



The QUARAE



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It Seems to Me

Have you looked at the RAE's web site lately? Thanks to Russell Dworakowski, WB3FAU and Leonard Stefanelli, N8AD and web master Paul Szymczuk, KB3POY the "for sale" section on W3GV.org is active again. Every Saturday at 2 PM there is a net on the 61 repeater as an outlet to sell, swap, or want to buy ham equipment. Leo records the net and passes it on to Paul who puts it on the web page.

I finally got my DMR HT working. No I didn't do it. I had an expert do it. I'm withholding their name so people don't bug them. Notice I was gender neutral! The radio is an Anytone D878UV plus that is absolutely amazing. You can hear stations from all over the world on your HT. I listened to a station in Sri Lanka 4S5SC talking to a station in Oklahoma. The radio puts the call sign on the screen.

I see that Doug is still in Florida. I don't know when he will be back. From what I hear, most if not all the public service events for the summer are canceled.

The new antenna book has the plans for a handheld 2 meter/ 440 Yagi for satellite use and also for **FOX Hunting**. Hint! Hint!

Men wake up as good-looking as they went to bed.
Women somehow deteriorate during the night.

How is Covit19 affecting Ham radio?

By Curtis Mohr, K5CLM

With the Corona Virus shutting down businesses, school, social gatherings and more, we all have to adjust the way that we do things.

Amateur radio is no different!

We can't have regular club meetings, we can't do training events, we can't meet for breakfast somewhere and just chew the fat. We can't even give tests to new potential hams anymore. So what does that mean for those that want to get their license?

Virtual testing is a thing now. If you would have asked me six months ago if it would ever happen, I probably would have said no, but now, I have already heard from people that have taken their test virtually.

There are even some clubs that are holding virtual meetings. Could this be a new way to keep your club alive? Could having a virtual meeting increase club participation?

How to be a Net Control

By Curtis Mohr, K5CLM



I'm sure if you are a ham you have been involved in a net at some point. But my question is, have you ever thought about being on the other side the



**Radio Association of Erie
Club Meeting at Wagner
Road**

Thursday June 4

7 PM- General Meeting

Program: TBA

radio? That's where I talk about in this post.

I have been a ham since June, or maybe July, of 1995. That's nearly 25 years as a ham! In that time I've learned how to communicate on the radio, how to listen and most importantly how to be a net control operator. I have been a net control for a standard training net, a Skywarn net, an emergency nets, a RACES net and several other types of nets.

Knowing how to run a net has also helped me a great deal in my career as a 911 dispatcher. I was a ham for approximately 10 years before I got into this career. Learning how to handle a large amount of traffic in a short amount of time was a big help in getting me through my training for my job.

So in this blog post, I am going to give you a list of items that has helped me to become a good net control operator.

Listen, Listen, Listen

Having a good radio ear is a key function of a good net control operator. Being able to listen to more than one radio is key to knowing where your people are, what's going on, and if something major is about to happen.

Listening to multiple radios is something that you can't just teach somebody how to do, you have to practice! When you are participating in a net and you were not net control, practice writing down the call signs that check into the net. Practice writing their names along with it and learning their voices. This will help you when you become a net control so that you can write fast and be able to read it, and you can recognize voices that correspond with call signs so you don't necessarily have to write down the entire thing.

Taking Check-ins

When I am net control, I will often write down just the last three letters of their call sign. If it is someone that is regular to the net that should give

you enough information to know who that person is and more than likely be able to figure it out.

Also probably about 90% of the time the number is going to correspond with the area that you're in. Unless you have a vanity callsign the number in your callsign is going to match the area that you are in. so you're probably are not going to have someone that has a different number than what you do. So that information right there, will give you at least a major portion of the call sign that's calling in.

On top of that if you learn people's voices you might not even have to figure out what the call sign is you may hear the voice in automatically know the call sign.

Tone Of Voice

Many things can happen while running a net, it doesn't matter whether it's a training net or an actual emergency net, an emergency can happen at any time! You could be in the middle of a training net and someone have an accident, or witness an accident, or even have a medical emergency. Anything can happen at any time so you have to be ready for it.

The tone of voice is often a major clue as to if a person's traffic message is just a standard every day message or if it's an emergency. Your job as net control is to make sure that emergency or priority traffic is handled in a timely manner. Once you get that information, it is also your responsibility to make sure that it gets to the correct person or entity to get it handled.

You can hear the stress in someone's voice or their voice pitch will change if someone has an emergency and you will know immediately! That is when you need to leap into action and get it handled in a timely manner.

Net Control Tone of Voice

So we have talked about the tone of voice of those out in the field but let's take a look now at the tone

of voice that you should have as net control. First and foremost, you need to remain calm and show that in your voice. If you are excited or nervous it will show in your voice and often times will change the emotions of the operators in the field.

As far as what to say as net control just remember, you are in charge of that frequency! You are the one that has the final say so over who talks and who goes next and anything else to do with that net. You are the one that maintains the flow of information that's passed from the operators to yourself and then on to whatever served agency you're running the net for.

Make sure that you give clear and concise instructions for what information you're looking for. If you are or net control for a skywarn net and you have one station that is seeing a rotation or a full-blown tornado make sure that you were clear to the operators in the field that the only traffic that you want at that time pertains to spotters that can see the tornado or rotation or any other emergency traffic. You don't want to have an operator that is 20 miles away that can't see the rotation or the tornado and gives you a report that they are only getting light rain and a calm breeze.

Knowing Where Everybody Is

Another major aspect of your "job" of being net control is to know where all of your operators are. Whether you have an APRS system in your area or you have to rely on voice communications to tell where everybody is, you still need to make sure that you know where everybody is.

There may come a time when you were closing down your net and you have a station that has not been cleared with you. This has happened to me several times over my career as being a net control operator. Whether the station simply forgets to clear with you or an actual emergency happens you still need to know where that person is at all times.

In one of the instances that I had as a net control, I "lost an operator". I had an operator checked out at

a certain location and a bad thunderstorm cell was moving into the area where that person was. As the major part of the cell was bearing down on where I knew this person was supposed to be at this person did not answer the radio. This change the whole aspect of the net at the time because we had an emergency situation where we couldn't find an operator and a major part of the cell was moving down on where they were supposed to be at.

Now we had to switch gears of being a storm spotting net to a potential rescue net. Several operators that were in the area converged on where this operator was supposed to be to try and find out why this person wasn't answering the radio. This caused two things to happen:

- One a delay in the storm spotting and potentially seeing something in the storm that could help hundreds or thousands of people.
- Secondly, it caused several other people to go into a potentially dangerous position.

Eventually we did find this operator, he had moved his location when he saw something that he didn't like and failed to notify me as net control that he was changing locations for safety reasons. Somehow, in his scramble to move, his radio got changed to another frequency, so he wasn't hearing me call him.

While it was totally understandable that he wanted to move, with him not notifying net control that he moved it put other operators in danger because they were going to where he was supposed to be during a major weather event.

In another instance that I had, we were doing a final check out of a weather net that turned out to be nothing and this person was nowhere to be found. This person was stormy spotting from his house so we figured that that's where he was. After several people went to the area that he was at and went to his house we found out that he decided to go to bed and turn off his radio.

Being A Net Control Is A Very Stressful Job

As the net control station, you were often listening to more than one audio source, for example you will be listening to your main repeater, a cell phone call, a secondary repeater and neighboring repeaters all at the same time. You have to be able to hear and comprehend what you were hearing at the same time.

When you're dealing with your own net not only will you have to hear and comprehend what is being said but you also have to log what you're hearing for future records. Often times this is too much for one person to handle. It is best to have somebody with you that can take notes or write down callsign when they're checking in or making phone calls for you or listening to a second repeater or frequency.

Remember To Take Care of Yourself

Because being a net control is such a stressful position, it's a very good idea to make sure that you take care of yourself. If you don't take care of yourself then you might make mistakes that can hurt or potentially harm those that are in the field. It is never a good idea to be a net control for too long. The max that I would say that anybody should be in their control is four hours, and that's really pushing it. In a high traffic net you should probably change net control stations at least every two hours at the most; every hour would probably be better.

This of course is if you were net control for a major net that is going to be going over an extended period of time. Most of the nets you'll probably be involved with our going be local nets such as training nets or skywarn nets. Most of these nets only last an hour tops with most of them being 30 minutes or less depending on the number of check-in's.

Make sure that you have something to drink preferably water and make sure you have some kind of healthy snack this will help keep your energy level up and your stress level down. You are going to be doing a lot of talking and will need something

to "wet your whistle." If you drink a soda or something carbonated, your mouth will get dry a lot faster. It is best that you drink something other than carbonated, such as water.

With that being said, you need to make sure you don't drink too much because then you will need to use the restroom. It never fails that when something major happens, you will need to use the restroom and won't be able to. This is also a good reason to have an assistant with you, so you can take a short break.

Have A Backup Net Control

While it is a good idea to have someone with you to assist you in writing things down, making phone calls or answering a second radio, it is also a good idea to have a backup net control at a different location. Anything can happen during a net, including a power outage. If you lose power at your location and you don't have a planned backup, the net will just stop until someone steps up to take over.

Something might happen to your radio or antenna and you might not know it. If you suddenly stopped hearing people talk or no one is answering you when you call someone, that is a major clue that something has happened. If you have a planned backup net control and they hear that you have suddenly disappeared, they can jump right in and not really miss a beat in the net operation.

Conclusion

Being a net control is not for everyone. Now don't get me wrong, anybody CAN be a net control but it might not be something that they might want to do. Either way, being a net control is something that will take practice and experience to do it well.

Thanks for this chart. Check out his web site VE3ELB

AMATEUR RADIO ANTENNA LENGTH CHART					
	FREQUENCY (Mhz)	1/4λ (Feet)	1/2λ (Feet)	1λ (Feet)	1/2λ Inv Vee 90° (Feet)
	1.800	130' 0"	260' 0"	558' 4"	257' 5"
	1.850	126' 6"	253' 0"	543' 3"	250' 5"
160 METERS	1.900	123' 2"	246' 4"	528' 11"	243' 10"
	2.000	117' 0"	234' 0"	502' 6"	231' 8"
	3.500	66' 10"	133' 9"	287' 2"	132' 5"
	3.750	62' 5"	124' 10"	268' 0"	123' 7"
80 METERS	3.900	60' 0"	120' 0"	257' 8"	118' 10"
	4.000	58' 6"	117' 0"	251' 3"	115' 10"
	7.000	33' 5"	66' 10"	143' 7"	66' 2"
40 METERS	7.150	32' 9"	65' 5"	140' 7"	64' 10"
	7.300	32' 1"	64' 1"	137' 8"	63' 6"
30 METERS	10.100	23' 2"	46' 4"	99' 6"	45' 10"
	10.150	23' 1"	46' 1"	99' 0"	45' 8"
	14.000	16' 9"	33' 5"	71' 9"	33' 1"
	14.150	16' 6"	33' 1"	71' 0"	32' 9"
20 METERS	14.300	16' 4"	32' 9"	70' 3"	32' 5"
	14.350	16' 4"	32' 7"	70' 0"	32' 3"
17 METERS	18.068	12' 11"	25' 11"	55' 7"	25' 8"
	18.168	12' 11"	25' 9"	55' 4"	25' 6"
	21.000	11' 2"	22' 3"	47' 10"	22' 1"
15 METERS	21.200	11' 0"	22' 1"	47' 5"	21' 10"
	21.450	10' 11"	21' 10"	46' 10"	21' 7"
12 METERS	24.890	9' 5"	18' 10"	40' 5"	18' 7"
	24.990	9' 4"	18' 9"	40' 3"	18' 6"
	28.000	8' 4"	16' 9"	35' 11"	16' 7"
10 METERS	28.500	8' 3"	16' 5"	35' 3"	16' 3"
	29.700	7' 11"	15' 9"	33' 10"	15' 7"
6 METERS	50.000	4' 8"	9' 4"	20' 1"	9' 3"
	54.000	4' 4"	8' 8"	18' 7"	8' 7"
2 METERS	144.000	1' 8"	3' 3"	7' 0"	3' 3"
	148.000	1' 7"	3' 2"	6' 9"	3' 2"

Antenna length calculations are based on the following formulas:
 1/2 wave dipole (feet) = 468/frequency in MHz
 Full wave loop (feet) = 1016/frequency in MHz
 Inverted vee with 90 degree included angle is 90% the length of 1/2 wave dipole

Note:
 Cut wire slightly longer to allow for connecting insulators and pinning.
 Height above ground, nearby wires, trees, etc. will change tuning slightly.

MILLENNIA
 ANTENNA

June 20 - West Virginia QSO Party See qsl.net/wvsarc/wvqp/wvqp.html

June 20 – VE Session

June 20 - ARRL Kids Day See www.arrl.org/kids-day

June 21 – Father’s Day

June 27 - ARRL Field day See www.arrl.org/field-day

Amateur Radio Calendar

June 2 – Donut day!

June 2 – Corry Amateur Club Meeting

June 4 – RAE Club meeting at Wagner Road

June 6 – Rochester Hamfest (cancelled)

June 6 – Breeze Shooters Hamfest (cancelled)

June 6 - Kentucky QSO Party See

www.kyqsoparty.org

June 9 – Wattsburg Wireless Club meeting

June 11 – Union City Wireless Club meeting

June 13 - ARRL June VHF Contest See

www.arrl.org/june-vhf

June 14 – Flag Day

June 15 – Conneaut Club Meeting