



The Greensboro Amateur Radio Association

Feed Line

Providing Amateur Radio news for the Triad



Brian Wilson, KJ4LKY, Editor

www.w4gso.org

info@w4gso.org

A Sincere “Thank You” to the Guilford County ARES

by Stephen Marks, N4SCM

On behalf of the Technical Services Division of Guilford Metro 9-1-1, please accept our sincere appreciation for the assistance ARES members provided in our quest to identify some interference impacting our 800 MHz radio system. Information provided by the Amateur Radio community which you forwarded to us in your daily reports was valuable in determining that the interference was not local. All of the reports indicated that signals were not heard on the input of the repeater pair. Some Hams may have felt that by not hearing the interference, their observation was inconclusive or of no value. On the contrary, every report was



worthwhile.

While we still have not conclusively determined the source of the interference affecting two of our National Mutual Aid System (NMAS) repeaters, we do feel confident – based on the information provided by ARES – that the interference is from outside of

NEXT MEETING Monday, February 22

The next meeting of the Greensboro Amateur Radio Association will be Monday, February 22nd, at the Golden Corral Steak House, 4404 Landview Dr, Greensboro, NC 27407, off Wendover Ave. near Sam's Club.

Guilford County. We are grateful for the immediate and professional response provided by Guilford County ARES and hope that you will be amiable to assist us with projects in the future. Again, please extend our thanks to all the Hams who participated in this activation for a job well done.

NC QSO Party - February 28

ARRL North Carolina Section Manager
Timothy B. Slay, N4IB, n4ib@arrl.org

One of my personal goals for 2010 is to operate in as much state QSO parties as possible, with one going on almost every weekend throughout the year. For a list of state QSO parties, check out <http://www.hornucopia.com/contestcal/stateparties.html>. Our own North Carolina QSO Party is coming soon!

Sponsored by the Forsythe Amateur Radio Club, W4NC, the event starts on 12 noon on Sunday, February 28 and runs to 10pm. The object is for out of State stations to work as many NC

stations as possible. Stations may be worked once each per band/mode combination. NC mobiles can be worked again as they change counties. NC fixed stations work as many NC counties, states, Canadian provinces and DXCC countries as possible. NC mobile stations work from as many NC counties to as many NC counties, states, Canadian provinces and DXCC countries as possible. There is a 100W power limit for all participants.

This is a fun event and gives you a chance to be at the bottom of a pile up!

Go to www.w4nc.org for more details.

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GARA Meeting Minutes

Regular Meeting Minutes January 25, 2009

The Greensboro Amateur Radio Association held its first monthly meeting of the new year on January 25, 2010 at the Golden Corral restaurant beside Sam's club near the intersection of Wendover Avenue and I-40. The meeting was called to order at 7:15pm by our new president Will Ravenell, AI4VE. Will told everyone that Chris Thompson, K4HC's mother was in the hospital and Roy Smith, N4BYU, vice president, was sick and recovering at home.

Will started by asking everyone to identify themselves.

Treasurer Ernie Wall, NC4EW, spoke about the bank account status said that he has paid Arch for the D-Star repeater and other accessories.

Financial officer Al Allred, K4ZKQ, said the expenditures were less than expected and the membership renewals were less also.

Betty Williams, KC2BFN, our new member-at-large said she is looking at ways to get new members to join GARA.

Will said that the D-Star repeater is working well and he spoke about a problem with it back in mid-January. He and Arch, KT4AT, went out and ran some tests and found a loose cable to be the cause. After repairing the repeater, it has continued to work great.

Will asked for ideas about ways to get more members to join the club. We had a discussion on what may be keeping people from coming to the meetings and ways to attract more people to GARA.

Will said he would like to restart the fall trip to Mt. Mitchell.

There have been several members who have started learning CW, and Will said that we may start a CW learning net and/or class. He also noted that CW is required for most QRP sets.

We discussed some ideas about the radio station at the Nature Science Center and the possibility of having meetings there. Will said that it is not looking too promising about holding meetings there.

Will said he would like to see an outreach program in the local schools where hams would go to schools and give programs about ham radio to the students. He would also like to see more support from club members.

We discussed some program ideas for the coming meetings this year.

Larry Pike, KI4PRT, said he would like to see the program topic in The Feed Line.

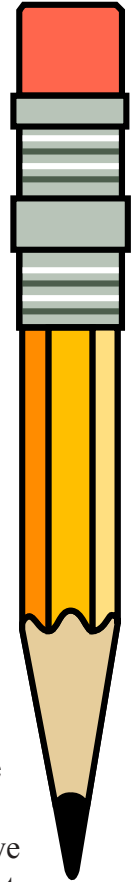
Will said that we should again look into becoming a Federally recognized non-profit organization as it can open doors for the club.

Jim Waynick, N4JLW, said he would like to see ham radio involvement with scouts and schools, and he discussed working with scouts.

There was no program this month.

The meeting ended at 8:30pm.

Respectfully submitted by Greg Spencer, KG4UQV, GARA Secretary.



The Greensboro Amateur Radio Association

President Will Ravenell, AI4VE
Vice-President Roy Smith, N4BYU
Treasurer Ernie Wall, NC4EW
Secretary Greg Spencer, KG4UQV
Financial Al Allred, K4ZKQ
Engineering Chairman Jesse Lindley, N4BFD
Operations Bob Mays, KE4MOW
Member-at-Large Rob Erikson, KG4OPX
Member-at-Large Betty Williams, KC2BFN
Appointed Positions:
Webmaster Tom Forrest, N4GVK
Newsletter Editor Brian Wilson, KJ4LKY

The Feed Line is ©2010 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.

GARA Meeting Minutes

Board Meeting Minutes January, 2009

The GARA board of directors held their February meeting at the Benjamin Branch Library.

The meeting started at 7:11pm with Will Ravenell, AI4VE, President; Roy Smith, N4BYU, Vice President; Ernie Wall, NC4EW, Treasurer; Al Allred, K4ZKQ, Financial; Betty Williams, KC2BFN, Member-at-large; Jesse Lindley, N4BFD, Engineering Chairman; and Greg Spencer, KG4UQV, Secretary, present.

Ernie gave the treasury report listing the bills paid and those coming due, as well as, the balance in the bank account.

Al gave the financial report. He stated that he is still working on the forecast for this year.

Jesse told us about the repeater problems the club had during a power outage at the site. When the power went out the backup generator came online only to fail due to an oil leak, which damaged the electronics. Next the uninterruptible power supply (UPS) for the repeater equipment died due to a faulty battery which caused the DVR backup battery to run down and lose its memory. Everyone needs to take this as a lesson and inspect our own equipment closely.

Jesse has replaced the battery in the UPS and the DVR, and the city has repaired the generator.

Jesse said the club should replace the UPS battery on the D-STAR repeater, also.

Will said that Arch, KT4AT, is ready to update the D-STAR controller software.

Roy said that Terry Hendrix, KC8OEX, and Mike Walker, KE4MOY, donated copper tubing to make J-Pole antennas at the open house. This pipe is being stored, and the club needs to do something with it. The Board is looking at having a copper pipe J-Pole building session soon. Stay tuned for details.

Will and Greg have signed the D-STAR controller user agreement and sent it back to Arch.

Will said that Arch is not ready to unveil his D-controller at Dayton this year.

Will said that Arch was disappointed that the D-STAR net is not attended by other D-STAR repeater groups. The club needs to talk with other groups to see if possibly a rotating net control among all area D-STAR repeater groups would work so that everyone can share the net.

Betty said that she has some ideas for programs in the works, as well as, some ideas to increase membership.

Will said he would like to get a calendar of events put on the website.

He also said GARA should

look at repairing the ICOM radio at the Natural Science Center. It has a faulty encoder on the tuning knob, and he will bring this to the club for discussion. Will is working on a proposal to improve the station. Will said he would like to improve the relationship between GARA and the Natural Science Center.

The Board talked about the possibility of putting up another antenna for the old analog 440 repeater. The club could then put it back on the air in addition to the D-STAR and VHF repeaters. The Board will get some details worked out and bring this discussion to the club at a later date.

Al spoke about making Jim Waynick, N4JLW, a non-voting board member as he is the Emergency Coordinator for ARES. This will allow GARA and ARES to keep up with each other.

The Board discussed our agreement with Triad Skywarn for the use of our repeater. Skywarn will be second priority if ARES and Skywarn are activated at the same time.

Will said he would like to again look at the possibility of becoming a 501c3 (non-profit) organization a little later in the year.

Respectfully submitted by Greg Spencer, KG4UQV, GARA Secretary.

From the President's Shack

by Will Ravenel, AI4VE
GARA President

I'm sure you'll all agree, this has been an unusually cold winter. But it's not all bad, old Sol is waking up and propagation seems to get better every week. The cold weather and snow have been good for

hunkering down in a warm shack and working some DX. QSOs on 17 and 15 meters are common and there's even been some activity heard on 12 meters. Ten meters is still pretty quiet except for short openings, but it won't be for long.

With spring just around the corner this is a good time to think about antennas. There's a small window of mild weather every year before the leaves come back to make antenna work more difficult. I plan to raise my multi-band vertical soon and to lower and check the connections on my 96' doublet.

There are lots of activities coming up and the GARA web

site has a new Schedule of Events page that lists each activity. Look for the link in the left column of the home page.

Sunday, February 28th is the **NC QSO Party**. This event runs from noon to 10pm local time and

is a fun way to work a lot of states at one sitting. I

plan to work the Natural Science Center station for this contest and encourage others to come participate and show off Amateur Radio to the visitors.

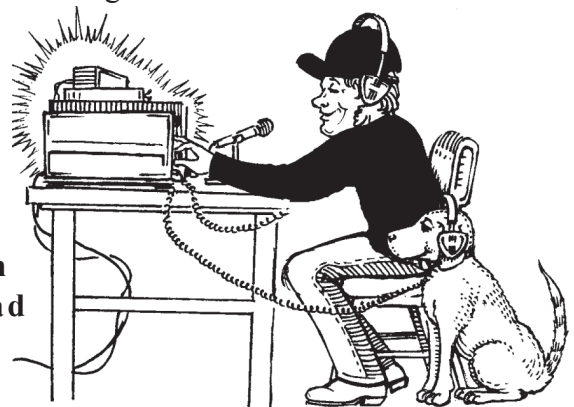
The **Charlotte Hamfest** (in Concord) is on the 13th and 14th of March and W4VEC exams will be postponed until the following weekend as a result.

Other upcoming events being planned are a **D-STAR Forum** (March 6th, time is TBA), a copper pipe **J-Pole construction session**, and a **road trip** to the National Radio Astronomy

Observatory in Green Bank, WV. To find out more about these activities once plans are finalized consider one of the following: 1. check the web page frequently; 2. participate in the Sunday News and Information Net at 9pm on the 145.250 repeater; 3. participate each Tuesday in the NC D-STAR Net at 9pm on 442.8625 (W4GSO B and Reflector 17C); or 4. attend the club meeting on the fourth Monday of each month at the Golden Coral restaurant beside Sam's club near the intersection of Wendover Avenue and I-40.

I hope to see you there.

Will, AI4VE



Congratulations, You Passed!!

Unfortunately, due to inclement weather (aka snow) the February testing session was cancelled. Remember that the March testing session is the **THIRD** Saturday of the month, so

that anyone who wants can go to the Charlotte Hamfest in Concord.

Look to this section each month for a listing of those who have passed the test for their license or upgrade. We hope there

are many people whose names and pictures will be shown here in 2010. Remember, the W4VEC testing schedule is on the back page of this newsletter, as well as contact information.

News Briefs That Effect the Ham Community

ARRL Field Day

2010 Field Day Packets Now Available

From ARRL

It's never too early to start planning for Field Day! It's that time of year again -- time to start gearing up for ARRL Field Day, June 26-27, 2010! ARRL's flagship operating event -- always held the fourth full weekend in June -- brings together new and experienced hams for 24 hours of operating fun. Field Day packets are now available for download and include the complete rules (including changes for 2010), as well as other reference items such as forms, ARRL Section abbreviation list, entry submission instructions, a Frequently Asked Questions section, guidelines for



Silent Key

I sadly have to tell you that my Grandfather, Rudy Varney, KC4AM, passed away this morning, February 9, 2010, at 12:01am. At least he is not suffering anymore. Thank you for getting the word out to other Ham operators. A friend of his named Ralph called to check on him yesterday. I really appreciate it. Thank you - Misty

getting bonus points, instructions for GOTA stations, a kit to publicize your event with the local press and more.

Numbered Radiograms of the GREENSBORO AMATEUR RADIO ASSOCIATION

Developed by Chris Thompson, K4HC

Produced by R. F. Mays, KE4MOW

GARA ZERO The IQ of the drivers around me is ZERO.

GARA ONE The traffic on ____ (name of street) is lousy.

GARA TWO I will meet you at the ____ (location) Starbucks in ____ minutes.

GARA THREE I am where I'm at (aka arrived or "destinated").

GARA FOUR The city (or county) planners have their heads in the sand, and don't have a clue as to what this city (or county) needs.

GARA FIVE Wishing you a most splendiferous day, unencumbered by the hardships that go along with modern living, accompanied by the warm feeling that follows accomplishing the tasks placed before you and hoping that in some small way, I have made your day.

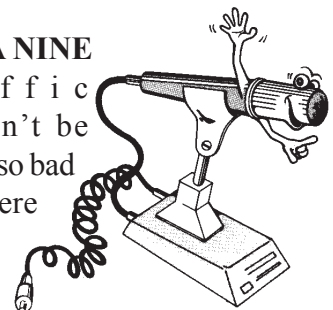
GARA SIX I can see you now (voice APRS).

GARA SEVEN I-40/85 is backed up.

GARA EIGHT You doubled with ____ (name or call sign).

GARA NINE

Traffic wouldn't be nearly so bad if it were not for all the cars.



GARA TEN I'm going to take a nap. *(The use of this Radiogram is limited to use by Roy Smith---N4BYU.)*

Note: For GARA Numbered Radiograms, they may be phrased as a question by placing an INTERROGATIVE (abbreviated INT) before the Radiogram number. For example: INT GARA SIX—Do you see me now?

Hints and Kinks: Unistrut Antenna Support

From ARRL

This idea comes to us from Louis Kobet, WB3DZD, of Camas, Washington.

When considering a center support for the installation of an inverted V antenna I decided on the following requirements: a strong material, easy assembly, corrosion resistant and with tilt-over capability. The initial design was to use several 10-12 foot sections of antenna mast or 2 inch galvanized pipe coupled together. Due to the cost of antenna mast and galvanized pipe being more than anticipated, an alternative, 10 foot sections of 1-5/8 inch Unistrut channel was selected.

Unistrut is a ham's Tinkertoy. It is available in 13/16, 1 1/4 and 1-5/8 inch widths, 10 and 20 foot lengths and in 12, 14 and 16 gauge sizes. It is made with dipped surface protective treatments from electro-deposition acrylic green to "hot dipped" galvanized coatings and multiple channel designs (including telescoping sections). A vast selection of brackets and fasteners is available and it is continuously slotted for easy

guying. The design and choices for project use are limited only by the creativity of the user.

The tilt over base support consisted of a treated 4×4 inch landscape post anchored in concrete. (The wooden post was moisture sealed at the top using the dipped coating used for hand tools and along the length with several coats of wood sealer.) The Unistrut mast pivot point on the support base was a 3 inch lag bolt about 50 inches above ground. In retrospect, a section of Unistrut could have been set in the concrete as the antenna base support.

The Unistrut mast preparation consisted of black paint (except for areas where the sections were bolted together) and the addition of a hoisting pulley mounted at the end of a 2 foot PVC pipe (see Figure 1). One problem encountered was in bolting the Unistrut together. Bolting back-to-back against the base of the "U" was not possible because I couldn't get a socket on the bolt head inside the Unistrut

channel. To get around this the Unistrut was bolted with the open "U" ends face to face. Square Unistrut channel would have eliminated this issue. The three Unistrut sections were bolted together with about a 12 inch overlap.

An antenna hoisting line was fed through the pulley and mast section carried to the base support for mounting. After attaching the mast to the pivot point it was tilted up into position, plumbed and secured in place with three additional lag bolts.

The V antenna was spread out, transmission cable attached and hoisted to the top of the mast. The ends of the V antenna were attached to a 12 foot landscape treated 4×4 that was secured to the property fence.

Do you have an idea or a simple project that has improved your operating? Maybe you've taken something commonly found around the home and developed a ham radio use for it? Why not share your hints with fellow hams in "Hints and Kinks," a monthly column in QST. If we publish your hint in QST, you will receive \$20. Send your hints via e-mail or to ARRL Headquarters, Attn: "Hints and Kinks," 225 Main Street, Newington, CT 06111. Please include your name, call sign, complete mailing address, daytime telephone number and e-mail address.



Figure 1: The PVC pipe and hoist pulley device mounted to the top of the Unistrut for hoisting the antenna.



Figure 2: The center of the inverted V raised into position at the top of the Unistrut support.



NC4BL Dayton Hamvention by Bus **May 13th, 14th, 15th & 16th, 2010**

The bus will leave from Burlington, NC (Exit 141) on May 13th at 7 AM with the following pick up locations and times:

<u>Greensboro</u>	<u>Four Season's Mall</u>	<u>7:20 AM</u>
<u>Kernersville</u>	<u>Behind Hardee's</u>	<u>7:50 AM</u>
<u>Winston-Salem</u>	<u>Lowe's Parking Lot</u>	<u>8:15 AM</u>
<u>Mt. Airy</u>	<u>I-74 /Exit 8</u>	<u>9:00 AM</u>
<u>Hillsville, VA</u>	<u>I-77/Exit 14(Citgo Station)</u>	<u>9:30 AM</u>
<u>Wytheville, VA-</u>	<u>I-81/Exit 80 (McDonald's)</u>	<u>10:00 AM</u>
<u>Bluefield, VA</u>	<u>I-77 TBA</u>	<u>10:35 AM</u>



The cost will be \$250 per person (which covers lodging for 3 nights at the University of Dayton (double occupancy) and the coach). It is advisable to order your Hamvention ticket (good for all three days) in advance for \$20 as they will cost \$25 at the door. Their address is: Hamvention Advanced Tickets, PO Box 1446, Dayton, OH, 45401.

A \$75 deposit is required with the balance due by April 15th.

(Note: I will take the first 50 people to make a firm commitment – either by sending in their deposit or contacting me personally)

Complete the form below—clip and send along with your deposit to:

Bill Lundy, NC4BL
151 Brady Johnson Lane.
Mt. Airy, NC 27030

or email: nc4bl@surry.net
Phone: (336)320-2135
Fax: (336)320-2136

Name _____ Call _____ Phone _____

Address _____ E-Mail _____

City _____ State _____ Zip _____

Enclosed is deposit of \$ _____ (\$75 required by March 15th, 2010) Balance of _____ (required by April 15th, 2010)

Note: I would like to room with:

Call _____

Area Happenings

FOURTH MONDAY – at 6:30 PM, the Greensboro Amateur Radio Association have their regular monthly meeting at the Golden Corral, 4404 Landview Dr, Greensboro, NC 27407, off Wendover Ave, near Sam's Club. Please plan to gather at 6:30 PM for dinner. The meeting is scheduled to start at 7:15 PM

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.

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

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.

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

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 7 PM.

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

THURSDAY – at 11:15 AM, 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 8 PM (approximately) Greensboro Hams get together for coffee.

GARA REPEATERS

145.150 Mhz - minus offset
100 Hz. Tone
442.8625 Mhz. + offset
Digital D-Star

The W4VEC Testing Schedule

Mar. to Aug. 2010

March 20, 2010

April 10, 2010

May 8, 2010

June 12, 2010

July 10, 2010

August 14, 2010

September 11, 2010

Location: #3 Centerview Dr,
Hickory Building,
Greensboro, NC 27407

Time: 9:00am

Contact: Glenda Nicholson

Phone: (336) 674-3810

E-mail: ag4nc@bellsouth.net



Greensboro Amateur Radio Association

P.O. Box 7054

Greensboro, NC 27417

www.w4gso.org

FIRST CLASS MAIL

The Official Publication of GARA