

ARC-SHORTS

APRIL 2021

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

Our next ZOOM meeting will be Friday APRIL 9th at 7PM. A ZOOM meeting invite will be sent out soon. April 9th – ZOOM MEETING, West Mountain Radio, Mark Siegesmund (W9WMR)

Last Meeting

Alexandria Radio Club

Meeting Minutes March 12, 2021

At the monthly meeting last night Howard (WB2UZE) and Bill (W6JIM) of the Long Island CW Club <<https://longislandcwclub.org/>> did a terrific job explaining how to get onboard with learning CW while having fun. Enclosed is a link to the website that offers inexpensive CW keys and oscillators for practicing CW. Many Technician class operators may not know that they have HF privileges to operate using the CW mode which can reach around the world more effectively than SSB phone. See attached Technician Class privileges. Technician Class operators can use CW on 80 meters at 3.525-3.600 MHz, 40 meters at 7.025-7.125 MHz, on 15 meters at 21.025-21.200 MHz, and 10 meters at 28.000-28.500 MHz. CW does not require a lot of transmitting power, which can make it inexpensive to use. The Long Island CW Club is especially organized to help beginners learn to operate using CW.

The Virginia QSO Party starts the weekend of March 20-21, 2021, you may operate from fixed, mobile or expeditionary locations using QRP (5w or less), Low (150w or less) or High (>150w). Activate as many different Virginia jurisdictions as possible.

Recommended Software N3FJP or N1MM for easy logging of contacts. N1MM Logger is the world's most popular ham radio contest logging program. For CW, phone and digital modes, its combination of contest-optimized features is unmatched. N1MM is free to download.

Committee Reports were accepted as given.

The Alexandria Radio Club has 104 members in good standing.

All the Alexandria's Radio Club repeaters are operational

The Alexandria Radio Club Spring Training class begin March 23, 2021 for Technician and General License

Net control operators for the following dates are:

- March 18, 2021 Rick Bunn (N4ASX)
- March 25, 2021 Ian Keith (N8IK)
- April 1, 2021 Richard Adamy (KA4GFY)
- April 8, 2021 Bryan Pettigrew (WD4ADF)

Scheduled Activities and Presentations for 2021 updated as of February 1, 2020 (SEE PRESIDENT'S Column)

Presidents Corner

Presidents Corner

Virginia continues to be under a state of emergency based on COVID-19, but as of April 1st has reduced restrictions with the 4th amended Executive Order 72. The amended order allows the maximum number of individuals permitted in a social gathering to increase to 100 people for outdoor settings, while remaining at 50 persons for indoor settings. The new guidelines will be effective for at least one month and mitigation measures may be eased further if key health metrics continue to improve according to the order. The latest general COVID-19 guidance from the state of Virginia is that 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 Aside of home, and get tested immediately if you have COVID-19 symptoms. Given the mixed set of indicators concerning reopening the economy and continued spread of COVID-19, Alexandria Radio Club leadership has not elected to recommend resumption of in-person club activities; we will continue with our virtual meetings using Zoom.

This month, we are again delighted and fortunate to have new club members. We are welcoming new club members Kenneth Horton (W4ODA) and Phillip Brown (W3PJB), who recently joined ARC.

The ARC March 12th meeting featured Howard (WB2UZE) and Jim (W6JIM) of the Long Island CW Club on 'Learn & Have Fun with Morse Code'. As an indication of the popularity of the Long Island CW club activities, it has over 1400 members, worldwide. It is noteworthy that one of the best things about CW is that even Technician Class operators can operate worldwide CW on HF, with a minimal investment.

The April 9th ARC monthly meeting will feature a presentation by Mark Siegesmund (W9WMR) of [West Mountain Radio](#). Mark is the current president of West Mountain Radio and head of engineering; he has done hardware design for many of the company's products. The presentation will feature DC power technologies, distribution, batteries, and solar power sources, and covers special considerations involved with low voltage high current DC power as is used in amateur radio. Cable loss as well as connector suitability are discussed. An overview of the state of battery technology will be presented with a good comparison of the technologies as it applied to amateur radio. Battery configurations, safety and the use of solar power will be discussed. West Mountain Radio has been at the forefront in the ham radio community for many years, being first one of the first to popularized sound card hardware for the new digital modes, and the first to popularize Anderson powerpole connectors for ham radio. The company specializes in products for amateur radio, DC power distribution and control, as well as R/C hobbies, West Mountain Radio manufactures RIGrunner DC power strips, voltage monitors and tools, and precision battery analysis hardware and software; in addition to RIGblaster sound card interfaces.

We are gratified that the Alexandria Radio Club was featured prominently in the recently released Alexandria City Council approved Resilient Alexandria Charter document, a project proposal to assess and report on the state of our City's resilience to disasters. The Charter was developed by Alexandria's Citizen Corps Council, an advisory body charged with evaluating, catalyzing, and empowering the entire community to prepare for and respond appropriately to disasters and emergencies of all kinds. We will continue to support development of the Resilient Alexandria Charter project.

The ARC Leadership Group met on April 2nd. The club leadership group consists of elected officers, committee chairs, and president's emeritus. The impacts of COVID-19 on club activities were discussed at length, particularly options for Field Day 2021. The group discussed options for Field Day 2021 with plans for making a decision by May 1st on whether the club will have a virtual or in-person event in 2021 based on the COVID-19 outlook, but planning includes pursuing dual tracks for Field Day, in-person and virtual. Ideas for updating the ARC Officer's Guide were discussed. The status of purchasing ARC patches, shirts, safety vests, and sweatshirts was discussed. Other items discussed included strategies for membership building and retention, maximizing the value of new at-large-Board Directors to ARC, and fundraising ideas. A list of tech-talk topics was discussed, including the establishment of a start date for tech-talks, the first Wednesday in June.

The list of upcoming club activities and presentations planned for 2021 is listed below. The Club also welcomes any ideas from club members for programs and activities in 2021. Please send your ideas to president@w4hfh.org.

ARC recorded Zoom meetings with featured presentations are located at

<https://drive.google.com/drive/folders/1MG9VUqKOWeoWEWt0oBwychbzh4qILqbl?usp=sharing>.

Scheduled Activities and Presentations for 2021 updated as of April 2, 2020

- January 8th – ZOOM MEETING, Pentagon Radio Club MARS Operations by Gary Sessums (KC5QCN), 2021 Plans & Programs, Voting Meeting
- February 6th – (CANCELLED) FROSTFEST, Richmond, VA
- February 12th – ZOOM MEETING, VA QSO Party, Gordon Miller (NQ4K)
- February 15th – (CANCELLED) George Washington Day Parade Participation
- March (Date) – License Classes begin, Ends May (Date)
- March 6th – (CANCELLED) St Patrick's Day Parade
- March 12th – ZOOM MEETING, How to Learn and Have Fun with Morse Code by Long Island CW Club, Howard (WB2UZE) and Jim (W6JIM)
- March 20-21th – VA QSO Party Weekend

YOU ARE HERE!

- April 7th – ZOOM MEETING, FIELD DAY 2021 planning committee kickoff
- April 9th – ZOOM MEETING, West Mountain Radio, Mark Siegesmund (W9WMR)
- April 24th (VIRTUAL) WINTERFEST, Annandale, VA
- May 14th – ZOOM MEETING, ARC ARES, Rick Bunn (N4ASX)
- May 21-23rd – (CANCELLED) HAMVENTION, Dayton,
- June 11th – ZOOM MEETING, FIELD DAY 2020 final briefing
- June 26-27th – FIELD DAY 2021 Weekend
- July 9th – ZOOM MEETING, AREDN, Joe Porcelli (KT3I)
- August 1st – Berryville HAMFEST, Berryville, VA
- August 13th – ZOOM MEETING, Antenna Tuners: When do you need one, and how do they work?, Barry Feierman (K3EUI)
- September 10th – ZOOM MEETING, TBD
- October 8th – MEETING, History of ARC, Don Lewis (KI4D)
- October 31st – (CANCELLED) MARINE CORPS MARATHON
- November 12th – MEMBERSHIP MEETING, Elections
- December 10th – MEETING, Christmas party

Proposed Tech Roundtable Topics for 2021

(Panel of experienced club members and others discussing their experiences with Q&A.)

1. Ham Activities for New Technician Class Hams
2. Handy talkies (HT) options, what kind, how much? Pros and Cons
3. Building a Go-kit for ARES
4. QRP (Reduced transmit power out)
5. Portable ops (rigs, batteries, antennas, etc.)
6. Mobile installations
7. Starter Base Station Options
8. Stealthy Antennas for city dwellers
9. QSL Cards
10. Getting Started with ECHOLINK
11. Getting Started with Amateur Radio Satellite Communications
12. Parks on the Air for Beginners
13. Working with Repeaters
14. Using NVIS
15. Working with Digital modes
16. Radio Scanners for Beginners
17. Packet Radio
18. Raspberry Pi Applications
19. Virtual Ham Shack Tour
20. Ham Shack Hotline
21. Installation and Logging with N3FJP
22. Matching Antennas to Feedlines
23. Propagation and Sunspot Cycle 25
24. "Time" for new amateur radio operators

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

73 Don, KI4D

ARES

On 3/30/21 The FEMA Region II held a Webinar on using Amateur Radio for communications during a disaster. Many amateurs attended including a few from this club. The speakers were the Emergency Manager and ARES lead for Nassau County Florida. A few points caught my attention and are applicable to Alexandria ARES

1 - Nassau Co. Florida is outside of Jacksonville Florida but does not include Jacksonville. Much the way Alexandria is a small city next to Fairfax and DC.

2 – It took some time for the ‘Professionals’ in emergency management to recognize the worth of ‘Amateur Radio Operators’. It was pointed out that the volunteers included two retired Generals and many operators who had extensive knowledge of communications systems and emergency procedures. This apparently surprised the ‘professionals’ as they had heard only about CB radio and other services.

3 – They now have a training plan that includes the ARES TASK BOOK which establishes THREE levels of operator. This is now the standard for all ARES groups.

4 – As with Craig Fugate’s story about the state EOC being disabled by cut set of optical cables, a similar problem happened with the EOC in Nassau Co. FL. As with the previous example, the amateur radio operators were prepared and continued to operate.

One of the issues that comes to mind when listening is that WE (ARES) must be careful not to promise more than we can deliver. Alexandria had about 12 volunteers for Inauguration Day to cover two locations for 12 hours (12 hours, 2 operators per shift, 2 locations = 48 manhours) this meant that each volunteer had to cover 4 hours. If we had to cover the EOC, The Hospital, Red Cross and 4 shelters for 48 hours (hurricane or other major disaster) that would be 48 hours, 7 locations 2 operators per location = 672 manhours. If Alexandria ARES has only 14 volunteers that means that EACH of our 14 volunteers is on duty for 48 hours. That assumes that we have 14 volunteers. My 50 years as an ARES volunteer and 15 years as the Emergency Coordinator (EC) tell me that in a real disaster we would be lucky to get 8 of those 14 volunteers. So, we need to be incredibly careful about what we promise.

Alexandria ARES DOES need more volunteers, but I understand why, out of 30 plus active members and over 100 paid members in the club, we have only 14 and many of them have been in the program for as long as I have. People need to look out for themselves and their families. Some think you need special training and equipment; Others just are not into this type of operating.

Training is simple and to get to LEVEL II takes about 2 hours. The equipment for 95% of our ARES operation is a 2 Meter handheld or mobile. And if you don’t have appropriate gear, we have a comm trailer that is already equipped, and the EOC is completely equipped. For those who would like to operate on D-Star, we have 7 ID-51As that can be loaned out, which are programmed with all the local repeaters and D-Star channels and can be loaned out for one year at a time. Some operations may use HF or WINLINK, but that’s easy to cover. ARES Needs volunteers who are willing to commit to training and to being able to respond when needed.

Volunteering is SIMPLE, call or e-mail the Emergency Coordinator and fill in the simple form. (One page – contact information and capabilities.)

73 Rick Bunn
N4ASX
EC Alexandria ARES

ELMER

We are now back teaching both the Technician (Tech) and General License classes. One thing this club tries to do that some classes don’t do it TEACH THE MATERIAL and NOT JUST THE TEST.

The most important aspect is to give our students a good foundation so they can better enjoy the hobby. That said, I hope that EVERY new amateur does TWO THINGS when they get that new call sign.

1 – JOIN A CLUB – ANY CLUB. Why? Because that is where you will find others who have the same hobby and are learning like you are. Life and Amateur Radio are a continuous learning experience. Also, within any club will be the “GRAY BEARDS”. That’s a Navy slang for the old members of a club that have “been there, done that”. These are your “ELMERS” and most are happy to help new operators.

Club’s also have various activities. Field Day, Fourth full weekend in JUNE each year. NATION WIDE. Operations “out in the field” setting up in a park or other open space with emergency power, temporary antennas, tents and friends. You will learn more about HF radio in that weekend then in 10 weeks of class time. Other contests. While many will say contests are just a pain and testers have no curtesy, a contest is a great way to work states and countries that you would not find under ordinary conditions. Public Service events are a chance to show how valuable Amateur Radio is to the community and at the same time great training for emergencies.

2 – FIND AN ELMER OR TWO OR MORE! The Elmer does not have to adopt you, but even if you’re not a club member find those guys who have been around for a while and can answer your questions. Most of the older guys in the hobby have had the same problems you have. If you live in a Condo, Apartment building or a home that has a Homeowner’s Association (HOA) there are others who have successfully found ways to operate in those conditions. Not sure about antennas? There are guys who enjoy antenna theory and can help. Got a little mic fright? Ask an old amateur if you can help with his station during a contest. Guarantee you will get over the mic fright. Finally, there is more equipment out in the hobby then you can learn about on your own. If you are going to buy a used radio, MAKE sure part of your research is to talk to the old amateurs and get the real story. An example: A new ham sees a TS-830S for sale for \$300 and in his research finds that when that radio came out it was a HIGH-END CONTEST DX RADIO. Looks like a great deal. BUT, what he does not find out that it has been and will be a radio that is overly complex, no longer supported by the manufacturer and has a reputation for needing repair more frequently than most. The flip side of this looking at a 1985 vintage Ten Tec. Ten-Tec is not doing well, and those radios are 35 years old. But they are generally very reliable, and their receiver performance is as good as current radios on the market. What 20 years ago was a \$1500 used radio can now be had for \$500. Again, used gear is like used cars, find some expertise to help.

More amateurs fall out of the hobby because they say it’s too boring. If you ask them if they belonged to a club or had a ELMER the answer is generally NO. There are SO MANY aspects to this hobby that it is impossible to say you’ve seen and tried it all. But, to find out what your missing you need to join a club and find an Elmer.

73 Rick Bunn
N4ASX

DMR ON THE ROAD

Road trip report

I recently had to be in Florida for a short business trip. With all the travel hassles, I decided I'd drive and get out of the covid cabin for a while. Easy haul straight down I-95, and I planned an overnight stop in each direction in Savannah, a city which I adore.

For radio comms, I moved my primary shack radio (a Wouxun KG-UV950P) to my car. It's a basic 2 meter / 70-centimeter mobile unit with 50 Watts of power through a rooftop magnetic mount antenna. I've used it before and love it for driving trips, and I programmed in a few 2M repeaters along the way. Since it's roughly 1000 miles each way, I only programmed in repeaters in the larger metro areas I would be driving near.

For the long flat areas where the South of the Border billboards are scarce, I monitored both 2 meter and 70 cm simplex national call frequencies, 146.52 MHz and 446.00 MHz, respectively. To be fair, other than saying hi to a few friends on the repeaters in the NoVA vicinity, my analog FM activity was pretty minimal.

I knew wanted more than that. So, I installed my Pi-Star hotspot in the center console of my car, and set it up to tether through my iPhone's WiFi hotspot service.

It's a somewhat strange mishmash of technologies between my handheld DMR radio, an AnyTone 878, and the DMR world. My Pi-Star listens in on a UHF frequency in the 433 MHz range. From there, the Pi-Star gets Internet service via the iPhone over a Wi-Fi connection from the Pi-Star to the iPhone. From there, it goes out over the Internet using AT&T's LTE service in my case. Talk about an alphabet soup of technologies and protocols, but it works. (See sidebar discussion for details on how to configure the iPhone and Pi-Star for this sort of setup.)

Fortunately, the I-95 corridor has excellent LTE coverage, and I didn't see a single moment of "no signal".

Quite the contrary, I was able to sign on and monitor a few of the Brandmeister statewide groups along the way. I always checked in and said hello to the "locals," and I even had a few very pleasant QSOs. (I'm sending those each a QSL card to thank them for making a lonely long drive a bit more bearable.)

I also was able to monitor my ragchew talk group of choice over on TGIF. I stay on that talk group pretty much all day every day. Oh, and I even checked in on a weekly net I enjoy connecting with down in South Africa. (My family is originally from there, and I'm trying to find records of my grandfather's ham radio CW DX contesting from the 1950s.)

A question I've gotten several times is why do I bother with the hotspot in my car? Why not just use DMR repeaters and not bother with the hotspot? It's a fair question, I suppose.

For one thing, I would have had to program in DMR repeaters throughout the 1000 mile journey, and there would no doubt have been many long stretches that were out of reach of any repeaters. But sure, I could have done that just as I did for the FM repeaters in my mobile.

The second reason I prefer the convoluted arrangement I used is that each DMR repeater uses the DMR controller of its owner's choosing, and they "dish up" the talk groups they care to. My little "ragchew" group out on TGIF is not likely to be on any more than a small handful of DMR repeaters, so I would not have been able to connect to that for at least most of the journey.

On the other hand, with my hotspot, I am able to use both the Brandmeister and TGIF DMR controllers simultaneously and connect to any of the talk groups I wanted to. That is far more flexible and better suits my personal needs. In fact, the hotspot was uniquely suited to what I wanted to do on this 1000 mile journey.

Overall, bringing the mobile rig was a great success for me. I did get a bit of 2 meter traffic as well, but DMR proved to be my bread and butter comms for the trip. Tethering from the iPhone worked flawlessly.

Still, it's good to be back at the QTH with my wife and basset hounds after a long week. My first business trip in roughly 15 months was made a little less lonely by bringing along my DMR rig, for sure.

SIDEBAR:

Here are instructions on how to set up a similar configuration in your car. I tried to keep the instructions general and not merely specific to my Pi-Star hotspot.

1) Set up your iPhone or Android device to share "hotspot" service over Wi-Fi:

Settings —> Personal Hotspot —> Allow Others to Join.

Enter a non-trivial Wi-Fi password as well.

2) Set up your hotspot to connect to your phone's Wi-Fi hotspot.

Do this just as you would connect to any Wi-Fi network. Scan the available networks and select your iPhone.

(The name of your iPhone's Wi-Fi network is the name of your iPhone, as set in Settings —> General —> About —> Name)

On Pi-Star hotspots, you can configure multiple Wi-Fi networks and in what priority order you want to connect to them. It's

likely you'll want to run your home Wi-Fi as the #1 network and your iPhone's Wi-Fi as #2. That way, if your hotspot can't find your

home Wi-Fi, it will search for your phone's Wi-Fi.

3) Once all that is set up, it's far easier each time you start the car. Get the car going, put your iPhone into hotspot "mode" by navigating to the Hotspot menu, and let the hotspot boot up.

If all goes as planned, your hotspot will automatically find your iPhone and you're good to go. There will be a blue icon in the top left of your iPhone indicating a device is sharing its hotspot service.

Assuming your hotspot is otherwise configured, that's all you need to do. At this point, your DMR handheld should be able to connect to your DMR service just as it did at home.

73 K0RvW Ken

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. 2020 was 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.

Just announced last month, Ole VA Hams will be holding a tailgatefest in lieu of their hamfest. The date is June 12 from 8 AM to 2 PM in the lot across from Signal Hill Park in Manassas Park. Here is the link: <https://w4ovh.net/wp-content/uploads/2021/03/ovh-tail-gate-2021.pdf>

At the present time, Berryville is still on the calendar. But that could change depending on whether hamfest-sized groups are permitted.

Whether it's Berryville 2021 or Richmond 2022, once we are able safely to attend hamfests, let's be sure to all go to the first area hamfest.

Training –

We just started virtual classes for both Technician and General. I have to give a big shoutout to KW4UJ and N8IK for taking the bull by the horns, so to speak, and getting the class moving. We have 5 in the Tech class and 7 in the General class.

The exam is scheduled for May 25. The new COVID restrictions allow for indoor groups up to 50, so we may be able to do the exam indoors. I am looking at a couple of ways to make it happen. We also will have use of a large parking lot (with trees) if we decide a drive-in exam is the way to go.

We are still working on getting our VE team up to speed so we can do remote exams. Looking at www.Hamstudy.org, there appears to be a lot of interest in becoming licensed by the number of exam sessions that are full. It appears that VE teams are giving all the exams they can handle.

If you are looking to take an exam, ARRL has a link for finding online exams:
<http://www.arrl.org/findonlineexam>

Contests –

- April 3 and 4 – Mississippi QSO Party – Exchange is RST and state
- April 3 and 4 – Louisiana QSO Party - Exchange is RST and state.
- April 3 and 4 – North American SSB Sprint – Exchange is other station's call, your call., serial number, your name and your state.
- April 3 and 4 – Florida State Parks on the Air – Exchange is state.

YOU ARE HERE

- April 10 and 11 – Nebraska QSO Party – Exchange is state.
- April 10 and 11 – New Mexico QSO Party – Exchange is nme and state.
- April 10 and 11 – Georgia QSO Party – Exchange is RST and state.
- April 10 and 11 – North Dakota QSO Party – Exchange is RST and state.
- April 17 and 18 – Michigan QSO Party – Exchange is serial number and state.
- April 17 and 18 – Texas State Parks on the Air – Exchange is RST and state.
- April 17 and 18 – Ontario QSO Party – Exchange is RST and state.
- April 18 – ARRL Rookie Roundup SSB - Exchange is name, 2 digit year 1st licensed and state.
- April 24 and 25 – Florida QSO Party – Exchange is RST and state.
- May 1 and 2 – 7th Call Area QSO Party. Exchange is RST and state.
- May 1 and 2 – Indiana QSO Party. Exchange is RST and state.
- May 1 and 2 – Delaware QSO Party. Exchange is RST and state.
- May 1 and 2 – New England QSO Party. Exchange is RST and state.
- May 8 and 9 – Arkansas QSO Party. Exchange is RST and state.

If you participated in the Virginia QSO Party and have not submitted your log(s), please do so soon. Be sure to indicate your affiliation with the Alexandria Radio Club. We have done well the last few years. Here is the link to submit your logs:

<https://www.employees.org/~mschulma/SPARC/VQP>

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>.

Every Tuesday at 0000 (8 PM EDT Monday for us) is the Worldwide Sideband Activity Contest. Exchange is RS and age group (OM, YL, Youth YL or Youth). Here are the rules: <https://wwsac.com/rules.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 and State QSOParty.com.

Repeaters –

The club repeaters are all up and running. The DSTAR repeaters are seeing a lot of activity. We have been linking the 70 cm repeater to Reflector 001C, the world-wide reflector and the 23 cm repeater to Reflector 030C, another busy reflector. If you want to link to another reflector, be sure to unlink the repeater first and then link to the reflector of your choice. All we ask is you return it to reflector you found it on.

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 some of the new DMR repeaters. 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.

Ian, N8IK, has started a Wednesday night DSTAR net on the 145.380 MHz repeater at 8 PM. We have linked the repeater to Reflector 62B so members and former members outside the local area can join in. Some time ago, I asked the folks who maintain the

lists of DSTAR reflectors to create a Virginia perma-link reflector. Many other states have them. Be sure to put Reflector 62B in your DSTAR programming.

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

73, Rich, KA4GFY