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The Greensboro Amateur Radio Association

Feed Line

Providing Amateur Radio news for the Triad



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American Red Cross Clarifies Amateur Radio Policy

From the ARRL

On September 3, the American Red Cross released a statement to clarify their policy as it concerns Amateur Radio operators. The letter below from American Red Cross Disaster Service Technology Manager Keith Robertory, KG4UIR, is presented in its entirety:

There has recently been some posting on amateur radio discussion groups on the Internet that is carrying false or misleading information. The Red Cross does not have a policy against amateur radio participating in passing health and welfare messages. In fact, we recognize the importance of amateur radio in being a vital method for people to get registered.

The American Red Cross welcomes the support of Amateur Radio Operators in connecting friends and family members together through our health and welfare programs. The grassroots, independent nature of Amateur Radio Operators in communities around the country make them well suited for this task.

General welfare messages are processed through the Red Cross Safe and Well web site. This site allows people to register their status which can be checked by friends and family who search by your name, address or phone number. A quick look at the website disastersafe.redcross.org will show how both the registration process and search are done.

As few as two hams can setup an effective

registration process. A ham located in the disaster zone can use any mode to transmit the basic Safe and Well registration information to another ham located outside the disaster who would enter the information on the web site. This quick ad-hoc setup doesn't rely on any affiliations and can be established by a call out to another ham who can help.

The Red Cross also processes welfare inquiry messages that contain specific medical information. These contain more sensitive and personally identifiable information at the same time that the Red Cross keeps confidential to respect client privacy. We are researching if and how these messages can be passed across open frequencies, and what federal restrictions (such as HIPPA) may impact how this is done.

Keith Robertory, KG4UIR
Disaster Service Technology Manager,
American Red Cross

Antenna Building Party



GARA sponsored an "tape measure" antenna build party Sept. 13. Those building an antenna are, left to right, Greg Cohoon, KJ4AED; Rob Erickson, KG4OPX; Dan O'Connell, KJ4FWU; Will Ravenel, AI4VE, instructing; and Larry Pike, KI4PRT.

NEXT MEETING September 22

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

The program will be a video presentation of comments by Riley Hollingsworth, K4ZDH, at the 2007 Dayton Hamvention.

GARA Meeting Minutes



Regular Meeting Minutes August 25, 2008

Chris Thompson, K4HC, GARA president, called the meeting to order at 7:15 PM. The meeting started with everyone identifying themselves.

Chris asked about approval of the minutes from the last meetings as published in the Feed Line. The minutes were approved and passed.

Old business: None

New business: Ken Weeman, WB2RFK, thanked everyone who helped out with the Bike Race. Shirley Minter, XYL, of Allen Minter, AI4NG, is in the hospital as of this afternoon.

Ernie Wall, NC4EW, treasurer, stated that the checking balance is good and everything is paid. Al Allred, K4ZKQ, the financial is looking good money spent on manuals is coming back in.

Roy Smith, N4BYU, asked about the status of the ecolink testing. Bob Davet, W8JFQ, responded that it is up and running in simplex mode but he needs to get with someone to help him get the repeater to pass the link node tones as he can't get that to work. Chris said that some research would be done to find the solution. Roy said that he has a copy of the repeater

controller manual and he will look for the solution and pass it along to Bob.

Clark Doggett, KG4HOM, said that the club picnic would be on Saturday September 20th at 6:00 PM. Please e-mail John Doggett, AJ4DV, at aj4dv@arrl.net Please bring chairs and if you want something stronger than a soft drink you will have to bring it. There will be a Fox Hunt held earlier in the day. Meet at 10:00 AM behind the Wendys restaurant near Brassfield road.

Roy said that we need some people to step up and help with being net control for the Sunday night net.

Allen Bradley gave the soccer report, stating the Labor Day Shootout will be coming up on August 30 & 31, and we will be using the 145.15 repeater for communications during the event. We have enough operators at this time.

John Strandberg, AJ4BT, vice president, presented a video produced by Gary Pierce KN4AQ of Amateur Radio Video News about VHF Digital Radio.

After the video Chris asked how many people had a digital VHF D-Star radio. Of those present about 10 people had a D-Star radio. We have been offered the use of a 440 repeater and controller set up for D-Star operation by Arch, KT4AT, for test and evaluation. The board of directors has discussed converting the 440 repeater to D-Star to fill a void in the area. Chris asked if anyone had any comments about that. Carlton, N4DFA, asked if this would be a digital only repeater? Chris: Yes this will be digital only and a stand-alone repeater that will not be connected to a gateway at this time.

John Doggett, AJ4DV, asked about losing the use of the 442.875 analog repeater for backup of the 145.15 repeater during soccer tournaments or emergency? Chris: We have been using the 2 meter repeater for soccer tournaments for 26 years without a problem and Chris also said that to the best of his knowledge, the 440 repeater is not listed as a backup for any emergency use.

We have a duplicate repeater that can

be on the air quickly if need be. Clark Doggett KG4HOM asked how many people use the 440 repeater now? Clark also asked what would be required to have a digital repeater and keep the 440 analog repeater? Chris: A new repeater, controller, feed line, antenna and space to put it on the tower as well as permission from the City of Greensboro to put another antenna on the tower. Roy said that there could not be anything else added to the tower as we have already asked the city about this.

John, AJ4DV, said that he thought that Arch's controller was being built to be both analog and digital.

Chris said that was the original idea but that Arch has not followed that route with his controller. Jessie Lindley, N4BFD, said he thought D-Star would be a plus for ARES as far as DATA transfer goes while keeping the analog communications. Roy asked if a D-Star radio could have a GPS hooked into it to give location information such as the last rider follower at a bike ride? Chris: yes that is possible and would be very easy to do. I envision this being the same as it was 50 years ago when HF was AM only and people said they did not think that side band stuff would catch on. Rick Mainhart WB3EXR, said the same thing was said about the conversion to narrow band HF.

Clark questions why we need a D-Star repeater if people can already use their D-Star radios on simplex? How many people use FM simplex as opposed to a repeater? A repeater is infrastructure which helps get over terrain problems.

Dan, AI8O, I don't know what is going to happen in the future with digital between D-Star and the commercial radios such as APCO 25 as one will win out over the other and APCO 25 will have a large fallout of radios when the commercial users upgrade their radios. Right now D-Star seems to be the way to go. Rick said that from what he sees the APCO 25 stuff that is coming available to hams is being replaced by radios that is the technical equivalent to D-Star.

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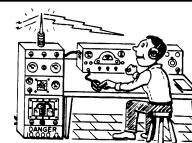
The Greensboro Amateur Radio Association

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Appointed Positions:
News letter editor and Webmaster:
Tom Forrest, N4GVK

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From the President's Shack



by Chris Thompson, K4HC
GARA President

I had a great trip to Shelby over the Labor Day weekend, and saw several old friends and got a chance to meet several OM's face-to-face for the first time. Because I was able to sell some items, I was able to come home with new toys. The new venue at Biggerstaff Park in Dallas, NC seemed especially well suited to the event, and SARC is to be commended for bringing this one off after their disagreement with the Cleveland County Fairground, the home of the Shelby Hamfest for the last 30 or so years.

Official numbers indicated approximately 10,200 people attended the fest. If you didn't find what you were looking for, it probably isn't available. The flea market was HUGE! Rick Mainhart, WB3EXR and myself, along with our respective spouses, tailgated side-by-side, and had a blast. We even got a chance to explain the crowbar kept on the table (used to pry open cheap hams wallets!).

I greatly appreciate everyone's cooperation with the Labor Day Soccer tournament, which from a communications standpoint, went off without a hitch. Kudos to all the volunteers, and especially Alan, KD4IUN and Madeline, KD4SVJ for

heading up this service event. For those who don't know, there are three soccer tournaments each year, which basically takes over the two meter repeater during the times the event is active.

I'm excited to report that as mentioned at last month's club meeting, we anticipate installing a D-STAR repeater at our site on a trial basis, hopefully on the air by the end of September. After a period of operation, we'll have a chance to evaluate this exciting new mode first-hand and determine if this is to be a permanent change. Initially, this will be a standalone repeater, without connection to the Gateway that many of you have heard about.

The possibilities for enhancing ARES communications, especially through add-on programs such as D-RATS and D-CHAT cannot be overemphasized. See recent articles in QST regarding some of the possibilities and success stories using D-STAR. By my very unofficial count, there are already approximately 15 hams in Greensboro and surrounding areas with D-STAR capability, with several more actively pursuing a purchase.

Steve Marks, N4SCM (ex-KE4FCW) has indicated that he will be seeking

grant monies to outfit Guilford County EM with D-STAR capability. Additionally, we are planning to hold in the near future a D-STAR Users Meeting to help bring people up to speed on programming, call sign routing and data capabilities. I believe that we have programming software for all of the current D-STAR radios to help with setup. Steve Marks has again come through by offering the large training room at the Guilford County EM training center. Date(s) and time(s) will be announced as things firm up. By the way, the repeater frequency will be 442.8625 (+), with a call of W4GSO(space)(space)B

A reminder that the Technical Forum meets each Sunday night at 7:30 pm on 145.15, for informal but directed discussions on a wide variety of topics recent topics have included Emergency Power, HF Antenna installation, Mobile installations, station grounding, RFI elimination, and many others. If there's a topic you would like to see discussed or investigated, please drop an E-mail to me k4hc@triad.rr.com or Rick: wb3exr@triad.rr.com, or catch us on the air. This has proven to be quite popular, with regular check-ins from Danville to Lexington and Winston-Salem to Burlington.

Keep having fun, and catch you on the repeater! 73, Chris, K4HC

Meeting minutes from page 2

There is a significant infrastructure around the world that is committing to D-Star. And this is completely reversible and we can come right back here to where we are now if this does not work out.

Carlton asked if we could connect up on of our existing repeaters for analog use and use another repeater for digital and be able to switch between them? Rick said that is possible and we would probably end up with something similar to that.

Chris thanked everyone for coming. The meeting closed at 8:30 PM

Respectfully submitted by, Greg Spencer, KG4UQV, GARA Secretary

Comments on D-Star From the GARA Trustee

by Roy Smith, N4BYU, GARA Trustee

A lot has been discussed about D-Star. At this time the D-Star users feel this is the upcoming technology. We have an offer to install, on a trial basis, a 440 D-Star system at no cost initially to the club. We will be using an Icom repeater with an after market controller. There will be no changes to the club's equipment at this time, and it will remain place.

After a test period, if all works, and with the membership approval, we can convert one of the GE MastrII repeaters to D-Star. This will be reversible. The equipment cost for permanent implementation is approximately \$1,500. As there are currently a few users on 440, we feel this will not be a significant inconvenience to anyone at this time. A significant number of current 440 users are already D-Star capable.

One of our present concerns is that there would be no back-up, primarily for the three annual soccer tournaments. In 25 years, 440 has only been used once. As D-Star gains acceptance and adds users, 440 could still be used in a backup capacity. There are at least 15 GARA members who now have D-Star equipment, with more owners on the way.

Shelby Hamfest Has Great Turnout At New Location



Biggerstaff Park in Dallas, NC, was the venue for this year's Shelby ARC hamfest. The new location proved a welcomed change and seemed especially well suited to the event. Mike Best, WD4DUG captured these photos while making his rounds.



GARA September Board Meeting

The GARA board of directors had their monthly meeting on September 8th 2008. Roy Smith, N4BYU, arranged to hold the meeting at the Greensboro Moose lodge.

The meeting started at 7:15 PM with Board members Chris Thompson, K4HC; John Strandberg, AJ4BT; Roy Smith, N4BYU; Clark Doggett, KG4HOM; Dave Touvell, KN4ZO and Greg Spencer, KG4UQV in attendance. Jesse Lindley, N4BFD, was also there as a visitor.

Old Business: A lengthy, detailed discussion was held by the board members present, about the D-Star digital repeater system and the future a GARA installation/conversion for D-Star.

No action was taken in the matter.

There being no further business the meeting was adjourned.

Research Data Base

Do you ever need to reference an article in QST magazine and just can't find the issue? Now you can look back into the archives of the ARRL by using their new web site feature for ARRL members.

The search index can be accessed from their page or below is the direct link. A username and password will, be needed.

<http://www.arrl.org/members-only/qqnsearch.html>

New Calls

Steve Marks reports he has a new call sign. Having held, KE4FCW for 15 years – or as Steve humorously called it, “Fried Chicken Wings” – his new call is N4SCM.

Not to be outdone, Steve's oldest son, Andrew, who just recently received his license, also has a new call, N4ASM.

Upcoming Events

- **Sept. 20:** Doggett Picnic, “Doggettville”
- **Sept. 20 & 21:** Virginia Beach Hamfest
- **Oct. 11:** Forsyth ARC, Pfafftown Hamfest
- **Oct. 12:** Maysville, NC Hamfest
- **Nov. 16:** JARS Fest, Johnston ARC, Benson, NC



FOR SALE

ESTATE SALE

The following are items from an estate sale. Ameriton AL-811H, \$500; Kenwood TS870S, \$1300; KWPS52 Power Supply \$80; Kenwood SP 31 Speaker \$45; MFJ 3KW Differential Tuner \$175; Heil Pro Set Headset \$40; Antenna Analyzer \$100; Antenna & Roter 10 meter \$150. If you are interested in any of this equipment, contact Gerry Miller, at the following: Daytime phone number is 336-747-1648; Night phone is 336-945-2177 e-mail address is: gerry.miller@hanescompanies.com

TOWER FOR SALE

I have a 60 foot tower, antenna, and rotator for sale; Antenna-Hy-gain 3 element 20 meter beam (full size); Tower-came from Western Electric, 60 feet; Rotator-Yaesu G-1000 SDX.

All cables, coax, and guy wires included. Make an offer - Contact Lee Wimbs, W1MBS at leewimbs@bellsouth.net or phone 336-288-8595

APPLE POWER BOOK COMPUTER

Apple Power Book laptop computer,

running OS 9.2, new hard drive. This is the Wall-Street version. Comes with many accessories and nice carry case on wheels. Additional memory and the battery still holds a charge. Has 10 baseT port (RJ45) and a wireless PCI card. Purchased new by original owner, non-smoking environment. \$275 complete outfit. Call Tom, N4GVK, 294-6771 or e-mail n4gvk@bellsouth.net

VHF MOTOROLA MT1000 VHF - Portable radio with 16 channels, 5 Watts,

good battery and new rapid charger, speaker mic, accessory, \$125. Computer programmable. Refurbished and new cases and excellent condition. Call Tom, N4GVK, 294-6771 or e-mail n4gvk@bellsouth.net

Get Well ...

Get well to **Bill Mauldin, WG4R**, who has been having some heart problems and undergoing tests.

Allen Minter, AI4NG, reports his wife, Shirley has been undergoing some testing after being admitted to Moses Cone Hospital She reported fainting and was feeling weak.

Wedding Bells ...

Congratulations to GARA member Rudy Langley, KG4HCT, and Carrie Elizabeth Allred who were married September 13 in Burlington. Rudy has served as vice president of GARA.

Tech Tip

Yes, I know this is simple and probably obvious, but it makes a good suggestion anyway. A lot of Hams have radios that have battery chargers. Trying to locate one that goes with the proper radio can be challenge. This is because some don't have the name of the vendor that the charger or “wall-wart,” belongs to. Solution - mark it. Black markers don't usually work since the wall-wars are usually black. Use a simple printer style label maker with white or yellow tape, and label each as you receive it. You can use white paint if you don't have a label maker. Next time you can grab the correct one with greater ease.

by Tom Forrest, N4GVK
Feed Line Editor



It's Not Your Microphone, It's You!

by Steve Katz, WB2WIK/6
Via E-ham

Those of us who foray into the “phone” bands have all heard some G-dawful modulation.

There are the “wi-fi audio guys” who, to me, sound like fingernails scratching a chalkboard, but I’ll admit some like the way that stuff sounds. I don’t, but that’s neither here nor there.

There are the overprocessed guys who have fallen victim to AKTR* Syndrome, and as long as they believe what they do, will never, ever sound good.

(*AKTR = All Knobs To Right. This is a method where the operator simply turns all the knobs on his transmitter fully clockwise, keeping adjustments very simple.)

There are the “radio dispatchers,” who sit back in a chair about two feet away from their microphones and operate from that position. They always sound crappy, without exception. This method of operating creates a very undermodulated signal unless the operator also follows the AKTR philosophy, in which case, then you can hear his heart beat, clock tick and cat meow, and those items all modulate his rig about the same as his voice. Along with lots of room echo.

There are the mumblers. There are the cross-talkers: You know, guys who talk across their microphones rather than into them, honestly believing the mythology that somehow that works better. There are the yellers who elevate the pitch and intensity of their voices every time they’re on the air, and never use a conversational tone until the rig’s shut off.

There are those with lisps and various impediments to normal speech, and while many of those could be cured by simply listening to their own voices played back by a tape recorder, most have never even tried this.

And then, there are the drawlers. These are folks who don’t actually live in the deep south, and really don’t have a southern drawl, except when they’re on the radio, when they suddenly develop one. Or if

not that, then some other silly accent they don’t really have.

Why is it that only about ten percent of all hams using the phone bands actually sound good on the air?

Pssst: It’s usually not their microphones, or even their rigs. They really don’t need audio equalizers or other means to add “fidelity.” What the ones who sound lousy really need is a way to listen to how badly they sound, and learn how not to sound like that.

Some useful hints

No matter what kind of microphone you use, use it as you would a “hand mike.” If your lips are more than an inch or so from the front of the microphone, you’re too far away. If you’ve never operated this way: Trust me, it works, and you’ll sound a whole lot better as soon as you start operating this way.

Don’t talk “across” the microphone. That looks silly, and doesn’t sound any better, at all.

Use conversational tone. Don’t elevate the pitch or volume of your voice simply because you’re on the air. Speak normally, as you would to someone sitting in front of you.

Practice enunciation, using a tape recorder or digital voice recorder. Most people, especially if they’ve never been broadcasters, have a very incorrect impression of how they sound. The tape playback clears that all up.

Adjust your transmitter (assuming the mode is SSB) so that the “ALC” indicator registers just a bit on voice peaks, and goes dead between voice peaks. If the “ALC” scale on your particular transmitter goes from 1-10, and the “highlighted” area where you’re “supposed to” use it is a range from 2-7, adjust your mike gain so that a very occasional peak indicates about a “5,” and normal speech is down around “2.” Background noise, including the cat, the dog, the TV in the next room, and everything else, should indicate absolutely nothing.

If you do operate SSB, and most of this discussion concerns SSB operation, by all means try to buy, build or borrow a true PEP wattmeter. A normal wattmeter cannot indicate PEP, and PEP is what counts when you’re operating SSB. Some wattmeters have a “peak” or “PEP” position, but do not have a power supply operating them, nor internal batteries to power the PEP circuitry. If you have a meter like that, rest assured it is not a PEP meter, period. It’s impossible for it to be, because peak reading circuitry consumes power, and cannot work by magic.

The reason I stress the “PEP meter” point is that so many hams look at their average-reading wattmeters and try to modulate their rigs so these meters indicate whatever the output power of their transmitter is supposed to be. If you do that, you’re guaranteed to sound crappy on the air, and you’ll probably achieve such reports. A 100% modulated SSB transmitter will usually indicate 20-30% of actual output power on a typical (non-PEP) wattmeter. That same transmitter will indicate 100% of actual output power on a PEP meter, and this will make you feel better and also provide you with great insight about the difference between peak and average power. (Remember, the average power of a high-level modulated AM transmitter is 25% of PEP; however, all of that is the carrier, so even if you don’t say a word, you’re running an average power of 25% of PEP, and that power is entirely wasted: Which is why suppressed-carrier single sideband became popular in the first place.)

Most microphones, regardless of design, work best under full sound pressure, e.g., when you provide them with as much sound pressure as they can handle without damage. In the case of communications mikes, that’s a lot of pressure. You can’t provide that pressure from across the room, a foot away, or usually not even from two inches away, unless you’re screaming. With normal voice modulation, you’ll want to be right up against the microphone. It’s what sounds best, and it’s what works. Take a look at any broadcast studio and you’ll see announcers right up on their microphones. Ditto any concert with vocals. You never see

anybody back a foot from the mic. That doesn't work.

Get in the good habit of close-talking the microphone, no matter what the environment, or what type of microphone it is. I've never come across a microphone that didn't sound better under full sound pressure.

Desk mics

Desk mics are silly.

Okay, I'll go a bit further (although I really could have ended it there). They're not only silly, but they always cost more than hand mikes, and never sound better. For radio operating, what works, if you have one hand free, is a hand mic. If you don't have a hand free, then a boom mic, or boom headset. Anything that puts the mic element right in front of your lips.

Problem with desk mics is that most are not designed to be comfortably used if you want your lips up against them. They're too short, so you have to lean over. Or, they're too something. If you can mount a desk mic so that it's the same height as your mouth when you're comfortably seated at your operating position, great. But rarely is this the case. Which brings me back to my first statement: Desk mics are silly.

The ambient

The ambient is your operating environment: What's around you. It should be quiet, so that nothing other than your voice modulates your transmitter.

If you have a wattmeter with different scales of sensitivity, here's a great test: Set the wattmeter to its most sensitive position, preferably something like 5W full scale, or maybe 20W full scale. Then, run as much power as you can (preferably a kilowatt), and key your push-to-talk switch with your mike gain and any processor or compressor set as they would normally be set for your operating. Count to three and look at the meter. Does it indicate anything at all? It shouldn't. It should just lay there, reading zero.

If it reads anything at all, that's too much, as you have background noise modulation which is extremely distracting to anyone trying to listen to you. I say trying, because

hard as I try, I usually can't listen to anybody with that much background noise. And "any" is too much.

Get rid of the noise source, or make adjustments to your station.

Distortion

Any that can be discerned as distortion is too much. There's distortion in everything, so we'll never achieve "zero." But you shouldn't be able to hear any obvious distortion, other than that caused by propagation. On HF, and even sometimes on VHF, there surely is distortion created by "the path" (propagation) that isn't actually there when the signal leaves the transmitter. But most of us who have spent any time operating know the difference.

Best way to avoid distortion is to not overdrive any stage of the transmitter. Not the mike preamp, or the balanced modulator, or any of the driver stages, or the final amplifier. In an SSB transmitter chain, all modulated stages are linear and can operate pretty much distortion-free if not overdriven.

Overdriving the mike preamp can be pretty easy to do, with some rigs. All you need is too much mike gain for the voltage the mic is producing. Close-talk the mike as repeated ad nauseum above, and adjust your mike gain for slight ALC activity. That's usually the right amount; although, with some rigs, it may not be. It really pays to listen on a second receiver, using headphones, if you can.

Headphones

Using headphones can create a better-sounding, better modulated signal for you!

How? A few ways...

- Phones allow you to use your transceiver's MONITOR function (if it has one - all the "high end" rigs do, and some of the mid-line rigs do, too), so you can listen to yourself and see how you sound.

- Phones allow you to use a second receiver (if your transceiver has no MONITOR function), to do the same thing.

- Phones also allow you to operate in a very quiet environment. It's peaceful and

serene, and you can hear signals in headphones that nobody could hear in any speaker in the world. When SONY developed the Walkman, they realized the magic of a set of \$2 headphones. The phones bring the sound close to your eardrums and allow you to hear a range of frequencies you can't hear if those same sounds are generated by million-dollar speakers across the room. Once you get used to operating with 'phones all the time, it's unlikely you'll ever go back to a speaker.

(BTW, other members of your household will thank you for ditching the speaker. "Radio receiver noises" represent a majority of the noise pollution generated by hams in their own homes, and using headphones eliminates this.)

And, 'phones set the stage for the greatest boon to two-way radio communications: The boom headset, which includes a microphone that you can have planted directly in front of your lips to create the best modulation you'll ever have. Better than desk mikes, anyway.

Equalizers and such

Nah.

Ham radio would be nothing without experimentation, and by all means, feel free to experiment! However, in lieu of \$500 worth of modulation-altering add-ons, most operators would benefit more from \$500 worth of professional vocal training. Improving your diction, enunciation and voice timbre is something that you can take with you everywhere you go, for the rest of your life; it will make you a better public speaker, a better telemarketer, and a better communicator in all facets of life and for most, I'd highly recommend this over electronic gizmos that work only with your transmitter.

Conclusion

If you don't get stellar reports of full, rounded, smooth, punchy, great modulation - it's probably not your microphone's fault. It's far more likely the operator. Learn to close-talk, adjust levels properly, minimize room noise, and really articulate. Practice with a tape recorder or DVR, and work on your own voice until you think it sounds great. When you do, others will, too.

Area Activities

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 – 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. (Not operational present time)

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 6:30 PM The **Guilford Amateur Society** holds their monthly meeting at the Golden Corral, 4404 Landview Dr, Greensboro, NC 27407, off Wendover Ave. Refreshments at 6:30 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 at Guilford College (summer location till Daylight Savings time changes)

• Hams at Hams every Friday afternoon, Cone Blvd. restaurant, at 5:30 - Talk-in on 145.150 repeater.

Greensboro Amateur Radio Association

P.O. Box 7054

Greensboro, NC 27417



Web:
www.w4gso.org

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