

Feed Line



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February, 2005

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Meet Our Members - Randy Bowers, KR4QH

Randy Bowers, KR4QH is our member profile this month. Randy has been licensed since 1994 is an Extra class.

Randy is from Mountain Park, NC in Sury County. A friend, Carl, KF4RJ got him interested, but he put off getting his license for eight years.

His shack consists of a Yaesu FT-100D, with an ATAS100 antenna, Yaesu FT-8800R mobile, Yeasu FT8100R mobile, Yaesu FT-90 mobile, Yaesu VX-5R handheld and an Icom W21AT. He runs various antennas including an old cubical quad.

Randy said his favorite club activity is the soccer tournaments. He also enjoys "fox hunts" along with Ham activities of DXing, WAS, APRS, SkyWarn, MARS and ARES.

Randy is an NC State graduate and has completed the Program for Management Development at UNCG and the Executive Program at the Darden School of Business at the University of Virginia.

He is employed by International Textile Group, Inc., formerly Cone Mills Corporation and Burlington Industries. The Cone side is still the largest denim manufacturer in the world. His career has included engineering, technical services and support, purchasing, industrial management, real estate, process improvement, financial analysis and traffic and transportation. He also holds a valid CDL.

Randy is married to his wife of 22 years, Susan, and they have one son, Alan who is 17.

He concluded, "I enjoy our club and encourage anyone wishing to join a Ham radio club to consider GARA. We have a good group of members that really care about the hobby."



Randy Bowers, KR4QH

Next Meeting February 28

The next meeting of the Greensboro Amateur Radio Association will be held at the Golden Corral Steak House off Wendover. If you'd like to eat be there at 6:30 with the meeting beginning at about 7:15.

This month's program will be presented by John Hamilton, NC4JH, Area SkyWarn Coordinator.

GARA Obtains New Web Site Domain Name

Beginning March 1, 2005, the GARA web site will move to a new home at www.w4gso.org. The new e-mail address for the site will be info@w4gso.org.

The change was needed to gain more server space and allow for use of newer technology scripts along with more server features.

The old site will remain in operation and have a automatic redirect page for a few months.

March Hamfest Schedule

- The 15th annual Down East Hamfest will be held Sunday March 6, 2005 at the Lenoir County Fairgrounds
- Charlotte Hamfest & Computer show, March 12-13

\$\$ From the Financial Officers Of GARA \$\$

By Al Allred, K4ZKQ

From The Funds Trackers, Or, How your Club's Funds are tracked – Ernie, NC4EW, Treasurer and Al Allred, K4ZKQ, Financial Officer

This is a follow up on "A Note from the President" in the January Feed Line. In that note Lee urged you to consider this "your Club." In the same vein, the directors treat Club funds as "your funds." Your directors account for

Club funds in the following manner:

The Treasurer, (Ernie, NC4EW), has a four-part function:

1. He gets the mail from the post office box and separates membership renewals from invoices. He also receives membership renewals at club meetings. Dues are deposited to the Club's checking account. Invoices are verified before payment.

2. He gives each member a receipt when dues are paid. This provides a paper trail for the income, identified by member name.

3. He pays the bills by check after invoices, or requests for reimbursement, are verified.

4. Each month, he sends to the Financial Officer (Al, K4ZKQ) a list of the financial activities through the current date. Membership renewals are identified by name. Expenditures are identified by check number, payee, and purpose.

- The Financial Officer, (Al, K4ZKQ), has a two-part function:

1. He prepares a forecast by month for the current year as a means of comparing current results

with the Club's experience for the three or four previous years.

2. He summarizes the individual transactions by appropriate categories. These totals are compared to the forecast in the monthly report.

Weather Challenges Local Ham Operators

By John Hamilton, NC4JH
Emergency Coordinator
Triad Skywarn



Well, this Winter has certainly proved to be challenging for the National Weather Service forecasters! From an unexpected 1/2" of snow which crippled Raleigh to the forecast 4 - 8"

storm which only brought small amounts of snow, sleet and freezing rain, the complex weather patterns have certainly left many scratching their heads so far this year!

While we have been lucky thus far in escaping any serious wintery precipitation, please keep in mind that we have until late March before we are in the clear!

With this in mind, I encourage everyone to take time and visit the

Cont., See Weather on page 7

GARA OFFICERS

President

Lee Wimbs, W1MBS

Vice President

John Doggett, KI4BMS

Secretary

Tom Forrest, N4GVK

Treasurer

Ernie Wall, NC4EW

Financial Officer

Al Allred, K4ZKQ

Engineering

J.B. "Arch" Archinard, KT4AT

Operations

Roy Smith, N4BYU

Members At Large

Clark Doggett, KG4HOM

Mark Robertson, KG4STP

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Paul Shepherd, WA4LGX

Webmaster & News Letter Editor

Tom Forrest, N4GVK

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from Lee Wimbs, W1MBS, GARA President

A Note from the President

"Take a moment to consider what you can do to help your club for it's future existence."

I have a water fountain in my back yard. This is a modified old fashion hand pump with an electric pump. The water is pumped from a bucket up through the hand pump and runs back into the bucket. This makes a wonderful 'water fall' sound, and can be relaxing just to watch.

The birds and squirrels love to play and drink from this bucket. Even with busy schedules I find myself standing in the kitchen looking out at the animals gathered around this fountain.

Because the water evaporates, and the wind blowing the water, I have to add water to the bucket to keep the process flowing. This is not a system that will run forever with out a little attention. And from time to time Sheari will add the water for me. This is an enjoyment we both like to watch.

At our January GARA meeting I read a list of goals I wanted us to do for the 2005 year.

These were items such as the soccer matches, a mini hamfest, a picnic, and a trip to Mt. Mitchell. Every time I would read an item and offer a brief description, some of you would nod your head in agreement.

I made the comment 'let's see if we can do these this year'. Then someone said, 'let's at least do something'. What a wonderful comment. 'Let's at least do something'. Perhaps we get together and build a club project. Or teach new hams what a wonderful hobby this is. Or have

that special covered dish dinner for the whole family. 'Let's at least do something'.

There were a number of sign up sheets for these events. You could sign up to help teach amateur radio. You could sign up for the fox hunt we want to have. How about signing up to work with the Boy Scouts in ham radio?

There was only one signature, mine. No one took the time to sign up to help. This is your club. My back yard fountain works great, unless the level of water gets low. The fountain needs a regular addition to work properly.

Our GARA club needs regular events to keep it interesting and to work properly. We need to work together to even maintain the level we are much less grow as a club

Take a moment to consider what you can do to help your club for it's future existence. Pick an item you are interested in promoting for your club. Be a volunteer and sign up.

Lee, W1MBS

FROM THE PAST



This picture was discovered recently in a collection of "old family pictures." from George Blosser, N4CPV. The photo is one of his Dad's first stations taken around 1930. George said he had no idea what some of the "black boxes" were, but they were all constructed by his father. Note the telephone on the desk. The only thing remaining from this picture today is the microphone...believe it or not, George still has it! His Dad was first licensed in California as W6HBL in the late 1920's.

(Photo Courtesy N4CPV)



GARA Meeting Minutes

REGULAR MEETING January 24, 2005

The regular monthly meeting of the Greensboro Amateur Radio Association was held at the Golden Corral Restaurant Monday evening January 24 at 7:15 PM with 28 members present.

The meeting was called to order by President Lee Wimbs, W1MBS, who asked for a moment of silence.

President Wimbs asked if any visitors were present. None were present. It was noted that John Shultz, K4JBS was in the hospital and there was no new information about James Waldrop, KD4IRI. The minutes of the previous meeting were approved as printed in the "Feed Line." President Wimbs introduced new members of the board and welcomed them on board.

There was no old business reported. Committee reports were presented. Vice President John Doggett, KI4BMS said he needed ideas for upcoming programs. Treasurer Ernie Wall, NC4EW, reported all was in order. Al Allred, K4ZKQ, reported the financial status of the club was on track for the coming year. Secretary Tom Forrest, N4GVK, said all was in order. He also reported on the newsletter, requesting articles not only from club members, but interesting articles about area amateurs. The web site was being updated as needed.

Engineering Committee report was given by Arch, KT4AT. He said the tower crew had completed their work for the city and for the club with the installation of the new UHF antenna and exchanging our VHF antenna with our spare. The old VHF antenna was discovered to have a bad "N" connector and some other minor damage. The installation of the UHF antenna checked out really good. During the tower work, it was discovered the city had some cables mislabeled and we had been using a different antenna for UHF that we had originally thought. The tower crew removed old cables and once the old lines were identified, the city allowed us to use the newer of the feed lines for our antennas. Arch said he would begin work on the UHF Mastr II repeaters soon. The old Icom repeater has no output and was probably not worth repairing, but could be sold for spare parts.

Operations and repeater trustee Roy Smith, N4BYU, was out of town and there was no report. Members-at-large, Clark Doggett, KG4HOM and Mark Robertson, KG4STP, were not present and therefore there was no report.

President Wimbs spoke briefly about upcoming club activities for 2005 and welcomed any suggestions.

The program for the evening was given by Dave Collins, KE4IAF, ARES Coordinator for Guilford County. Dave gave a PowerPoint presentation explaining the operations of ARES and its

organizational structure. He also gave personal accounts of recent hurricanes and described the assistance Ham operators provided in Eastern North Carolina counties when public service communications towers were destroyed.

Dave invited all amateurs to the ARES meetings held the first Monday of each month at the Emergency Services building 1002 Meadowood St. off Wendover starting at 7 PM. Also the weekly training net is held on the 145.150 (100 Hz. Tone) on Thursday evenings at 9 PM. Dave encouraged all to be prepared with "jump kits" explaining their contents, batteries, personal effects, etc. He explained that everyone could be actively deployed at a moments notice. The program was enjoyed by all.

There being no further business, the meeting was adjourned.

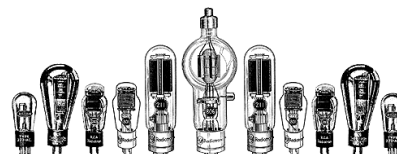
*Respectfully submitted,
Tom Forrest, N4GVK, Secretary*

Time To Renew GARA Membership

Membership renewals for 2005 are due and may be given to the Treasurer or mailed to GARA, P.O. Box 7054, Greensboro, NC 27417. Membership is \$24 for the calendar year and is used to directly support our two fine repeaters. Checks should be made payable to Greensboro Amateur Radio Association or simply GARA.

UHF Repeater Work Underway

Engineering Report



By Arch, KT4AT
Engineering Chairman

1)- UHF Machine: With the UHF antenna and feedline work completed in January, next priority is to setup the UHF Mastr2's..

UHF Duplexer: The first item is to check/retune the Club's UHF duplexer. It is first in line because it will be used benchtop to make preamp measurements. This is actually complete. This duplexer is a used 4 cavity Wacom. The rejections look good (around 105 dB on both sides), but I am less than pleased with the passband loss. A typical loss value for that type is around 0.9 to 1 dB. This one is more like 1.5 dB. And it is traceable to the cavities, not the cabling. Due to the high cost of those things (around \$1300 for a new one), we will get started with this one. We may elect to revisit later on.

UHF Preamp: The choice of the preamp used is critical to machine performance. The key specs, in decreasing order of importance, are as follows. First, Dynamic Range will determine machine intermodulation performance. I already took a peek at what comes down the feedline. Big stuff: UHF TV broadcasts at -15 dBm, and commercial UHF stations in the 450 MHz band at -25 dBm (several of them). An HT connected to that feedline does NOT work, as it receives at least 4 commercial stations on intermod. Preamp IP3 (Intercept point on 3rd order intermodulation mixes) is key. This is measured benchtop with a complex setup involving

two generators, the duplexer to couple them, the preamp under test, and the spectrum analyzer. We may also have to pre-filter a little bit with a cavity. The second spec which matters is Noise Figure. This determines machine sensitivity. This is measured on the Noise Figure Analyzer. The problem here is that generally, Noise Figure and Dynamic Range go opposite to each other. The third spec is preamp input match. A good match is required for the duplexer to work properly. This is measured on the Network Analyzer. Finally, the right amount of gain is desirable. Not enough gain results in inadequate quieting, too much gain results in Mastr2 mixer overload. I have three different preamp types ready for evaluation.

Helical filter: A 5 cavity helical filter is used in the Mastr2 receiver front-end, following the preamp. Those helical filters age differently, with some becoming very lossy. I have about 6 or 7 of them, and they will be cleaned up, and sorted for loss. We will use the one with the lowest loss.

Rest of Receiver: The local oscillator module has to be fitted with the proper crystal. The multiplier board, the IF front-end, the IF/Audio/Squelch boards, and my Audio/Tone board have to be operational.

Controller: We will use for the time being the available Club's RC-96 controller. It was used for about 6 months on 15 in 2001. The DTMF decoder aliases some, and does not work over the telephone

line. This will be fixed. The delay board is dead, and will be replaced by an RLC delay board.

Exciter: The oscillator has to be equipped with the proper crystal, and the exciter will be retuned and checked.

PA: The PA will be taken apart, the old thermal grease removed and replaced by new. It will be checked for proper power control, spurs and harmonics. Finally it will go through an 8 hour nonstop, full power transmit torture test on load.

Machine construction: There is also a fair amount of work to be done on the cabinets (drill holes, assembly, etc...). We will stack two small Mastr2 cabinets to house the two UHF machines.

2)- VHF Machine: There is still a number of tasks left on the VHF side. Those are: (a) update controller/DVR for program rev, autodial, and Bill's DVR messages, (b) grounding kits have to be installed on the two feedlines (VHF and UHF), (c) the feedlines in the shack have to be attached back to the walls, and (d) there is minor work left to do on the VHF duplexer.

Send Us Your News

Do you know of an amateur in the area that's newsworthy? They do not have to be a member of GARA to be eligible. Send your items to the Feed Line newsletter Editor, Tom Forrest, N4GVK at n4gvk@bellsouth.net.



The Editor's File

By Tom Forrest, Feed Line Editor

The "Pack Rat" In All Of Us

While stuck in traffic on Wendover waiting for the "three-eyed-yellow-thingy" to change, a large vehicle caught my eye. The truck had as its cargo a large portable storage building. Painted on the side was "Pack Rat" portable storage.

Seems like some soul was getting a temporary place to store their "stuff."

I'm probably one of those people that has a lot of stuff. Most is radio gear that I've accumulated over the years. I guess I've become a member of that exclusive club of "pack-rats" My problem is that I've run out of storage space for all my collectibles!

My collection is mostly

Hallicrafters. A first collectible was a SX400 "Cyclone" Hallicrafters tranceiver I got from my best friend. I used it for sometime as one of my first HF rigs. Of course being all tubes, the audio quality on transmit was outstanding.

My collecting took a break for a while until my brother-in-law, Frank, WA4FCM, really got me started again when I saw his museum of collectible radios. The shack consists of many operating positions of vintage radios. If you'd like to see his shack, the URL is www.vintagehamradio.net

The first time I saw Franks's shack, my mouth hit the floor in awe. My thought was "now this is heaven for a Ham"

Since our first meeting some 12 years ago, we've gotten to know each other quite well. About two years ago I got a wonderful Christmas present of a Hallicrafters SX-28 fully restored from him. There's just something about the receive audio and the glow of the tubes on these old rigs. It brings back the childhood memories of sitting at my uncle's house and listening to his Hallicrafters SX-43.

I've collected some really nice memorabilia regarding vintage Ham radios. Being a "pack-rat" or a vintage radio collector, has been a great reward, but does require a lot of space to store all your treasures.

Don't be afraid to save your older radio gear, it could be valuable someday.

Until next time, happy collecting!

Tom, N4GVK

FOR SALE

FOR SALE - Palomar Engineering HF Transceiver Pre-Amplifier. Covers 6 meters through 160. Model P310X, 110 VAC . Very good condition. No manual or box. \$35

Tempo 1, 2 Meter HT. Oldie but goodie. 2 antennas, heavy leather case, battery pack, charger and manual, no box. Works fine, but no encode tone board. \$35

Direction Finder. 45 to 470 MHz. Used for fox hunting, locating dead key signals, etc. Uses 9 volt battery. No manual. With coax & BNC connector. Commercially made. \$30.

Turner Dynamic Amplified Base Microphone. Volume & Tone controls, Built in meter reads both audio output & battery condition. Freq response 200-4000 Hz, low impedance, adjustable head, bar & lock key. With specifications & diagram. VGC \$30

Sony-Mini Stereo Speaker System. For walkman, etc. Like New. \$10

Micronta 28 Range FET Multitester/Volt Ohm Meter. 0-1000 volts AC & DC. 100ma to 10 amps. Large meter. With box & manual. Like New. \$20
Call me on 145.15 or E-mail me at

N4DFA @arrl.net. Serious inquires call my home between 10am & 10pm @ 288-5595

FOR SALE - Hallicrafters SX-85 in good condition, with manual. Seems to work OK, but may need an alignment. \$95.00.

FREE - Office Desk by Miller, 6 drawer with center drawer. Well used but in good condition. Still in use. This is **FREE** to a good home. You remove and carry. Can be partially disassembled.

Call Tom, N4GVK, 294-6771.

Ham Happenings NEWS briefs

John Shultz, K4JBS, SK



John B. Shultz, K4JBS, became a silent key on February 5, after a losing battle with cancer.

John was known for his quick wit and good sense of humor. He participated in the "Friday lunch bunch" group along with the Saturday morning breakfast group.

John also served as president of the Guilford Amateur Society for three years.

One of John's favorite GAS club duties was cutting grass

at the WFMY Channel 2 site where the GAS 145.250 repeater is located. He also participated in numerous events including the Tour to Tanglewood and a SAG wagon. John was also present at many of the venues involving Ham radio, especially ARES and the Wrangler McDonald Soccer Tournament.

John was first licensed in 1995 at KE4WZO. Our thoughts and prayers go out to John's family.

Get Well Wishes

Get well wishes go out to Tom Boone, W4COC, of Friends Home West.

Ray Huff, NC4RH, SK

Ray Huff, NC4RH, of High Point, passed away Tuesday February 8 at High Point Regional Hospital. Ray was well known for his Ham radio outlet store, Ray's Amateur Electronics, in High Point for a number of years. A resident of this area most of his life, he was a member of Lexington Avenue Baptist Church. He opened Ray's Amateur Electronics after retiring from Exxon USA. He is survived by his wife of 43 years, the former Judy Foust of the home.

Family Losses

- Our sympathies are extended to **Carol Marks, wife of Steve Marks, KE4FCW**, in the loss of her father, Richard Conley, of Naples Florida, on February 2.

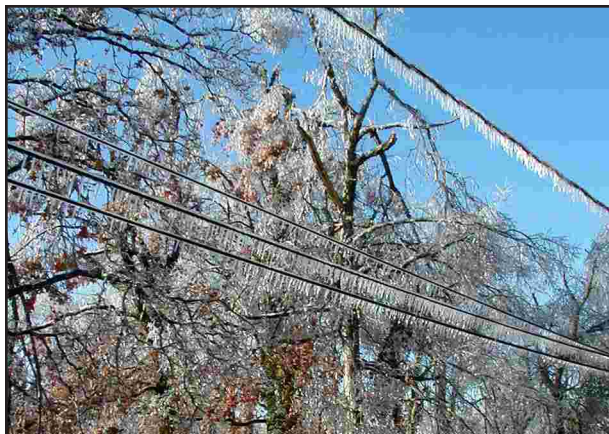
- Condolences are offered to **Bob Schwer, K3ZGA's** wife Nancy, whose father, Vernon Roberson of Greensboro, passed away February 6.

Weather, from page 2

www.triadskywarn.com web site, click on "Criteria" at the top of the page, and review the information which is requested by the National Weather Service during these events.

Please keep in mind that while the National Weather Service is our primary served agency, numerous local media outlets, emergency management officials and the general public monitor our activations on a regular basis. Accurate and reliable reports from our spotter team have earned us the respect and credibility we all enjoy today. This was not by accident! Continuous improvement through

training, educational programs and available technology have propelled Triad Skywarn to a leader in the southeastern United States!



In the coming months, Triad Skywarn in conjunction with

the National Weather Service, will host both Basic and Advanced Spotter Training Classes across the area. We also hope to host a "Radar Interpretation" training class in the Triad area this spring. Please join us weekly at 8:30 pm local time on the 147.255 (Asheboro) K4ITL repeater for the Triad Skywarn Information Net. This is where, along with www.triadskywarn.com and our Yahoo e-group, you can stay abreast of upcoming training and activation notices.

Thank you for volunteering your time and equipment to provide ground truth data to the National Weather Service when needed.

Area Activities

FOURTH MONDAY – at 6:30 PM, the **Greensboro Amateur Radio Association** has their regular monthly meeting at the Golden Corral on Landview Dr., off W. Wendover Ave. Please plan to gather at 6:30 PM for dinner. The meeting is scheduled to start at 7:15 PM

CLUB NETS:

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

TUESDAYS – at 8 PM, the **2 Meter SSB Net** meets on 144.225 Mhz. USB. Chris Thompson, K4HC is the net control station.

WEDNESDAYS – The **Guilford Amateur Society** 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 PM **The Guilford Amateur Society** holds their monthly meeting at the Golden Corral on Landview Dr., off W. Wendover Ave. Dinner at 6:30 PM and the business meeting is slated to begin at 7 PM.

SATURDAYS – at the K&W Cafeteria on Big Tree Way, hams get together for **Saturday Breakfast** at 7:30 AM. Talk-in is on the 145.150, W4GSO repeater, with 100 Hz. tone.

MONDAYS & FRIDAYS – at 11 AM, Greensboro Hams get together for lunch. On Monday they meet at the Oakcrest Restaurant Battleground Ave. and on Friday lunch is at the K&W Cafeteria off South Holden Road. 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 at Starbucks in Quaker village Shopping center off W. Friendly Ave.

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



www.w4gso.org

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