Captain Bill's Seafood & Steakhouse, Greensboro)
Jan 28	VE Session (Red Cross Building, High Point)
Feb 11	VE Session (Hinshaw United Methodist Church, Greensboro)
Feb 13	GARA Board Meeting
Feb 25	VE Session (Red Cross Building, High Point)
Feb 27	GARA General Meeting (Captain Bill's Seafood & Steakhouse, Greensboro)
Mar 10	Charlotte Hamfest (Concord, NC, MARS, <a href="http://www.charlottehamfest.org">http://www.charlottehamfest.org</a> )
Mar 11	VE Session (Hinshaw United Methodist Church, Greensboro)
Mar 13	GARA Board Meeting
Mar 20	GARA General Meeting (Captain Bill's Seafood & Steakhouse, Greensboro)
Mar 25	VE Session (Red Cross Building, High Point)

The purpose of this calendar is 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](mailto: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 News Line and is on the 145.150, W4GSO repeater. Patrick Moore K2CPR 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 54C)

**WEDNESDAYS** – at 8:45pm, 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

Oct. 2016 to Jan., 2017

Oct. 8, 2016

Nov. 12, 2016

Dec. 10, 2016

Jan. 14, 2017

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

Time: 9:00am

Contact: David Macchiarolo

Phone: 336-420-9424

E-mail: aj4tf@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](http://www.w4gso.org)

**FIRST CLASS MAIL**

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