



The Greensboro Amateur Radio Association

Feed Line



Providing Amateur Radio news for the Triad

Betty Williams, KC2BFN Editor

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This Month's Program

Hams have always been inventive and have pushed the boundaries of radio technology to new places. Sometimes, we even appropriate other technologies into our devices and use their benefits to give them new capabilities. One of those technologies is Ethernet networking, whether it is on a small scale inside your home, or on a large scale like the entire Internet. This month's meeting will show you how networking has transformed ham radio, and it will do it in one of two ways. Steve, K4SQI has agreed to come and speak to the club about new innovations in linking different digital modes together so that we can all communicate regardless of which protocol we're using. Some of that is happening on our own equipment- Steve has upgraded our D-Star gateway and is experimenting with further improvements and he'll let us know how we can take advantage of them. However, Steve is very busy and may not be able to make the meeting. If that happens, there is a back-up plan: I will give a related presentation on basic Ethernet networking. More and more of our gear can be controlled by an app, used remotely, or can link us to far-away repeaters, but in order to get that all to work, we need to have some understanding of what is happening on the network and may need to make changes to get everything to talk. If Steve is unavailable, my presentation will explore basic ideas related to networking and give practical tips that will hopefully reduce your frustration with it. Plan on being at Cooper's on Monday.

Thanks!

Scott



Appreciation for Dave McLin for his Field Day efforts.

NEXT MEETING August 28, 2017

The next meeting of the Greensboro Amateur Radio Association will be held at the Cooper's Ale House on Swing Road in Greensboro on Aug. 28, 2017. The program will be presented by Steve K4SQI – Carolina Link: Bridging the Digital Radio Divide. Come for dinner at 6:30 PM; meeting starts at 7:15 PM

ARRL business:

- ◆ The Board was updated on plans to upgrade the ARRL website
- ◆ ARRL International Affairs Vice President Jay Bellows, K0QB, told the Board that even small threats to our bands from such devices as small battery chargers pose serious threats to Amateur Radio spectrum and must be monitored.
- ◆ The Electromagnetic Compatibility Committee reported that it is working with the ARRL Lab on issues stemming from the increase of RF noise related to home solar power installations and on the overall increase in the noise floor generally.
- ◆ ARRL General Counsel Chris Imlay, W3KD, told the Board that a workable solution is in sight to the FAA tower lighting and painting rules that could affect some Amateur Radio antenna installations. Imlay also told the Board that while Amateur Radio spectrum has avoided being targeted in any FCC reallocation dockets, the possibility still exists that amateur frequencies could be included in future dockets.

The Greensboro Amateur Radio Association

President Cameron Conover, AJ4TW
 Vice-President Scott Toth, KV4UP
 Treasurer Jaimie Restrepo, N4JAI
 Secretary Greg Spencer, KG4UQV
 Financial Chandlee White, KJ4ADX
 Engineering Chair Jesse Lindley, K4AX
 Operations Chair John Strandberg W4DX
 Members-at-Large:
 Chris Thompson, K4HC
 Gregory Ray, K4MHY
Appointed Positions:
 Public Information
 Officer
 Newsletter Editor
 Betty Williams KC2BFN

ARE YOU BENEFITING FROM THE ARRL WEBSITE?

A few topics to consider:

- Logbook of the World
- International Operating
- Tutorials
- Special Event Stations
- Contests
- QSL Services

Explore the website www.arrl.org and learn something new or refresh something old.

The Feed Line is ©2017 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 – August 2017

The GARA board of directors held their monthly meeting on August 14th 2017 at the Coopers Ale house located at 415 swing road in Greensboro.

The members present were; Cameron Conover AJ4TW, Scott Toth KV4UP, Chris Thompson K4HC, Chan White KJ4ADX, Greg Ray KK4MHY, Jamie Restrepo N4JAI and Greg Spencer KG4UQV. Betty Williams KC2BFN was also in attendance.

The meeting came to order at 6:45 PM.

We discussed mail that was received and paid bills.

We discussed the Shelby hamfest and Qorvo Free gate as venues to sell donated equipment. Chan said that he needs some help pricing the Items. We discussed tables and staffing at the hamfest.

Cameron spoke about his idea of doing a fall contest and he hasn't gotten much interest, Chris said we should concentrate on the Carolina QSO party and Field day.

Scott spoke about the engineering issues with the 145.150 repeater locking up. Scott said he thinks it stems from power line issues at the repeater site.

Betty asked about Name tags for members and if anyone is making them, Jamie sad he would reach out the Tom Bertolino KB1P and see if he would like to keep doing it.

Betty said that people do not join clubs just because they are hams. We discussed ways to make people want to join GARA. Chris said we should email any ideas to other board members.

Jamie Restrepo N4JAI made a motion to adjourn, Chris Thompson K4HC seconded and all were in favor. The meeting ended at 7:45PM

Respectfully submitted by
Greg Spencer KG4UQV
GARA secretary.

Regular Meeting Minutes – July 2017

The Greensboro Amateur radio association held their regular monthly meeting on July 24th 2017 at Coopers Alehouse located at 415 S. Swing road in Greensboro.

Cameron Conover AJ4TW Called the meeting to order at 7:15PM

Scott Toth KV4UP spoke about recent changes that were made the D-Star repeater.

Jamie Restrepo N4JAI gave the treasury report and stated that AT&T is now set up on automatic payment.

Jamie said we have 75 paid members. Scott gave the Pay pal balance.

Greg Spencer KG4UQV made a request for volunteers for the 36 hours of Uwharrie off road endurance event coming up on August 10th through the 12th.

Chris Thompson K4HC gave the presentation on Morse code AKA CW.

Chris Thompson K4HC made a motion to adjourn, Fred Lomax KV4PI seconded. All were in favor. The meeting ended at 8:15PM

Respectfully submitted by
Greg Spencer KG4UQV
GARA secretary.

From the President's Shack

August 2017

Well, if you are like me you were probably a little disappointed with the eclipse. I got to see a bit of overlap in the beginning and some at the end, but all the magic in the middle was covered by clouds. That's how it goes I guess. I know that some of our members got to see some interesting sights, a few traveled to totality, I can't wait to hear some stories about that. Jump on a net soon and share your experiences with us!

Shelby hamfest is upon us. It is September 1, 2, and 3rd. I don't think we need to worry too much about hanging around on Sunday, unless we have members who just really want to be there on Sunday. I will be able to go down on Saturday to help at the table, but we really need one or two volunteers to help Chan out on Friday. If you are available on Friday and you'd like to see some early bird action at Shelby, why not volunteer to help out with our table and help us sell a few things while you are there? That would be greatly appreciated.

In a couple months' time it will be time to elect officers again. I hope that you will consider serving your club on the board. I know that we are going to need a few new people, and I hope that some of you will step up. I don't want to have to go around twisting arms!

See you Monday night!
73, Cameron, AJ4TW

FINANCE COMMITTEE REPORT

We are looking for volunteers to attend the Shelby Hamfest on September 1-3 2017. GARA is planning to rent a table indoors to sell off more of our accumulated equipment donations for support of the GARA budget.

Location of Fairgrounds: 1751 E. Marion Street, Shelby, NC 28152 Approx. 35 miles west of Charlotte Douglas International Airport.

If you are interested in going, even if only for one day, please contact me: Chandlee White, Finance Chair, AccessInformationServices@gmail.com

August Engineering Report

August is almost over and that means the Shelby Hamfest is almost here! I'm looking forward to heading down this year and helping out at the GARA table, we had a lot of fun doing it last year and the funds from the sales really helped the clubs bottom line.

The engineering committee has slowed down a bit this month, but we do still have several projects in the works, from playing newline from a computer at the repeater site through the controllers audio ports to extra Dstar connectivity and expanded capabilities for the future on the UHF machine we have a lot going on.

Steve K4SQI sent in a write up with everything he is working on and where he is with setting up a reflector/talkgroup/room that Dstar,DMR, and C4FM users can all talk together. It's a really interesting project and it's really cool to be able to talk to anyone from any digital mode to another. Monday I was in Madisonville TN to see the eclipse in totality, and I talked to Steve over my BlueDV hotspot from my car, with my Icom ID31 while he was using DMR and C4FM. At one point I switched over to DMR as well, on the same hotspot and the audio sounded great all the way around on all the modes.

The VHF FM/C4FM repeater is doing well this month, no issues that required site visits like last month with the power issues that affected both machines. We have plans to completely clean up the install at the site (on both machines) pulling out things that are not used anymore and to revamp the power back up gear. As I mentioned before, Newline being played directly from the repeater via a command from the controller is still in the works. Also Echolink which has been maintained by Scott KV4UP has been working well, and it's neat to be able to use it on FM or C4FM as it follows whatever it hears.

The UHF Dstar repeater has been doing well this month. No issues on the RF side, regular updates on the gateway computer. This repeater also needs to have its cabinet revamped, with older gear that hasn't been used in 9 years still sitting in the cabinet taking up space as well as its power back up options upgraded.

I'm trying to keep it short this month, since Steve also has a write up for what's going on with the reflector linking project he's been working on. 73 and I hope to see some familiar faces down in Shelby!

Jesse K4AX
Engineering Chair

Carolina Link – Bridging the Digital Radio Divide “here in our neck of the woods”

When I got back into the hobby almost 4 years ago, the biggest thing that interested me was D-Star and Digital Radio. After all these years, I finally posted some of the back story on my QRZ page. I won't repeat it here, but it does give some background as to how I got here & why this is one project I have a personal interest in.

We're lucky here in the Carolina's that we have a great deal of talented Hams that are always experimenting with new technology and putting it on the air for people to use. The GARA Club was one of NC's first D-Star gateways connected to the internet. Over the years, D-Star has seen some decline in some areas, but continued to grow in others. We've seen a huge growth in DMR. We have the NC PRN Network which connects most of NC/SC with a nice DMR Network. We have the 4th highest # of DMR Users in US. It really helped that some of the Chinese radio companies were selling DMR radio's less than \$200. Then Yaesu did something un-heard of. They started selling the DR-1X repeater that was both Analog and

Digital for \$600. Everyone was buying them! How could you pass up that kind of deal on a repeater? Yaesu brought us a new digital mode called Fusion or C4FM. This is where things started getting confusing for a great deal of ham operators. We have D-Star, DMR, & Fusion. It's great except for one huge problem. When I have a D-Star Radio & want to talk w/ Bob, who has a Yaesu Fusion radio, or Billy who has a DMR Radio we can't do it! What radio should I buy? What mode is best for me? Do I really need to carry 3 different radios with me just to talk to my friends? Let's start w/ broad overview, but this is how the Carolina Link came to be and how it's trying to help.

In the world of D-Star you have regular Reflectors, X-Reflectors, DCS Reflectors and now XLX Reflectors which can emulate the other three, but also has a bunch of new features as well. A Reflector is basically a server somewhere that allows you to connect your repeater or hotspot to. Reflectors are like big "chat rooms" where anyone & everyone can connect to and chat. They even have different "channels" called modules. In the world of DMR, you have talk groups and reflectors. You have 3 different DMR groups. Each has a different philosophy and goals. You have the DMR-Marc Network which is one of oldest around. Now you have the DMR+ and the BrandMeister Network as well. The DMR+ Network is popular over in Europe and tends to have a lot of reflectors to talk on instead of the traditional use of talk groups. The BrandMeister Network has seen a huge growth over the last year. Repeater owners have been dropping DMR-Marc by leaps & bounds to join the BrandMeister Network. Why? It's about personal freedom. If you're a repeater owner, you have full control over what talk groups or reflectors you want to provide access to on your repeater. You don't have to accept what's available on your "local" c-Bridge. Ham radio is about experimentation, right? The BrandMeister Network allows a great deal of freedom there as well. Is this the greatest thing since sliced bread for a DMR user? It might be right for you, but for others, they prefer the "tried & true" standard as they call it. This is where the NCPRN Network falls into. You can't blame them. They have a great deal of money, time & effort built into the NCPRN Network. Others will disagree, but that's not what this article is about. The BrandMeister Network has seen a huge growth because of the ability to use a personal hotspot and experimental MMDVM multi-mode repeaters/hotspots on DMR. This allows a DMR user to connect to any talk group or reflector of their choice. Here in NC, we now have five repeaters connected to the BM Network. Three around the greater Charlotte area, one in Burlington, and one in Cary. We're going to see an increase in the number of MMDVM Repeaters soon as well.

Finally, you have Fusion or C4FM. Things are even more complicated here. First you have Wires-X which is maintained & sold by Yaesu. You purchase a box which you can connect directly to your Fusion Repeater or what's called a "Node" Radio. It connects to a computer running Windows. This is by far the biggest "Fusion" network. You also have the FCS Network which came about by the folks who brought us the DV4Mini. There's 4 FCS Servers around the world and each one has 99 "rooms" or "modules" to connect to. The latest option is called the YSF Reflector. This was created by G4KLX and is completely open source. His YSF Gateway software emulates Wires-X and allows you to connect to any of the 120+ YSF Gateways around the world.

Confusing enough? How do all these choices make things "easier?" The simple answer is they don't. At the end of the day, everyone has a mode or brand of radio they prefer. All we can do is figure out how to make it all work together.

What is this Carolina Link & how does it work? The idea around it is simple. No matter what kind of digital radio you have or where you're located in Carolina's we want you to have one place where you can talk with everyone. We don't care if you like D-Star, DMR, or Fusion. For the past year and half, the Charlotte D-Star group has had a bridge in place on the BM Network going from DMR over to D-Star. You can connect to the group's XLX Reflector by connecting to XRF054C or DCS054C. If you're on the BM Network, you can key up on talk group 31254. Which is named "XRF054C." A few weeks ago, I talked with Mark, W4BOG who created the "cloud" server which hosts the XLX reflector. Within a couple of

minutes, our discussion of adding an YSF Reflector became a reality. Mark created me a new “cloud” server and I had the YSF Reflector working within 30 minutes. Over the next 12 hours, that YSF Reflector was registered and connected to the BM Network. We called this YSF Reflector, “US BM TG 31254/Carolina Link.” Not wanting to stop there, I quickly added another Fusion bridge over to FCS Reflector FCS003 module/room 33. We tested this close to 14 hours the first day. Everyone who stopped by to help test the DMR<->C4FM audio was truly impressed! How come we hadn’t done this earlier? The audio passing from D-Star<->DMR or D-Star<->C4FM is currently the issue. It does work and you can have a conversation, it’ll just test your patience with your volume control. We’re working on a better solution & hope to have it up and going in a few months. In the near future, I plan on adding a Wires-X Node as well. We’re encouraging everyone to feel free to use the system. Since building the first YSF Reflector, we’ve added a second one which is now linked to the BM Network North Carolina TG 3137. We’re looking to add a third YSF Reflector to the system as well once we test things further. This YSF Reflector will be connected to the BM Network South Carolina TG 3145.

Here's a quick update:

Over the weekend, I came up with a crazy idea and gave it a try. We’re currently testing this on XRF054B or DCS054B. This is a second D-Star<->DMR Bridge. It’s linked up to the Carolina Link also on BM TG 31254. Remember what I was saying about the audio issue on XRF054C? This is a crazy attempt to fix the issue and it actually works. The audio passing from D-Star<->DMR is 100 times better than what’s in place on XRF054C. Is it perfect? No, but it is proof we’re closer to a solution. So, I encourage you to link your hotspots or repeaters to any one of the ways to access the Carolina Link and throw out your call. You never know who might come back to you. We’ve been getting quite a few visitors from around the US & the world. One thing I can promise you is, no one will EVER tell you to take your conversation somewhere else or that you’ve been tying the “Channel” up too long! We want people to use this system. Until next time! Steve 73 de K4SQI!

ASHEVILLE RADIO MUSEUM ANNOUNCES 2017 SURPLUS EQUIPMENT SALE

Are you looking for a restoration project? How about a matching speaker for your rig? We may have it. The museum is out of space and selling more than sixty vintage home and ham radios and accessories. No reasonable offers refused! For a complete list, see our [web site \(www.avlradiomuseum.org/surplus\)](http://www.avlradiomuseum.org/surplus).

For our vintage farm and home radios, come to the Antique Wireless Association [Swap Meet](http://www.cc-awa.club/summer) in Valdese, NC (7 AM – noon) on Saturday, August 19. For meet details, see <http://cc-awa.club/summer>.

For amateur radio gear, come to Asheville on Saturday, September 16 (9 AM – 1 PM). The sale is at the museum’s storage unit at [127 Sweeten Creek Road](http://www.127sweetencreekroad.com) (also called US 25A Alt). Take exit 51 from I-40 and go about ¼ mile north to the Extra Space Storage facility (it will be on your right).

All items are sold as-is and are untested, unless noted otherwise. Bid accordingly! For inquiries, please use the contact form at the bottom of the home page on the museum [web site](http://www.avlradiomuseum.org).

THIRTEEN US SCHOOLS/GROUPS MOVE CLOSER TO HOSTING ARISS CONTACTS

Thirteen schools and organizations will move into the second phase of the selection process to host the earthbound end of an Amateur Radio contact with an International Space Station (ISS) crew. Moore Square AIG/GT Magnet School in Raleigh is one of 13 schools being considered.

For further information, see

<http://www.arrl.org/news/thirteen-us-schools-groups-move-closer-to-hosting-ariss-contacts>

(source: ARRL website)

Look Who Passed

Every month on the second Saturday, except in March when it is the third Saturday, W4VEC holds a testing session for those who live in the area. This provides an opportunity for individuals to be able to test for their amateur radio license or upgrade. Thanks to 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 September 9th 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, 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, phone (cell), 336-420-9424.

Results from Greensboro, NC VE session August



BRYANT, ANDREA N. (Nikki)
KN4FEW
WINSTON SALEM, NC
Earned TECHNICIAN



CARTER, MICAH A
K4GCS
WINSTON SALEM, NC
Earned GENERAL



WARNER, SCOTT D.
KN4FEY
GREENSBORO, NC
Earned TECHNICIAN



PRATT, WILLIAM J.
KN4FEX
GREENSBORO, NC
Earned GENERAL

Situational Awareness When Chasing DX

Tips and Tricks to get that QSO in your log

When working to make amateur radio contacts with foreign countries, the goal is to exchange callsigns and typically a signal report. The signal report given is most often “59” or “599”; regardless of how strong or easy to copy the two stations are for each other. I’m not going to discuss the merits of signal reporting – the obvious information exchange is the correct callsign. If operating within a contest, the contest exchange should be used. Remember, you never HAVE to submit a contest log if you work someone in that contest (although it helps everyone if you do) – they still get credit for your contact, and you have (hopefully) a new country in your log.

Patience

This is a hard one, as it’s easy to get caught up in the excitement and want to work this station NOW. Take a few moments (or longer if needed) and observe what’s happening. Can you hear the DX station well enough to make a contact? Is he calling for a particular area (like EU (Europe) or AS (Asia)), or working “by the numbers”? Is he working split or simplex? If he’s working split, try to figure out where he’s listening – it does no good to call where he’s not listening. Most operators have a rhythm to their operating style – try to identify that so you can call when you have your best chance of being heard – sometimes being first out of the gate is NOT the way to be heard. Say your call quickly in your head, then do it over the air – the lag lets the quick triggers get done and be waiting. If, when you unkey, he’s already responding to another station, shorten your delay. Also, if he’s calling for a partial call, and it does not reasonably match your call – stop and let the other guy finish before calling again (I’m sure you’d appreciate if others would stop when it is your turn).

Your Own Callsign

On voice, I recommend you use the ICAO phonetic alphabet, “Alpha, Bravo, Charlie...” However, alternate phonetics can sometimes clarify the situation “America, Boston, Canada...”, for example. There is a place for “cute” phonetics, but chasing DX generally isn’t one of them. With my call, the “HC” suffix, “Hotel” sometimes gets misheard as “Echo”, or “Charlie” gets confused with “Germany” when conditions are tough. If your call is sent back wrong, repeat your call using alternate phonetics. “Honolulu Canada” usually does it for me. On CW, the “H” in my call sometimes gets misheard as “S”. Turn the keyer speed down a bit and exaggerate the spacing a bit when repeating your call. The general rule is to reply with your signal report only after hearing your call correctly sent back. You should NEVER send a partial call, either your prefix or suffix – ALWAYS send your complete call. While the DX station may reply back with a partial call, by sending only part of it, you guarantee they won’t get it right the first time. Learn to say your call snappily, but distinctly. In a pileup is NOT the place for a long, drawn out, exaggerated length call. The guy wants to work you, but he wants to work everyone else, also. Do your part to keep the rhythm going.

Split

Except during a contest, where virtually ALL contacts are made simplex (both stations transmitting on the same frequency in turn); it is common to use “Split”, especially for DXpeditions where the sheer volume of callers makes simplex operation non-viable. The DX station (the one being chased) is the one who makes the determination of whether or not to work split. They will normally say their call followed by “Up” or “Listening up” or “Up 5”, for example. Learn to quickly set your rig to split and with the proper offset. The DX normally listens “up” from his transmit frequency, but I’ve seen splits of “down” also used. One example of great DXpedition cooperation was during Heard Island (VK0EK) and Juan de Nova Island (FT4JA) overlap during late March/early April, 2016. Here were two extremely rare, difficult to activate DXpeditions, on the air at the same time, operating from similar time zones. They coordinated, and came up with a plan which placed their respective transmit frequencies pretty close, but VK0EK listened “Down”, and FT4JA listened “up” – keeping two very large pileups very well separated. It worked great.

Cluster spots

I’ve said this before, because I’ve been burned. NEVER TRUST THE CLUSTER. The number of bad spots can be downright frustrating. I recall when South Sandwich Island (a pretty rare entity) was scheduled to go on the air – their

previously announced call was VP8STI. PV8ADI, a station in Brazil, was mis-spotted as VP8STI – causing a massive pileup. He frequently sent his correct call, was working split, but I kept seeing spots from stations I just heard work this guy, who perpetuated the incorrect call on the cluster. I'm sure there were quite a few disappointed stations that were SURE they had just worked South Sandwich Island. These guys saw the spot, got excited, and forgot to listen. VP8STI came on the air two days later, as scheduled. The cluster can be a great tool, but don't let it disengage your brain. Listen. Figure out what's really going on. THEN call.

Dual Receive

This feature (if available on your radio) allows you to use headphones to copy VFO A in one ear, and VFO B in the other. This enables you to listen to both sides, and hopefully hear the station the DX just worked – thereby knowing where he is (or at least was) listening. Often, a rare DX station will listen to a “range” (Up 5 to 15 on SSB, for example). Knowing where in that range to call will get you in the log. You won't always hear both sides, but especially if they're listening over a range of frequencies, you'll often be able to hear at least SOME of the stations the DX is working. Put your transmit frequency there to be heard.

Switching A/B VFO

If you don't have dual receive capability in your radio (and many don't) – don't despair. It takes a little more work, but you can switch between VFO A and B to listen at the right time to both the DX frequency, and the range they're listening. This takes practice, and a certain amount of timing on your part. It does tend to work best when the DX station has a definite rhythm or cadence to their operating style – you'll have a good feel of when to go back to listen to the DX station. After listening to the calling stations, you'll start to recognize certain calls. Note where they are in the range. If you hear the DX station calling them, you'll know where to tune – quickly switch VFO's, and listen for the report – it will normally be a quick “59 Thank You” or something similar. But when you hear the report, you'll know you're in the right spot. Switch back and be ready to call in the next sequence.

Determining the pattern

Two main examples come to mind when talking about the “pattern”. One is operating pattern, and the other is the pileup pattern. I'll give examples of both that bagged me new countries.

First – operating pattern. PY0F/PP1CZ was on vacation in Fernando de Noronha, an archipelago well off the coast of Brazil, which counts as a separate entity in DXCC. While not super-rare, I needed this on 80 meters for a new country when I was working on 5BDXCC. I was having a difficult time breaking thru the pileup on 80m CW – as once he was spotted on the cluster, many more stations were calling. I noticed over two days that he tended to start on 40m, and then go to 80m somewhere around 8:30 to 9:00 pm local time. He also tended to go to the same frequency, and worked split all the time. The third night, I set up my receiver on his preferred frequency, set my transmit up 1 khz, and waited. He was spotted on 40m, and his pattern was to go to 80m soon. When he showed up, I was ready. I didn't make it first into his log that night, but I was second. Then the cluster spot hit and a large pileup quickly ensued.

Score one for me!

Next – pileup pattern. Many stations working split tend to use a range of frequencies, and then follow a pattern – this is especially true when using CW, but this also applies to SSB as well. One common pattern is to start at the low end, and tune up a bit for each successive contact. On CW, the increment TENDS to be on the order of 50 Hz to 100 Hz between contacts when the DX station is doing this – it helps to keep the pileup spread out, and rewards those who are paying attention – find the station being worked, move up just a touch, and call there. SV2ASP/A, Monk Apollo, in the DXCC entity of Mount Athos, was on 20m CW, working split, and tuning around in his range. If you'll look his call up on QRZ, you'll note that he is a full-time Monk, and doesn't spend a huge amount of time on the radio. While he tries to get on the air regularly, he is the ONLY ham in Mount Athos, and his other duties do take precedence in his daily life. This is important because Monk Apollo is more of a “casual” DXer, as opposed to a “seasoned” or “hardened” one. I knew this because I read his QRZ page. This caused me to pay a little closer attention to his pileup pattern. While I wasn't hearing everyone he worked, I heard enough to know I was calling in the correct general range, and he was moving up in frequency in the pileup. Then I heard two stations in a row he worked. They were almost 500 Hz apart. Quickly realizing Monk Apollo was tuning in larger than “normal” increments, I moved up about 500 Hz for the next call. And almost fell out of my chair when I heard my call coming back. He was moving in larger increments because it tended to find someone completely in the clear, without QRM. There are certainly other patterns used within pileups – but most DX stations working split use some sort of pattern. Figure out what it is, and then call where he's listening. It beats the hell out of calling where he's not.

When to call it a day

You're not always going to be able to work every station. Propagation, family responsibilities, work, the lid who keeps deliberately interfering with the DX; these and other things will conspire to keep you out of the DX station's log on a given day. If the signal is fading where you can no longer copy it well; your spouse just called you to dinner; the lid makes you want to tell him on the air to stop being a lid (by the way, that never works. But he will get tired and go away.), or you just find yourself getting frustrated because you're just not being heard....do yourself a favor. Either turn off the radio, and go do something else for a while; or go find another station to work. Come back later. Propagation shifts, the lids get tired, the pileup gets reduced because the guys with the kilowatts and the stacked monoband beams are already in the log. More than a few times, I've found myself frustrated in a pileup and taken my own advice. Then when I came back an hour or two later, or the next day, I'll get the DX in just a few calls. The two most important controls on your radio are the VFO knob and the power button. Don't forget they are there.

"Insurance contacts"

Back in the pre-internet days, it was common to seek out an "insurance contact" with a DXpedition, especially if you only could hear them on one band – as nothing is more frustrating than thinking you worked someone, only to get in the mail a "Sorry, Not In Log" note with your QSL card 6 months to a year later. While not everyone does so, most DXpeditions (and virtually all major ones) do some manner of online logging, either thru ClubLog.org or some other provider. Look up the station on QRZ.com to see if they offer some sort of online checking – it will normally be listed either there, or on their web page. If they are uploading to an online log, it is considered poor form to repeat contacts on the same band/mode – even so far as some DXpeditions refusing to log duplicate contacts. Most DXpeditions upload at least daily (even from extremely remote locations); I've run across several that are virtually instantaneous. Remember, if you're in the pileup, and you work a station more than once, you took somebody else's chance away from them. It's only courteous to be a little patient and check the online log if you're not 100 percent sure of a valid QSO. If the last QSO in their online log is after your contact, and you're not listed, please – jump back in.

Beyond the signal report – or Ragchewing

It can be very rewarding to make new friends and learn about other's interests via ham radio. However, during a pileup, it is simply not polite to extend a conversation – you're creating a traffic jam. Let the DX station lead the QSO. If he gives his name, location or other additional information, feel free to respond with a similar level of detail. If he's only giving your call and a signal report, please be considerate and only give a signal report, and a "thank you" (he already knows his call, and knows you're calling him).

DX Code of Conduct

The DX Code of Conduct - <http://www.dx-code.org/> - was developed to provide a guideline to help change declining operating habits. Let's face it – chasing DX tends to bring out the aggressive side of our personalities, but there is no justification for intentionally creating chaos. I like to think of a good DXer as being "politely aggressive". You have to jump into the fray to make the contact, and we all occasionally make mistakes in the process. Endeavor to learn from those mistakes and try to not repeat them. Try to do your part by not being a bully, and earn the respect of others chasing. Believe me, you will get a reputation – somebody is always listening. Make it your goal to make sure that reputation is a good one. Visit the DX Code of Conduct website and look it over – the expanded version has some great operating tips you should consider adopting.

Additional Resources

A short article like this obviously only scratches the surface of a topic. I've found several websites that have provided tips, how to's, and inspiration – a couple of them are shown here:

<http://nu8z.net/dx-tutorial/>

<https://ky6r.blog/2013/10/30/5bdxcc-and-beyond-hints-and-tips/>

73, and Good DX!

Chris, K4HC

Calendar of Events

Aug 28	GARA General Meeting (Cooper's Ale House in Salon "B", Greensboro)
Sep 1	North Carolina State Convention (Shelby, NC http://www.shelbyhamfest.org)
Sep 9	VE Session (Hinshaw United Methodist Church, Greensboro)
Sep 11	GARA Board Meeting
Sep 25	GARA General Meeting (Cooper's Ale House in Salon "B", Greensboro)
Sep 30	VE Session (Red Cross Building, High Point)
Oct 9	GARA Board Meeting
Oct 14	VE Session (Hinshaw United Methodist Church, Greensboro)
Oct 23	GARA General Meeting (Cooper's Ale House in Salon "B", Greensboro)
Oct 28	VE Session (Red Cross Building, High Point)
Nov 11	VE Session (Hinshaw United Methodist Church, Greensboro)
Nov 13	GARA Board Meeting http://www.jars.net)
Nov 19	JARSFest 2017 (Benson, NC,
Nov 25	VE Session (Red Cross Building, High Point)
Nov 27	GARA's Election (Cooper's Ale House in Salon "B", Greensboro)
Dec 9	VE Session (Hinshaw United Methodist Church, Greensboro)
Dec 11	GARA Board Meeting (transition meeting)
Dec ?	Area Ham Christmas (holiday) Party TBA
Dec 25	No GARA General Meeting this month
Dec 30	VE Session (Red Cross Building, High Point)
Jan 8	GARA Board Meeting
Jan 13	VE Session (Hinshaw United Methodist Church, Greensboro)
Jan 22	GARA General Meeting (Cooper's Ale House in Salon "B", Greensboro)
Jan 27	VE Session (Red Cross Building, High Point)
Feb 10	VE Session (Hinshaw United Methodist Church, Greensboro)
Feb 12	GARA Board Meeting
Feb 24	VE Session (Red Cross Building, High Point)
Feb 26	GARA Board Meeting GARA
Mar 10	VE Session (Hinshaw United Methodist Church, Greensboro)
Mar 12	GARA Board Meeting
Mar 26	GARA General Meeting (Cooper's Ale House in Salon "B", Greensboro)
Mar 31	VE Session (Red Cross Building, High Point)
Mar 31	North Carolina State Convention (Raleigh Hamfest http://rars.org/hamfest)
Apr 9	GARA Board Meeting
Apr 14	VE Session (Hinshaw United Methodist Church, Greensboro)
Apr 23	GARA General Meeting (Cooper's Ale House in Salon "B", Greensboro)
Apr 28	VE Session (Red Cross Building, High Point)

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

Area Happenings

FOURTH MONDAY – at 6:30 pm, the Greensboro Amateur Radio Association have their regular monthly meeting at Cooper's Ale House, 415 S. Swing Rd., Greensboro, NC 27410. Please plan to gather at 6:30 pm for dinner. The meeting is scheduled to start at 7:15 pm

CLUB NETS:

SUNDAYS – at 8:30 pm, 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 June 2017 to .Sep.2017

Sep. 9, 2017

Oct. 14, 2017

Nov. 11, 2017

Dec. 9, 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 39829

Greensboro, NC 27438

www.w4gso.org

FIRST CLASS MAIL

The Official Publication of GARA