

ARC-SHORTS

August 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.

Presidents Input

As we continue feel the loss of Jack Hranicky (K5OTZ), SK; Rick Bunn (N4ASX) continues to represent our Club in support Jack's family. However, Rick provides an added measure of support to Jack's family because of his long and enduring friendship with Jack.

Based on Executive Order 68, 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 next 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.

Next week at the next monthly club meeting we are fortunate to have, as our guest speaker, Bob Nagy (AB5N). Bob will give a presentation on SDR technology trends in ham radio. Bob claims not to be an unmitigated expert on SDR technology, but based on the many, many videos I have viewed on the Internet regarding SDR technology, Bob easily stands out as the best person for explaining SDR technology in lay terms. He is superb at boiling down the basic design concepts and restating them in a digestible format. Bob was licensed in New York City (NYC) at the age of 16 and has been on the air every day since 1971. Bob migrated from NYC to Austin, Texas after studies at New York Institute of Technology. There, he worked on early digital phone technology developments, and eventually moved to join the University of Texas (UT). At UT he built one-off laboratory devices and he spent a few years under grant at NASA Houston and Cape Canaveral to support STS 93, the 95th launch of the Space Shuttle and the 26th launch of Columbia. In his spare time, Bob built 3 broadcast stations in Austin which survive to this day. He also designed and hand-built a solar system that powered his home in Austin; he eventually sold it to retire at age 48 to Hot Springs, Arkansas. Since his arrival in Hot Springs, Bob has built another solar-powered FM radio station, and he runs a small ham radio company specializing in ham radio accessories. Bob is also an instructor at the Innovative Technology Center in Hot Springs. (Drones and Solar technology). With the time that he has left, Bob also teaches Russian and plays in a polka band, as well. His wife, Karen, is N5PQU.

This month, we are again delighted and fortunate to a new club member. When you have an opportunity please welcome Craig Thoet, KO4EQZ.

The ARC leadership group has approved the purchase of a new supply of club patches. The patches have been ordered and will be delivered in about three weeks. They will be attached to ARC safety vests and job shirts when ordered. Individual patches will be on sale to club members for \$5.00 each.

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)

YOU ARE HERE!

- September 11th – ZOOM MEETING, SDR Trends, Bob Nagy (AB5N)
- October 9th -- MEETING, Ham Radio Outlet, Steve Gilmore (W4SHG)
- October 25th – (CANCELLED) MARINE CORPS MARATHON
- November 13th – Meeting, Year in Review, Elections
- December 11th – Meeting, Christmas party

Please stay safe with masks and keep up with your social distancing.

73 Don, KI4D

ARC Monthly Meeting Notes August 14, 2020

Meeting Notes August 14, 2020

Our guest speaker for August 14, 2020 was Dr Ed Fong, he provided the Alexandria Radio Club a most interesting overview of the following items.

DBJ-1 Dual Band Base Station Antenna

DBJ-2 Dual Band Roll-up Antenna

TBJ-1 Tri Band Base Station Vertical VHF UHF & 220 MHz

Country Comm GP-5/SSB Handheld Receiver

Ed set up ordering so that club members get a price break and we did not have to pay shipping from California per order. This ordering process is similar to the way we ordered antennas from Ed in the past. The deadline to place orders was August 27, 2020.

Enclosed are a couple of links related to Ed's presentation that will provide you a more in-depth information on each of the items listed that you may find useful.

https://www.miklor.com/COM/Review_DBJ1.php

https://www.miklor.com/COM/Review_DBJ2.php

https://www.miklor.com/COM/Review_TBJ1.php

http://torborg.com/a/antenna_testing_tbj1_cx333.html

<https://www.miklor.com/GP5/GP5-Review.php>

<https://swling.com/blog/2014/12/a-review-of-the-countycomm-gp5ssb-portable-radio-a-great-emergency-portable/>

A reminder that our club has repeaters on all three of these bands. Our 220Mhz repeater has great coverage and is UNDERUSED. We have two 440 repeaters. The main 440 repeater is up on 444.6MHz (107.2 tone) and has great coverage. The 220 MHz repeater is on 224.82 MHz (107.2 tone). Lots of our members have purchased the TH-D74A which is a great handheld radio covering 2 meters, 1.25 meters and 70cm bands both FM and D-Star. It also has a GPS for both D-PRS and APRS.

NEXT MEETING September 11, 2020

Don, KI4D has not let COVID-19 slow him down one bit. He's has arranged for Bob Nagy, AB5N to be out guest speaker. Bob will be talking about SDR radios. Bob also has a fantastic website and one of things he has developed is modifications for ICOM and Yeasu hand mics. I own an ICOM 2820 that gets horrible audio reports on D-Star, so I am going to take advantage of his hard work.

ARES

Good news! Got an e-mail from Chief Whatley telling me that the EOC antennas have been installed and a few of us will go up and connect the radios, antenna and power and give them a check. (By the time we send this out it may be done.)

This is a new capability for the city and in our ability to support city and area wide emergencies. The gear includes HF, 6 meters, 2 meters and 70cm (440MHz). We have both D-Star and Packet / APRS capability on 2 and 440. I will provide more details on how we plan to operate after we get the systems up and on the air.

WINLINK WEDNESDAY

When I first started participating in the club's ARES and public service activities, the primary radio was a 2 meter mobile or handheld. In 1979 handhelds were very expensive and had between 4 and 8 'channels' they normally came with 146.52 simplex and a common repeater pair installed. If you bought the cheap crystals, you would spend \$8 per pair, so if you wanted the club repeater, a wide area repeater like 146.79 and the 147.3 repeater for weather you added \$24 and you had to either plug in the crystals or solder them into the board. Then each crystal needed to be adjusted with a trimmer capacitor to be on the right receive and transmit frequency.

My first hand held was a DRAKE TR-33 with 6 channels and I had to add 5 channels to it! But, it worked well with a 1 watt output.

But the technology marches on and in the early 1980s ICOM started selling the IC-2(AT) which was allowed you to dial up any frequency in the band and change the offset, but no PL tones,

Now we have handhelds like the TH-D74A the ID-51 and others that do about anything you need.

Now to the point. The agencies we support want us to move into new radio territory. This starts with the idea that we send written traffic more quickly and with greater accuracy without any delays in time. They are also familiar with the INTERNET and E-MAIL.

So, how does ARES meet these new demands and still stay flexible and without the need for embedded infrastructure?

There are two new areas that allow us to address these new needs. One is WINLINK. We've discussed this before, and it is not difficult to use. It allows e-mail like traffic to be passed via VHF, UHF or HF radio to either another station in Peer to Peer mode, or to a Gateway station that has it's own radio systems and can deliver to any WINLINK radio station or to any internet connected terminal. So, what it takes is a radio, a Terminal Node Controller (TNC) or a software TNC on you laptop or computer (More about this later), and a terminal which could be your cell phone, a tablet, laptop (if you have a lap), or your desktop. The WINLINK software is free, but making a small donation is a good thing to do. It's very quick to learn how to use it.

But how do we keep fresh on what we learn. That is an issue taken up by VA. ARES and KW6GB, Greg. Greg started WINLINK WENDESDAY. Each Wednesday, participating stations send Greg a simple WINLINK message with CALL, First name, Location and (VHF, UHF, HF). On the third Wednesday you need to put your message in the form of an IC-213 format. This is found in the templates provide with the program, you call it up, fill it in and exit. When you send it the attachment will include the information and will fill out the form at Greg's station. Great practice on using attachments and templates.

As of this last Wednesday, the club had at least 4 check-in's Don KI4D (using VARA), Rich KW4UJ, Rich KA4GFY and myself. The last three used conventional packet. You can also use VARA, PACTOR, or ARDOP modes (all come with the WINLINK program) on HF to go Peer to Peer.

So, If you have a radio with a built in packet TNC, an old TNC you don't use or want to work digital modes, Look at WINLINK!

Next month we can go over AREDN which is another development that will help us in the digital world.

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. So, our Fall 2020 class may be entirely online.

I am also 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 a little complicated on the technical end, but 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 –

- Sep 12 and 13 – Texas QSO Party. Exchange is RST and state.
- Sep 12 – Ohio State Parks on the Air. Exchange is your state.
- Sep 12 and 13 – Alabama QSO Party. Exchange is RST and state.
- Sep 12 thru 14 – ARRL September VHF Contest. 50 MHz and up. Exchange is 4-character grid square. Most of us are in FM18.
- Sep 19 and 20 – Iowa QSO Party. Exchange is RST and state.
- Sep 19 – Wisconsin parks on the Air. Exchange is your state.
- Sep 19 and 20 - New Jersey QSO Party. Exchange is RST and state.
- Sep 19 and 20 - New Hampshire QSO Party. Exchange is name and state.
- Sep 19 and 20 - Washington State Salmon Run. Exchange is RST and state.
- Sep 26 and 27 – CQ Worldwide DX Contest, RTTY. Exchange is RST and CQ Zone. We are in zone 5.
- Sep 26 and 27 – Maine QSO Party. Exchange is RST and state.
- Oct 3 and 4 – California QSO Party. Exchange is serial number and state.
- 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 and 25 – CQ Worldwide DX Contest, SSB. Exchange is RST and CQ Zone. We are in zone 5.

Looking ahead into November, don't forget the ARRL Sweepstakes. CW is on November 7 and 8, SSB is November 21 and 22.

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 Iam, 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. Thanks to Brian, WD4ADF for asking that we go to 224.82 after our regular net. We also need to make more use of 6 meters 53.13.

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

73, Rich, KA4GFY

FOR THOSE WITH NEW RADIOS

If you have a new VHF, UHF radio. The first thing you find out is that it has hundreds or thousands of memories and you also find out that there are hundreds of repeaters within your range and if you travel to other locations, you may want to have their repeaters loaded as well.

This can be a time consuming effort, but here is where a club comes in. It's a fair bet that someone in the club has already purchased the same radio you just did and may have a good 'code plug'. Many of us use RT Systems, CHIRP or the companies computer set up programs. Before you start from scratch or try to load a few hundred memories into the radio by hand, send an e-mail out to the club and you may find a member that already has a file for your radio and most will be more than happy to edit that file and loaded on your new radio.

73 Rick

N4ASX

MANY THANKS TO Don, KI4D, Wilson KM4KLLK, and Rich KA4GFY for their contributions to the newsletter.