

ARC-SHORTS

OCTOBER 2020

Club Repeaters: 147.315 (PL 107.2), 444.6 (PL107.2), 224.82 (PL107.2), 53.13 (PL107.2) 927.6 (-25Mhz, PL107.2), and 1282.600 (PL 107.2), DSTAR 145.38Mhz, 442.060, and 1284.
: DMR IS UP AND RUNNING 442.4125 +5Mhz Color Code 1.

PLEASE USE OUR REPEATERS.

Next Meeting

Due to the Corona Virus, our next meeting will be on ZOOM. This has worked out well and has as many participants as we have had in our in-person meetings. Encourage others to attend Our speaker on October 9th at 7PM will be Steve, W4SHG, the manager at HRO in Woodbridge and HRO's national sales manager, who will fill us in on what's new and as Steve is also an active tester, I expect he can give us some insight in to his testing activities as well.

We are also coming to the end of the year and that means that we have to nominate new club officers and vote in November. We have term limits and this allows new ideas and to share the work of running the club.

Don, KI4D, has done an outstanding job as president and he has a few ideas that may require changes to the by-laws. He may bring them up at our next meeting.

Last Meeting

Bob Nagy, AB5N, was last month's speaker and did an outstanding job of providing details on the design of Software Defined Radios (SDRs) . He also talked about voltage converters and new technology in batteries. The advantage of ZOOM was that he could talk from Hot Springs, Arkansas!

Presidents Corner

Based on Executive Order 68 as amended, the latest COVID-19 guidance from the state of Virginia, it is still "Safer to Stay at Home" with advice to continue teleworking if possible, wash hands regularly, maintain six feet of physical distance when outside of home, and get tested immediately if you have COVID-19 symptoms. Although many of the legal restrictions have been lifted under Phase III of opening, the Tidewater region of Virginia has remained under continuing restrictions because of COVID-19 outbreaks. Given the mixed set of indicators concerning reopening the economy and continued spread of COVID-19 in some states,

Alexandria Radio Club leadership has not elected to recommend resumption of in-person club activities; we will continue with our virtual meetings using Zoom.

As a reminder, COVID-19 has caused cancellation of the Marine Corps Marathon this month, for the first time in its 45-year history. The Marathon has had medical operations support from DC/Metro area ham radio operators for over 30 years.

At our monthly club meeting this week, our guest speaker will be Steve Gilmore (W4SHG), National Sales Manager for Ham Radio Outlet (HRO). HRO is a family owned business with 14 sales locations throughout the United States which includes a formidable presence on the Internet, making it the largest Ham Radio dealership in the world.

The ARC leadership group is now giving consideration to having a Holiday picnic with social distancing in lieu of our regular Holiday party dinner because of COVID-19. No details have not been completed, but the idea has had positive reactions.

Scheduled Activities and Presentations for 2020 updated as of September 6, 2020

- January 10th – MEETING, 2020 Plans & Programs, Membership Dues
- February 1st – FROSTFEST, Richmond, VA
- February 14th – MEETING, VA QSO Party, Gordon Miller (NQ4K)
- February 17th – George Washington Day Parade Participation
- March 10th – License Classes begin (Ends May 5)
- March 7th – St Patrick's Day Parade
- March 13th – (CANCELLED) MEETING, AREDN, Joe Porcelli (KT3I)
- March 21-22nd – VA QSO Party Weekend
- March 29th (CANCELLED) WINTERFEST, Annandale, VA
- April 8th – (POSTPONED INDEFINITELY) FIELD DAY 2020 planning committee kickoff (John Marshall Library)
- April 10th – ZOOM MEETING, Alexandria CERT, Dr. Marjorie Windelberg
- May 8th – ZOOM MEETING, WINLINK, Greg Butler (KW6GB)
- May 15-17th – (CANCELLED) HAMVENTION, Dayton, OH
- May 16th – HAMVENTION QSO Party
- June 12th – ZOOM MEETING, FIELD DAY 2020 final briefing
- June 21st – ARC (STAY SAFE) License Class FCC Exams
- June 27-28th – (STAY SAFE) FIELD DAY 2020 Weekend
- July 10th – ZOOM MEETING, AMSAT, Paul Stoetzer (N8HM)
- August 2nd – (CANCELLED), Berryville HAMFEST, Berryville, VA
- August 14th – ZOOM MEETING Ed's Twinlead Antennas, Dr. Ed Fong (WB6IQN)
- September 11th – ZOOM MEETING, SDR Trends, Bob Nagy (AB5N)

YOU ARE HERE

- October 9th – ZOOM MEETING, Ham Radio Outlet, Steve Gilmore (W4SHG)
NOMINATIONS FOR NEXT YEAR'S CLUB OFFICERS

- October 25th – (CANCELLED) MARINE CORPS MARATHON
- November 13th – Meeting, Year in Review, Elections
- December 11th – Meeting, Christmas party

ARES

First, I want to thank those who have signed up on ARES CONNECT. We had 22 on our group, but we also had one SK and a few who signed up to keep an eye on activities. I have asked ARRL to either add an item to the sign up that identifies the ONE group that the volunteer wants to work with as separate from the groups they want to be members of. In a widespread emergency, the list should provide the EC with his or her volunteers. If half of the volunteers work for Fairfax, Arlington or another group, the EC does not know who he or she can call on.

The city has told us that the VHF antennas are now installed on the EOC (jail). One covers 144/440/50 and the second covers 144/440/220. The radios purchased a few years back by the city are a Kenwood TM-710A and an ICOM ID-5100. We may add an Alinco 6 meter and Alinco 220Mhz radio. Note, the 710 allows packet and APRS operation and the ID-5100 provides D-Star capability. We may also use the city purchased Kenwood TS-480HTX on 6 meters.

We gave a brief to the new Alexandria Hospital emergency/communications director and hope to get equipment up and running at the hospital shortly.

I am working on a new ARES SOP. I would love to have inputs from all in the club and all who volunteer for ARES.

73 Rick
N4ASX

ELMER'S INPUTS

Despite COVID-19 our last class, lead and managed by Rich, KA4GFY was a great success with many of our students gaining not just the Technician Class license, but also their General Class license. This is great as it allows them to work on High Frequency bands where, when conditions are good, can allow you to talk around the world. The Extra Class is a bit harder but it's the highest level of amateur radio licenses. In the past (pre 1986) the Extra class was the ELMER class. The now extinct Advanced Class was the most technically challenging. Advanced material is now part of the Extra making that exam by far the most difficult.

For ne members a few things to remember about VHF/UHF operations. At some point more power does not get you more range. If your pumping 50 watts into a good OUTSIDE antenna, your still limited to LINE OF SIGHT. For radio Line of Sight means 4/3s of optical or direct line of sight, so if you can see 5 miles from your antenna you should be able to talk 6.7 miles before your signal goes off into space. Another issue is that as you go up in frequency, trees, houses, building block more of your signal. Earth is another issue, if you live in a valley your signal will not get beyond the hills around you. SO, what can you do? The higher your antenna

the better. A rough rule of thumb is for each 1 foot of height you get an additional mile of range. Efficient antennas not only allow you to be heard at the end of your line of sight, but also to HEAR that weak station. Also, look at your feedline to the antenna. If you have an antenna that needs 100 feet of coax and you buy RG-58 over the web, you will lose a great deal of your received signal on 2 meters and much more on 440MHz. RG-8, RG-213, RG-8x, is more costly but better. If you have a run of coax greater than 50 feet, and plan to operate on 440 MHz think about LMR-240 or even LMR-400 (9913F7 equiv.).

Another issue that seems to pop up is how to go CHEAP on your first radio. If you are not sure about the hobby, then going with a BOUFONG radio may be a good start but remember that any Handheld is limited. The receiver performance will not be as good as a more expensive radio and the rubber duck antenna is not particularly good compared to a mobile whip on a magnet. You can also put a quarter wave counterpoise on you antenna or build a ground plane antenna that will allow you to have better performance.

Another STRONG recommendation for new operators. You can buy used gear. Even new mobile/base radios have gotten less expensive. You will have to add a power supply, coax cable and an antenna, but usually the mobiles are better than handhelds in the receiving department. Most now have up to 50 watts output. A 2 meter only radio, made by a reputable company is less then \$200 and a dual band maybe a little over \$300 new. A power supply can be a charger and an old car battery. As for used gear, lots of very nice radios can be had for \$50 to \$100. Ask around at club meetings and you may find a deal when a fellow member decides to move to a new radio. This is even more true of HF radios, I had a bunch of older VHF radios and gave them to new members, because the XYL said they needed to go.

If you do decide to buy a NEW radio, you need to make a list of what features you want. If your only going to use 2 meters, then you don't need a dual band radio. If you only want to do FM and not D-Star or DMR, then FM only is less complex. Some who know they want more capability look too the Shack in a box radio. The ICOM 7100, FT-991A, Kenwood TS-2000 all come to mind. They have HF, VHF and UHF all in one box.

If you have questions for our longer time hams, please send them to Rick, N4ASX at COX.NET.

73 Rick
N4ASX

Hamfests –

The spread of COVID-19 (AKA Corona Virus) has put a major damper on hamfests.

With the ongoing COVID-19 situation, be sure to check the websites to make sure the hamfest has not been cancelled. This may be a lean year for hamfests, or any other activity where people gather in large numbers. Check any hobby/activity and we are all going through the same issues.

Here's hoping 2021 will be a better year.

Training –

Our next scheduled class is slated for early October, but we do not have the OK to use the building yet. There was insufficient interest in holding a class this fall. If there is enough interest in holding an online class, we can start one.

I am in the process of learning how to do exams on line. It's not as easy as it sounds. One online exam system looks very promising. Another is slightly complicated on the technical end, but much more involved on the paperwork side.

Being able to offer remote exams gives us another tool in the toolbox.

Another alternative may be the "drive-in" exam. Test takers take up a space in front of their vehicle and take the test while maintaining social distancing. This is a very viable option with cooler weather coming our way. I am looking for a possible place to do one.

Contests –

- Oct 10 and 11 – Nevada QSO Party. Exchange is RST and state.
- Oct 10 and 11 – Arizona QSO Party. Exchange is RST and state.
- Oct 10 and 11 – Pennsylvania QSO Party. Exchange is serial number and ARRL section.
- Oct 10 and 11 – South Dakota QSO Party. Exchange is RST and state.
- Oct 17 and 18 – New York QSO Party. Exchange is RST and state.
- Oct 18 and 19 – Illinois QSO Party. Exchange is RST and state.
- Oct 24 – Kentucky State Parks on the Air. Exchange is your state.
- Oct 24 and 25 – CQ Worldwide DX Contest, SSB. Exchange is RST and CQ Zone. We are in zone 5.
- Nov 1 – North American SSB Sprint Contest. Exchange is other station's call, your call, serial number, your name and state,
- Nov 7 thru 9 – ARRL Sweepstakes, CW. Exchange is the other station's call, serial number, class, year first licensed and ARRL section.
- Nov 21 thru 23 – ARRL Sweepstakes, SSB. Exchange – see CW above.
- Nov 28 and 29 – CQ Worldwide DX Contest, CW. Exchange – see SSB above.

Every Sunday evening at 8 PM local time, the K1USN Radio Club sponsors the "Slow Speed "Contest." The exchange is similar to a QSO. See the rules here:

<http://www.k1usn.com/sst.html>.

Don't forget, be sure to send in your log within 7 days after the contest ends for all ARRL sponsored contests. ARRL now uses a web application for contest log submissions. Here is the

link: <http://contest-log-submission.arrl.org/> Be sure to convert your file to Cabrillo format before submitting. Most logging programs support the Cabrillo format.

REMEMBER to support the CLUB'S score for contests by providing Ian, N8IK your info (Name, Call sign and Grid Square location) and submit your scores for the contests you play in. If the contest asks for a club affiliation, the Alexandria Radio Club is on the list of contest clubs. Contesting is one way we show that we are using our frequency allocations.

Contests may not be your thing, but contests are a great way to show outside interests we do use our valuable spectrum. By showing we use our spectrum, other services will have a hard time proving that we don't use our spectrum and it's up for re-allocation to someone else.

Contests can also be a great way to become introduced to HF communications. While it can be intense, pick the contest and jump in. Most contests have a limited exchange so it is usually easy to get what the other station needs.

State QSO parties are a great introduction to contesting. Most are low-key and the exchange is limited.

Speaking of state QSO parties, there is now a state QSO party challenge. You can start accumulating multipliers by submitting a log in any state or provincial QSO party to 3830scores.com [QSOParty.Groups.io.forum](http://QSOParty.Groups.io/forum) and [State QSOParty.com](http://StateQSOParty.com).

There was some good news about the solar cycle. ARRL reported the Royal Observatory of Belgium determined the solar minimum between Solar Cycles 24 and 25 occurred in December 2019. For the next few years, we should see improved propagation on the HF bands.

Repeaters –

The club repeaters are all up and running. We are still in the process of configuring the DSTAR server and resolving any issues. Once the server is placed in service, we should have full use of the DSTAR repeaters. They are working in local mode.

The DMR side is working normally with access to the DMR servers. If you use the DMRVA codeplugs, they have updated codeplugs on their website with the new DMR repeaters added since early this year for many of the popular handheld and mobile DMR radios. The codeplugs include more than just the DMRVA system repeaters. Their website is <http://www.dmrva.org/>

We have resumed (semi-regularly) the follow-on net on one of the other repeaters after the Thursday net on the 2-meter analog repeater.

As always, ham it up and get on the air.

73, Rich, KA4GFY