



1954-2024 — 70th Anniversary



ARC-SHORTS

The Newsletter of the Alexandria Radio Club

August 2024

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At our July meeting, Eric Parker, KG4DZA (r.), the Radio Manager of the City of Alexandria Public Safety Radio System, gave a detailed talk about the system. (Shown with Sean, K4KBK, club President.)

President's Corner

Sean (K4KBK)

Greetings! I trust everyone is keeping well and completing all of those summer projects despite the heat. We had a great presentation last month from **Eric Parker**, KG4DZA, on the Alexandria Public Safety Radio System showing how it is configured to support the City of Alexandria and how it interfaces with the

surrounding jurisdiction's radio systems. The presentation was well received by the club audience.

While our **Net participation** remains active and constant week over week, we seem to be running with the same 4 Net controllers each month. Let's do the math. We have 2 nets per week and in general that means 8 nets per month. To support that, we'd like to see about a dozen members who are comfortable behind a mic. The Net Control Chair, **Bryan Pettigrew**, WD4ADF, can provide training and outfit you with helpful hints on how to carry out a successful net. It's not that hard to do and if I as "Mr. 5 Thumbs" can do it, certainly other members of the club can do it too. Need help establishing your equipment to run the net? We can help. Just let Bryan or I know what it will take to get you into a position to run the Net. It's a little bit of work and a whole lot of fun!

We are continuing to make **small improvements** in your club. Last month the members approved funds to establish a consolidated storage facility for all the gear we use to support our annual activities such as Field Day, the city parades, and the special public safety awareness events as well as club administrative data such as old rosters and financial records. The goal is to secure a storage facility as small as needed to suit our purposes and to lease it on an annual basis to control the inevitable escalation factor. We anticipate housing our working HF systems there for use by newly licensed hams who would like to get on the air in authorized HF band space but who don't yet have the equipment to do so.

In looking at our event calendar for the last quarter of 2024, I see an opportunity for some fun and some recognition. This is our **70th year of operation as the Alexandria Radio Club** and we should organize something memorable to recognize that fact. Having said that, I'm looking for ideas on what folks would like to do. A dinner cruise on the Potomac, a group event at a game at Nationals Park, a day event at a local area park or other ideas! Let me or our PR Chair Jan Maas, KB2LRX, hear from you and let's see if we can build a plan for a 70th Anniversary recognition event this year.

Ok, I've taken enough of your time for this month. Please give us some feedback on the Net Control and 70th Anniversary topics above so we'll know what actions we need to take to carry them out. Thanks for all that you do and all of your contributions to the furtherance of Amateur Radio.

73 to All, Sean, K4KBK - comms@gallagher.us.com

Member News

ARC at National Night Out

Alexandria Radio Club (ARC) members Gary Sessums-KC5QCN, Sandy Kenyon-KQ4DNE, Bob Crumley-KO4ZIK, and Don Lewis-KI4D, participated in the annual "National Night Out" event which seeks to promote safe neighborhoods and strengthen relationships between public safety officials and the local community.



The event was held on Tuesday August 6, 2024 from 5:00 pm - 8:00 pm in the Del Ray neighborhood of Alexandria, Virginia.

The team setup a battery powered portable amateur radio station and antennas, distributed club flyers, answered questions from the community, and enjoyed free ice cream while demonstrating voice and digital modes of amateur radio, including the use of Winlink email over ham radio.

Order Your Club Cap

Louie Mingo, KO4QVB, will accept orders for club caps up to August 8. If you're interested, write to him at e4bflyboy@verizon.net. He will accept payment at our next meeting, Friday, August 9.



Check Out Sandy's New Website

The screenshot shows a web browser displaying the 'FFX ARES' dashboard. The dashboard is a grid of various weather and solar-related panels. At the top, it shows the date 'Sunday, August 4 - 03:48:26 PM EDT' and the time '2024-08-04 19:48:26 UTC'. The panels include:

- RADAR**: A map of the United States showing radar returns.
- SATELLITE**: A satellite image of the Earth.
- LIGHTNING**: A map of the United States showing lightning strikes.
- Aurora Forecast**: A map showing the predicted path of the aurora borealis.
- THE NEXT 3 DAYS...**: A weather forecast for the next three days (Today, Monday, Tuesday).
- Forecast & Activity**: A map of the United States showing forecasted weather and activity.
- Sunlit Map w/ MUF Data**: A map showing the sunlit portion of the Earth and MUF data.
- Tropical Outlook**: A map showing tropical weather systems and disturbances.
- Convective Outlook**: A map showing convective weather systems.
- Radio Propagation**: A map showing radio wave propagation paths.
- Solar-Terrestrial Data**: A table of solar and terrestrial data including SFI, SN, Aur, X-Ray, etc.

Sandy Kenyon, KQ4DNE, has designed a website with two dashboards—one for weather and one for amateur radio. It includes Earth and solar weather, propagation, POTA, plus lots more. Check it out at kq4dne.com.

ARC Field Day 2024 Stats

Ian Keith, N8IK, reports on the club's Field Day statistics:

A good time was had by all at the 2024 FD on June 22-23. We had 508 QSOs of which 464 were unique. By band:

15m 64
 20m 114
 40m 114
 80m 212
 Sat 4

By mode:

CW 95 (all on 40m/80m)

FT4/FT8 229

SSB 180 (none on 75m, N8IK is not a phone guy) – **73, Ian N8IK**

Volunteer for Marine Corps Marathon

The Marine Corps Marathon (“The People’s Marathon”) will run on October 27 this year. As usual, members of the Alexandria Radio Club are invited—encouraged—to sign up for communications roles. Planning is well under way, and, as in previous years you must register at two sites:

<https://www.marinemarathon.com/volunteer/> and
<https://hamvolunteers.com/>

ARES

Joe Kalfa (KD2HZG)

We have postponed the planned ARES training drill due to low responses. I would like at least 5 club members/ARES members to respond to run any given drill. While we are tabling that idea for now, I have been in contact with the Mount Vernon club about their ARES involvement and will be attending their meeting this coming Thursday to give them a brief overview the direction we are hoping to head in.



During the last ARES weekend meetup, we had a 3 hams including myself, with three different radio setups, who were all operating off battery power on digital modes. I was asked by one of the operators to come up with a brief overview of the various capabilities on digital modes for ARES purposes. I know we have some hams in the club who are running various forms of digital HF. I was hoping to tap into that resource pool and have you advocate for which modes you think are relevant for ARES use. I’d like to at least cover Winlink P2P, JS8Call, VarAC, and the Fldigi Suite. If anyone has a background with these and would like to put together a few paragraphs explaining some of the functionality and how it pertains to ARES please reach out to me.

For the month of August, I am planning at least one ARES weekend at one of the Alexandria City parks and as of now I’m open to which weekend that is, so please drop your preferences in the ARES room on Discord or shoot me an email.

ARES Gear Highlight: Expedient Antenna Masts! With the current standing of MFJ ceasing production, Ham Radio Outlet has started looking into different options to replace a lot of their offerings. Last time I stopped by they showed me some new mast options they are getting in from a Chinese supplier. They don't have any details on their website yet, but they come in a range of sizes up to at least 30 feet and from what they told me, the product is originally designed to be a yacht washing pole! This means they will likely have fairly high wind loads and weight capacities, but the model I was shown did not have any guying collars attached. Here is a link of another offering (these are not the ones HRO has on hand from what I can tell)

<https://www.aliexpress.us/item/3256804922179086.html>

Joe, KD2HZG

Special Comment

Ken van Wyk (K0RVW)

Practical Hotspot Tips

(This ARC-SHORTS article is a follow-up to my previous one about hotspots, in the July 2024 ARC-SHORTS.)

Perhaps you already have a hotspot (or three) or you read my last piece and got one. Well, here are a few practical tips for you to consider that may enhance your experience.

► If your hotspot is built on a Raspberry Pi platform like the Pi-Star family, chances are it has one or two stubby antennas on it. For inside the house, those work just fine. If you want to extend your reach a couple blocks—say, for example, for while you're out walking the dog—you'll need a bit more oomph than that. It's antenna basics, 101, right?

Tips:

- **Get a better antenna.** If your hotspot uses UHF, get a really good 70cm antenna. Most of the Pi-based hotspots use SMA antenna mounts, so

check yours and get an antenna that will fit. Mounting it straight onto the Pi is a good start, but...

- **Mount it as high as you can.** If you really want to extend your footprint in the neighborhood, consider mounting the antenna higher. I run a 70cm dipole (vertically polarized) in my attic, and I can comfortably go about 1/2 mile with adequate coverage. Mount yours outdoors if you have that luxury. (Make sure the antenna is built for outdoor employments.)

Sadly, not all hotspots on the market have external replaceable antennas—I'm looking at you, OpenSpot—so you may be stuck with the provided antenna.

► On the topic of antennas, consider your LAN connection. You're probably using WiFi, right?

Tip:

- **Wired LAN.** Well, nothing sells wires like wireless! If your house LAN provides for it, connect your hotspot to a wired connection. You won't regret it. They tend to be faster, but they're also more reliable, and they won't be hogging your WiFi bandwidth. Even if your hotspot doesn't have an RJ-45 connection for ethernet, you can probably place a wired ethernet adapter into one of its USB ports. Get one that is supported by Pi and just reboot your Pi to get onto the wired LAN.

► If your hotspot is built on a Raspberry Pi, it most likely has a micro-SD card containing its operating system. Your hotspot is a miniature Linux PC, after all! It needs a bit of occasional TLC to keep things running smoothly.

Tips:

- **Backups.** It's really easy to make a backup of your Raspberry Pi-based hotspot. Shut it down, remove the micro-SD card, and use an SD card reader on your PC. There is software for Windows, Linux, and Mac for copying images from SD cards. (Most micro-SD cards include an SD card adapter.) You can copy it onto another micro-SD or store the image on a PC. (I run a file server, and all my hotspots are backed up onto that, at

least twice a year.) That way, if your micro-SD fails and you can't boot your hotspot, you can quickly be back up and operational. (Those SD cards are great for photos, but they're pushed to their limits to run PC operating systems 24/7.)

- **Updates.** Be sure to update your firmware/software from time to time. Pi-Star does this periodically and shouldn't require much intervention, but it's still worth logging into the Admin page from time to time and manually running an update. Ideally, combine this with your backup regimen and you'll be happy.
- **Lastly,** don't neglect the hardware. Most common Pi-Star systems are built on the venerable Raspberry Pi 0 board. It's small, slow, and inexpensive, but it does just fine for hotspot use. Perhaps you've built your own or bought one that's built on one of the newer and faster Pi boards. My ClearNode runs on a Pi 4, for example.

► Take a close look inside. See how hot the CPU runs. Especially if you spend a lot of time on DMR/D-STAR, you might find your Pi runs pretty warm.

Tip:

- **Heat sinks.** They're cheap and readily available where Raspberry Pi hardware is sold. They usually come with thermal tape, too. Just stick heat sink(s) onto the biggest chip(s) on your Pi's board. I did this recently on a FlightAware Pi (not a hotspot) and the CPU speed clocked in 10C cooler with the sink in place. That can't hurt your device's reliability and longevity. Your hotspot may or may not already have heat sinks on the chips. Take a look and see.

With these tips in place, you're on your way to exploring the DMR/D-STAR (or other) worlds, as only hotspots allow. Go out and have fun, with confidence that your hotspot will be ready for you at all times.

Ken, K0RVW

Activities and Events

Contests:

- August 10, Maryland-DC QSO Party. <http://www.w3vpr.org>
 - August 17-18, North American QSO Party. <https://ncjweb.com/NAQP-Rules.pdf>
 - August 24-25, ARRL EME Contest. <https://www.arrl.org/eme-contest>
 - August 24-26, Hawaii QSO Party. <https://www.hawaiiqsoparty.org>
 - August 24-25, Kansas QSO Party. <https://www.ksqsoparty.org>
 - August 24-25, Ohio QSO Party. <https://www.ohqp.org>
- (Selected from ARRL Contest Calendar www.arrl.org/contest-calendar)

Alexandria Radio Club Date Book

Coming Events

Friday, September 20, 1-4 pm: Alexandria Preparedness Fair, Market Square

October 27: Marine Corps Marathon

Next Meeting

Will be held at 7 p.m., Friday, August 9, at the Alexandria Police Department Emergency Operations Center Community Room, 3600 Wheeler Avenue.

Last Meeting

Date: July 12, 2024

Time: 1900 hours

Location: Alexandria Police Department Emergency Operations Center Community Room, 3600 Wheeler Avenue.

Highlights: — Jack York, KE7VOU, Secretary

1. 20 members were present at the meeting location of the Alexandria City Police Department at 3600 Wheeler Avenue and 6 members participated in the online Zoom meeting.
2. A presentation was made by City Radio Manager of the City of Alexandria Public Safety Radio System.
3. The membership approved an expenditure of \$1,000 to acquire rented storage space for club property.
4. The treasurer reported a total balance of \$12,740.79 in club accounts with a total of 133 paid members. While collected field day food receipts totaled \$280.00, field day expense data is still being collected and expense estimate will be reported at a later date.
5. Total Field Day points are estimated to be 1,684.
6. Club member, Louie Mingo, KO4QVB, is preparing a special order for club hats with club logo on the front and call sign on the back. Payment for the hats will need to be submitted at the time of ordering. Price and ordering details will be forthcoming in a future email. Club shirts (button down, short sleeve) were also discussed and Louie will get with club VP Bob Crumley to identify a vendor for the shirts.

Attendance (26)

Name	Call Sign	Name	Call Sign	Name	Call Sign
Sean	K4KBK	Richard	KW4UJ	Scott H	W6GOU
Bob	KO4ZIK	Eric	K64DZA	Sandy	KQ4DNE
Erik	KI4BXU	James	W4TUE	Howie	WA9HS
Ted	W9TCE	Jack	KE7VOU	Charles	KC3TCZ
Louis	KO4QVB	Andrew	KI4THF	Robert	KM4SXF
Wilson	KM4KLK	Joe P	KT3I	Joe K	KD2HZG
Jan	KB2LRX	John	KE4JEM	Don	KI4D
Bryan	WD4ADF	Patrick	KF4MTV	Scott	KM4RDR
Claire	KQ4SCJ	Jeff	KQ4CMA		

PLEASE USE OUR REPEATERS

Club Repeaters: 147.315+ (PL 107.2), 444.6+ (PL107.2), 224.82- (PL107.2), 53.130- (PL107.2) 927.600 (-25Mhz, PL107.2), and 1282.600- (PL 107.2), DSTAR 145.380Mhz, 442.060+, and 1284.600-; DMR IS UP AND RUNNING 442.4125 +5Mhz Color Code 1.

Alexandria Radio Club mailing list

Home: <http://mailman.qth.net/mailman/listinfo/alexandriaradioclub>

Help: <http://mailman.qth.net/mmfaq.htm>

Post: mailto: AlexandriaRadioClub@[mailman.qth.net](mailto:AlexandriaRadioClub@mailman.qth.net)

This list hosted by: <http://www.qsl.net>. Please help support this email list:

<http://www.qsl.net/donate.html>

Club Leadership

Elected Officers for 2024 * †

Sean Gallagher, K4KBK—President

Bob Crumley, KO4ZIK

—Vice President

Jack York, KE7VOU—Secretary ††

Erik Misavage, KI4BXU—Treasurer

Elected Board of Directors, At Large* †

Sandy Kenyon, KQ4DNE

Joseph A. Porcelli, KT3I

Paul Cataldo, KQ4LJS

* Voting members of the leadership group are the elected officers and elected directors.

† Don Lewis, KI4D, was elected President in November, 2023, but resigned for health reasons on Jan. 12, 2024, at which time Sean Gallagher assumed the Presidency. The office of Vice President and a Director's position were filled by a special election at the February 9, 2024 meeting. †† Carol Myers, KN4LLL, resigned as Secretary in May, 2024. Jack York, KE7VOU, was elected at the June 14 meeting.

Committee Chairmen

Jan Maas, KB2LRX—Public Information Officer (PIO)

Gary Sessums, KC5QCN—Club Metro Area Liaison

Club Leadership Group members may be contacted using the following email addresses:

<mailto:president@w4hfh.org> president@w4hfh.org

<mailto:vice-president@w4hfh.org> vice-president@w4hfh.org

<mailto:treasurer@w4hfh.org> treasurer@w4hfh.org

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ARC-SHORTS compiled by Jan A. Maas (KB2LRX) – ARC Public Information Officer