OH-KY-IN Amateur Radio Society

August 2015 Volume 55. Issue 8

Q-FIVER

The Official Newsletter of the OH-KY-IN Amateur Radio Society



Amateur Radio Emergency Services (ARES) What is it?

The Amateur Radio Emergency Services, known as ARES, is an arm of the ARRL to provide emergency communications to government and non-government agencies during a time of need. ARES also provides communications to scheduled community events such as marathons and festivals. These planned events allow the operator to test their skills and equipment under more controlled conditions. Thus preparing them for emergency incidents.

ARES members voluntarily register listing their radio communication capabilities. This allows the entire ARES organization to tap into skilled and equipped operators when needed. ARES is structured in a supportive nature. The local group, usually a county, is the backbone of ARES. A volunteer Emergency Coordinator (EC) is responsible for the daily operation of the local ARES group. An EC may appoint Assistant Emergency Coordinators (AEC) to coordinate a specific project, function or geographical area within the county. Some examples are Digital Communications Coordinator, Net Control Coordinator and Served Agency Coordinators. Other members, who are properly equipped, may be appointed as an Official Emergency Station. This operator would be responsible for activating and maintain a net as a net control when needed. On the next level up is the Section Emergency Coordinator (SEC). The SEC may appoint

District Emergency Coordinators (DEC) to assist with operations in larger states such as Ohio. The SEC is responsible for the ARES operations in the Section. In most cases the section covers an entire state. Some of the larger states are split between two or more sections to make them more manageable. Remember, these are all volunteer positions and we all know that having the time to commit can be difficult sometimes. The SEC may also appoint Assistant SECs when deemed appropriate. The SEC reports the the Section Manager who is responsible for the over all operations in the ARRL Section.

One of the most unique parts of the ARES organization is mutual aid. If an EC has an incident that requires more operators to manage it, the EC can contact the DEC or SEC to request more operators or radio assets. This process also works across state lines. An SEC can request more operators and radio assets from a neighbouring SEC.

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2015 Board of Directors

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OH-KY-IN Repeaters

146.670 (-) Clifton

146.625 (-) Edgewood, KY

146.925 (-) Colerain Twp

443.7625 (+5) Clifton

A CTCSS (PL) tone of 123.0 Hz is required for access to all OH-KY -IN repeaters. All repeaters also transmit a CTCSS (PL) tone of 123.0 Hz

APRS on 144.390 mHz

K8SCH-10 Edgewood WIDEn

K8SCH-9 Clifton WIDEn

For membership information, please contact Nathan Ciufo KA3MTT, 6323 Cinnamon Ridge Dr, Burlington KY 41005, (859) 586-2435 or Email membership@ohkyin.org. Renewals of Club Memberships are due by the end of March.



Permission is hereby granted to any amateur radio group to quote or reprint from this publication, if proper source credit is given, unless permission is otherwise reserved.

THE Q-FIVER is now mailed & e-mailed, it's hoped, a week before the club meeting.

Normally copy deadline is the weekend before that. Please send your submissions for THE Q-FIVER (including notice of upgrades & callsign changes) to Brian K4BRI

These may be: snail-mailed to or dropped off at 6901 Backus Drive, Alexandria KY 41001 or telephoned to (859) 635-3095 any time

(Continued from page 1)

ARES in Hamilton County is growing and we are looking for more volunteers to fill leadership and non leadership positions. If you are interested in finding out more about ARES please contact Bryan Hoffman - KC8EGV,, EC for Hamilton County, Ohio.

Oh-Ky-In Life Members

John Phelps N8JTP

Kenneth E Wolf N8WYC

John W Hughes AI4DA

Karl W Kaucher KJ4KWR

Howard Hunt NG8P

Minutes of the July 7th 2015 Meeting

No minutes were taken at the club picnic.

Brunch Bunch

The next Brunch Bunch will be held Saturday, August 8th, and as usual, at 1pm. The location for August is Price Hill Chili Family Restaurant located at 4920 Glenway Avenue, near the intersection of Glenway Avenue and Cleves Warsaw Pike in Price Hill.

The menu at Price Hill Chili goes far and wide from just 3ways and cheese coney's. They've been serving quality food along with friendly and efficient service since they first opened in 1962. Join us at the Brunch Bunch and find out what keeps there regular customer's coming back time after time. This is another one of those restaurants that the Brunch Bunch has visited quite a few times and always brings a good group of Brunchers that attend. Wanna join us? Please do!

For a look at the menu as well as a map, please go to: www.pricehillchili.com

Remember that the Brunch Bunch always meets the second Saturday of every month at 1pm at a location to be announced each month. If you can't join us this month, maybe you'll be available to join us in the months ahead.

I'm always looking for suggestions on what restaurant you think might be a good place for the Brunch Bunch to visit soon.

73,Bruce, N8BV





DXPedition History by Lynn WD8JAW (continued from July)

The following operators made up DXpedition: Mike AC4XS; Phil KG8AP; Ken N8ASV; Lynn WD8JAW; John WD8NMV; Erik N8YCL and Carol WA8YL.

We arrived Saturday evening at approximately 6:30PM. The last hour of the drive was through on/off rain showers. We were experiencing the remnants of heavy rain from a tropical storm that had came ashore in Florida and moved northeast across parts of North Carolina. Standing water across many sections of the roadway slowed us down. If we drove too fast the water spray would literally inundate the car. Water was axle deep in some areas and we actually ran off the paved surface on the street where our QTH was located because we couldn't determine the road edges. But we finally arrived in one piece. As we exited the cars, we were immediately attack by "killer" mosquitos. Since it was dark, damp, and we were weary from our 16 hour drive we decided to put our bags away and go get a good meal. The antenna raising party would have to wait until the next morning.

Sunday morning started off bright, sunny and warm. Well fed and well rested we unloaded all the equipment and began the assembly process. But alas Murphy visited us 5 minutes into the project. With the usual persistence, and clear thinking we worked through the challenges and got everything up and running. We started operating around noon. The rest of the day was spent operating and logging, exploring the area and getting acquainted with our new QTH.

Our real troubles, not of Murphy's doing, began Monday morning. Ken, N8ASV and I went out about 8:30 AM to inspect the antenna setup and to enjoy the view of the inlet from the dock. Out of the clear morning air we hear "hey you" When we turned around there was a man standing on the porch of the house next to us. We politely replied "good morning". The next words out of his mouth were directed toward our antenna....you cannot put up an antenna here. The **covenants** for this area do not allow any kind of antennas' We told him we had permission from the building inspector. He said he doesn't care who we have permission from, antennas are not allowed. We again stated we were told by the rental agent and owner that it was OK to set up our antenna and we were here for only a week. He said he would call the rental agent, turned his back on us and walked away. This was the one and only time we had any contact or conversation with this man. The rest of the day was routine as we spent our time operating and enjoying the beach and associated amenities.

The man who called to us owns the house next door to where we were staying. It is for sale and he arrived either late Sunday night or early Monday morning. He apparently was there to do yard work and other touchup chores.

Tuesday started out normally. However, early in the afternoon I received a call from the rental agent saying that the neighbor had complained about our antenna and asked if we were doing anything unusual. I told the agent nothing had changed and we were doing just what we said we would be doing....operating our radio equipment. The agent said there they were just checking in as a result of the complaint and we were OK with the operation. That evening the owner called to say that the neighbor had called them to complain about the antenna and noise. I talked with the owner and described in detail how we set up the antenna and our basic operating schedule. The owner said they were OK with our operation and stated they did know what our plans were at the time we signed the rental agreement. The owner said they were surprised to hear about any covenants, that they had just recently purchased the house and did not read all the documents associated with the house.. They explained that they thought the neighbor was being unreasonable. The owner ask how long we planned to operate and I told them our plan was to stop operating at noon on Friday and begin taking down the antenna. We would leave early Saturday. The owner said this sounded reasonable and would pass this information along to the neighbor. The owner reiterated that we are OK to operate and continue with our antenna setup. I told the owner to tell the neighbor he was welcome to come visit with us and we would show him and anyone else in the neighborhood just what we were doing.

I had to make a run into town on Wednesday and I thought it might be a good idea to do some PR with the rental agent. We had a very friendly exchange and the agent repeated that they had talked with the owner and everyone was in agreement that our operation was within the terms of our rental agreement and felt the complaint with the neighbor had been defused. I again made our standing offer that anyone, rental agent, owner, neighbors, etc. were welcome to come visit and observe what we were doing. I left the agent on a positive note. Later in the day a call for me was taken by Carol,,WA8YL. I wasn't there to take the call and by the time I got the message it was too late to return the call. Wednesday evening we observed a group of ladies, we assume other neighbors, standing in front of our place. They were outside no more than 5 or 10 minutes but it appeared to me that they were making some sort of assessment of our operation.

The hammer fell on Thursday. At 11:00AM the secretary at the rental agency called me on the phone and said that the owner had

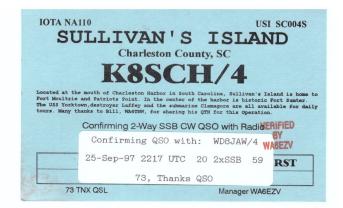
asked us to discontinue operations. We stopped operating at 11:30AM and left to go to lunch. When we got back from lunch I called the office manager about this request. I was told several neighbors had complained about interference with their telephones and televisions. The agent admitted to me that they did not believe we were causing any interference problems but now many of the neighbors were putting pressure on the owner and the owner wanted to keep peace within the neighborhood and therefore was asking us to shut down. The owner offered to pay us \$100.00 if we took the antenna down right away. I reiterate to the agent that from day one we exercised due diligence and went out of our way to fully disclose exactly what we were doing and what kind of antenna we would erect. I emphasized from the beginning that some slight interference might occur and if anyone had a problem we would address there concerns immediately. As previously mentioned we always carry telephone filters in case they were needed. I also explained this constituted a breach of contract and that we did not need the rental house if we could not operate. I told her we would take the antenna down, pack and be out early Friday morning. The agent agreed to give us a one (1) day rent charge refund.

We have good reason to think the accusation of interference was merely the "catch phrase" to get the rental agent and owner to take action since no one was siding with the neighbor until interference was mentioned. Of course the real stake through the heart were the RCCs. Up to the time I talked to the agent on Thursday after lunch, not one word was ever mentioned about interference. We operated 95% of the time on 20 meters. There was one daytime opening on 15 meters and we tried several evenings to work 40 meters. We were having trouble getting the amplifier to work and we never used it on 15 or 20 meters. It did work on 40 meters but again operating time was limited. We never started operating before 8:00AM and usually ended operation by 10:00PM or some time earlier.

Cable and satellite dishes were the means used for receiving television signals in this neighborhood.. One evening we did notice a slight ripple in our own picture but it did not persist. We never experienced interference when using the cordless phone. The wall phone located immediately behind and above the transceiver did pick up our signal. Apparently the interference was not heard on the other end of the phone calls because no one every brought it to our attention. All neighborhood utilities are underground! Finally, a new house was being built right next door to the complaining neighbor. They were using all types of power tools, electric rip saws, air operated hammers, and compressors plus all the normal hammering that goes on at any construction sit.

Our antenna mast is held in the extended (35') position by air pressure. We use a small air compressor equipped with a pressure switch to maintain the required pressure. When the pressure in the masts drops the compressor turns on then switches off at the preset pressure point. Other than when we actually raise the mast, the compressor runs less than 45 seconds maximum at any one time. How often the compressor runs depends on air leaks in the system but our best guess is on average every 3 hours. The compressor is noisy! We did not hear it run from inside our QTH but then again we may be insensitive to the sound from being around it. This is one sound the neighbor may have heard. We tried to reduce the noise level by using some makeshift sound barrier but it was ineffective.

Bottom line is we thought we had all the bases covered concerning permission for an HF operation and the necessary antenna installation. I relied on the building inspector, rental agent, and owner to know if there were any restrictions. On the surface it appeared we were in the clear. During the time we were in the process of deciding on the rental, Ken, N8ASV, commented that it was odd to have a QTH in an area where they had tennis courts, swimming pool (which we never did locate)and certain other amenities. I, for one, thought the owner was the final word on any restrictions and since I confirmed they had been advised of our intentions we were in the clear. As the saying goes when you assumeetc. Ken's insight proved to be right! RCCs restricting antenna structures are everywhere. Anyone hoping to operate in a new area while on vacation needs to investigate to see if any restrictions and/or RCCs apply. We will be more vigilant in the future!!





Grid Square EM91

73 QSL Manager N8FU







2015 Committee Chairs and Appointments

Newcomers/Elmers Net Robert Gulley AK3Q	Q-Fiver Editor Brian DeYoung, K4BRI
Technical CommitteeBrian DeYoung, K4BRI	Field Day Eric Neiheisel N8YC
ARPSC RepresentativeJerry Shipp W1SCR	HistorianDale Vanselow KC8HQS
Volunteer ExaminersBrian DeYoung K4BRI	Special Publications Jo Haltermon KD4PYS
QCEN RepresentativePat Maley KD8PAT	Fox HuntersDick Arnett WB4SUV
Membership Nathan Ciufo KA3MTT	Equipment MgrBrian Fulmer KC8FJN
Fundraising Bruce Vanselow N8BV	WebGeezer Russ Hines WB8ZCC
Education Robert Gulley AK3Q	Silent KeyBruce Vanselow N8BV
Repeater Control Ops Mgr Bruce Vanselow N8BV	Tech Talk Net MgrBruce Vanselow N8BV
PIOTed Morris NC8V	K8SCH QSL MgrGerry Weimer KD8ASL
Librarianopen	TV/RFIDick Arnett WB4SUV

Someone paid for a hamfest ticket at the May meeting but forgot to give Lynn the name associated with it—Please contact Lynn WD8JAW if you have ticket #2055 at wd8jaw@arrl.net

August Calendar

Sun Aug 2	7:00PM	Newcomers/Elmers Net, 146.67 146.67, Topic: Favorite Radio-Related Websites — NCS Robert AK3Q
Tue Aug 4	7:30PM	Club Meeting at St Bernard Recreation Hall, 120 Washington Avenue. Program: Raspberry PI for Everyone??? Andrew Krew – ND8D
Wed Aug 5	9:00PM	Tech Talk, NCS Robert AK3Q
Sat Aug 8	10:00AM 1:00PM	Mobile Foxhunt—Start at Mt. Storm park in Clifton—talk-in on 146.670 Brunch Bunch at Price Hill Chili Family Restaurant 4920 Glenway Avenue
Sun Aug 9	7:00PM	Newcomers/Elmers Net, 146.67 146.67, Topic: APRS—NCS Robert AK3Q
Tue Aug 11	6:00 PM	Technical Committee meeting—K4BRI's QTH—Instruction on programming the RC-210
Wed Aug 12	9:00PM	Tech Talk, NCS Brian K4BRI
Sun Aug 16	7:00PM	Newcomers/Elmers Net, 146.67, Topic: APRS In Space — NCS Robert AK3Q
Wed Aug 19	9:00PM	Tech Talk, NCS Dale KC8HQS
Sun Aug 23	7:00PM	Newcomers/Elmers Net, 146.67, Topic: Small Computers for Radio Uses — NCS Robert AK3Q
Tue Aug 25	7:00 PM	Board of Directors meeting
Wed Aug 26	9:00PM	Tech Talk, NCS Brian KC8FJN
Sun Aug 30	7:00PM	Newcomers/Elmers Net, 146.67, Topic: Getting Ready for the Winter Radio Season — NCS Robert AK3Q

The Elmer's Corner

Elmers Corner: Of S-Units and Power

By Robert Gulley AK3Q

I think it must be part of human nature to always want more power. The car manufacturers often try to sell us on cars with lots of horsepower—as if we are going to use them the way they are shown on TV! Maybe I am just getting old, but even if I lived out on the salt flats and I could take my car "from 0-60 in 2.3 seconds" while side-sliding to avoid missiles shot at me from a James Bond-movie-type bad guy, that's not a reason for me to buy the car. But we do like our power!

When a amateur station cannot be reached usually the first thing we think of is we need more power. "If I just had that ProPower all-mode whiz-bang amplifier I could reach that DX station." Maybe, but maybe not.

I do a lot of listening on the air in addition to trying to work a lot of stations, and I often hear folks talking about their station with a real sense of pride, and that is a good thing! But sometimes I hear folks talking about how much power they can throw out of their station and I get the sense there is a bit of bragging going on.

When two folks are talking to one another on 40 meters and they live a few hundred miles away from one another, 1500 Watts is not usually needed to make a contact! In fact, often that much power sounds off, as though the person is overloading their audio, and quite often they are.

There are times when the full legal limit might be needed, but not nearly as often as folks like to throw it out there "because they can." In fact, doing so violates the rules for amateur radio. We are directed by the FCC as part of our license *grant* to operate only with as much power as is sufficient to make the desired contact. Even on our repeaters we should turn our mobile power down from 50 Watts to 10 or 5 Watts if either of those power levels is sufficient to reach the repeater.

A little common sense goes a long way here, too. Minimal power does not mean your signal has to be barely just above the mud. But rather of such quality that it may be reasonably heard an understood without strain to the recipient. That may mean 10 Watts instead of 5 into the repeater, but one should also know what the bare minimum power can be used from a home or common location, just for those times when we might need to conserve power, such as when operating off of a battery or generator.

What Do I Gain by Cranking it Up?

Here's the thing: power is not a simple calculation. A change of 5 Watts to 10 Watts does not double the distance or strength of your signal. This is true whether on the HF bands or when working a repeater. Assuming a repeater hears your signal reasonably well it is going to re-transmit your signal at its assigned power level. The person on the other end cannot tell you have increased your power unless your original signal was weak coming into the repeater.

When talking about HF we often talk about S-units and signal strength. While S-units are somewhat inconsistent between radios and manufacturers, they are used as a minimal gauge of how well we are receiving a signal. In the HF world we get used to saying someone is "five-nine" (59) whether our meters read that or not, or we will give accurate readings (which is what we should do with the possible exception of some contests—but that discussion is for another day!).

Unless bands are really crowded or noise levels are extremely high, there is no real difference in the ability to copy a signal between five-seven (57) and five-nine (59). Yet I find myself sometimes thinking to myself when I get a true 57 report, I wonder what is wrong with my signal that I only got a 57 report?" Smack! I have been temporarily infected with the power virus! At five-seven my signal was completely understandable, I received the confirmation of my call, and no doubt was able to have a good discussion with the person on the other end.

(Continued from page 8)

In fact, when I get someone telling me at the start of a conversation that my signal is "ten over five-nine" that really means I should back down my power until I am no more than five-nine, or preferably less. Do I do that? Not all the time. If I am only making short calls and then moving on to talk with someone else, then I may leave the power alone. If I am planning to "ragchew", that is, talk a while with someone, then I need to back down my power to be in good compliance with the rules.

Now, back to S-units and their real value in terms of our discussion of power. To move one S-unit, from five-seven (57) to five-eight (58), we have to quadruple our power because our signals are measured in decibels. Doubling our power means, at least in theory, an increase of 3dB signal strength. In reality, it is a little less than that, but we will not quibble over it here. So doubling my power raises my signal 3dB, while doubling it again raises my signal a theoretical 6dB. An S-unit change requires 6db signal strength change as a minimum, and actually slightly more.

So to go from five-seven to five-eight, if I started with 25 Watts I would have to increase power to 100 Watts just to move 1 S-unit! If I want to move my five-seven signal to a five-nine (in other words, S-7 to S-9), I have to take my 25 Watts and go up to 400 Watts. Remember each doubling of power equals ½ S-unit change. Thus 25 to 50, 50 to 100, 100 to 200, 200 to 400 gives us a 2 S-unit change. And of course the reverse is true.

If 100 Watts gives you an S-9 signal, dropping back to 25 Watts still gives you an S-8 signal. Dropping even further, we could go down to roughly 5 Watts and still produce an S-7 signal—this is exactly why QRP operations are so popular. We do not need more than 5 Watts many times to work around the world. Again here's the math: 100 Watts/2=50 Watts (1/2 S-unit); 50 Watts/2 = 25 Watts (1/2 S-unit); 25 Watts/2 = 1/2 Watts, and 1/2 Watts/2 = 1/2 Watts or 2 S-units. Five-nine becomes five-seven, which is easily copyable under most circumstances.

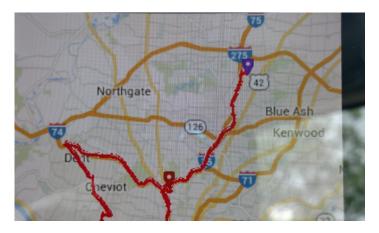
I say all of this just to drive home the point that power is not everything. There is nothing wrong with operating at 100 Watts and sending out a good signal, but don't assume more power is going to radically increase your reach, either. Going from 100 Watts to 800 Watts with a typical amplifier, is only an increase of 1.5 S-units, less when the amp only goes up to 600 Watts. From there, an increase from 800 Watts to 1500 Watts is only 0.5 S-unit increase; that's a lot of money and power to go up just 3dB!!

Amps are fine, just do not get caught up into thinking you have to have a legal limit amplifier to be heard! Spend more money and time getting the best antenna system you can and you will often raise **both** the transmit *and* receive capabilities of the station, boosting what you can hear. And always remember, if you can't hear 'em, you can't work 'em! An amp can help in certain situations, and they are another tool in the tool box, but they are hardly the most important one.

When you think in terms of power start thinking in terms of the decibel and S-units, and that will help you to not get too carried away by the lure of MORE POWER!! 73, Robert AK3Q

Foxhunting and ARDF

The July mobile hunt had the two regular hunters, Dick WB4SUV and Marji KJ4ZKC & myself. I could not get a signal from the start, and Dick also had a very weak signal. I thought I heard something about 220 degrees. Phil said he would try more power but we still had a hard time hearing him, so we went ahead and started anyways. I headed out 74 because I thought he was a long ways



away, and that was the direction I thought I head something. Nothing at all out 74, so we decided to head towards the river. I had the dim-witted idea that he might be near the brunch bunch location—nope. So we headed back towards the start to try to get a signal again.

Heading north on I75 we started to get something, so we just kept heading north. Good signals in the tri-county area, then it was just a matter of nailing down where he was. Dick beat us again, but not by a whole lot.

A good learning day, espically on what not to do:)



DX Spots—August 2015 de KA3MTT

Sun	Mon	Tue	Wed	Thu	Fri	Sat
					V29SH-Antigua & Barbuda thru 8-8	1
2	3 HC8 - Galapagos Thru 8-24	4	5	6 JD1 - Ogasawara Thru 8-9	7 ZF2EE-Cayman Is Thru 8-8 OY - Faroe Is Thru 8-10	8 LX9YL - Luxembourg thru 8-10 NH0J - Mariana Is Thru 8-13
9 S79DPX-Seychelles Thru 8-23	10 TF - Iceland thru 8-15	11	12 SV5 - Dodecanese Thru 8-19	13	14	15 C5WP - Gambia Thru 9-1
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31 TF - Iceland Thru 9-7					

OH-KY-IN Amateur Radio Society

Regular monthly meetings are held the first Tuesday of each month at 7:30PM local time at the St Bernard Recreation Hall, 120 Washington Avenue (corner Washington & Tower Aves) in St Bernard, just east of Vine St. Please come in the doors at street level, facing the high school. Visitors are ALWAYS welcome!

The Next Oh-Ky-In Meeting to be held on Tuesday, August 4th at 7:30 PM

Upcoming Meeting Presentations:

8/4/15 – Raspberry PI for Everyone??? Andrew Krew – ND8D

9/1/15 - ARRL Program - Scott Yonally - N8SY

OH-KY-IN Amateur Radio Society

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