

ARC-SHORTS

April 2022

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 8th at 7PM. A ZOOM meeting invite will be sent out soon. The program will be Bob, AK6R of Palomar Engineering. More details will be sent with the Zoom invitation.

End Fed Antenna Secrets for portable, emergency and stealth installations

By

Bob Brehm, AK6R

Learn how to select, choose and setup an end fed antenna system that works on multiple bands, is stealthy and radiates well at low heights. Find out the secrets of antenna matching, reducing RFI and minimizing noise present on many end fed antennas. Example installations and antenna dimensions will be shown for 160-6 meter operations.



Bob Brehm, AK6R is Chief Engineer of Palomar Engineers (Palomar-Engineers.com), and has been a ham for over 50 years with experience in contesting, RTTY, amplitude modulation, vintage radio restoration, boat anchors, linear amps and unique antennas. He is active on 3.870 AM and 3.895 Vintage SSB as well as other nets offering his expertise to new and old hams alike.

Bob is often asked to speak at conventions and radio club meetings about RFI, antenna matching, using baluns/ununs, stealth antennas, amplitude modulation, RTTY/digital modes, ESSB, ham radio on boats, and a variety of other subjects.

Alexandria Radio Club is inviting you to a scheduled monthly meeting via Zoom.

*This months MEETING PRESENTATION, End Feed Antenna Secrets for portable, emergency and stealth installations, Bob Brehm, AK6R

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Topic: Alexandria Radio Club Meeting

Time: Apr 8, 2022 07:00 PM Eastern Time (US and Canada)

Join Zoom Meeting

<https://us02web.zoom.us/j/89062352642?pwd=TGFhNnFGUU9pV254OWxRaUdHb3hZdz09>

Meeting ID: 890 6235 2642

Passcode: 405833

Last Meeting

Our last meeting was on Attic Loading Coil Antenna, John Portune (W6NBC). One of the main takeaways was that for loading coils to be efficient, they need to be large. He pointed out that many of the smaller loading coils were only 5% efficient. Something to think about for field day or attic antennas

ARES

Not much going on. I have tried to call the Hospital to get involved with their planning of the new hospital (3 years away) is not a long time for planning). Not much on AREDN, but AREDN will be the primary data methods for this years Marine Corps Marathon. I am also trying to work with building managers to see about putting AREDN nodes on buildings around Alexandria. The Trailer will be worked on in Late April or May before it gets too hot. If anyone has a scanner that dose trucking and P25 that they would want to donate to the trailer, let us know.

We are ALWAYS looking for more ARES volunteers. ARES volunteers come in three levels of expertise. Level one only requires a technician class license. Later you would need to take IS 100 so that you can support shelters, EOCs etc. Only equipment needed to start is either a mobile or portable (HT) 2 meter radio. As you grow in capability you can also train up to Level II and then Level III. If you would like to volunteer, you can send me an FSD-98 and I will add you to the list. We ask that you ONLY volunteer for ONE ARES group. If we were to have a widespread event, having your name on more then one list means that you can only support one organization.

MARINE CORPS MARATHON

Looks like the MCM will be on this year as COVID becomes less of a risk. This is THE BIGGEST public service event of the year for Amateur Radio. It is also the most public. You may not see amateur radio on the news but those who run the race and those federal, state and local agencies that support the race DO SEE US. They need about 135 volunteers, and you can volunteer for positions on the racecourse and all you need is a 2 meter HT or mobile. This includes mile markers, water stops, food stops. If you want to shadow someone, there are zone commanders, medical personnel etc. If you have digital gear and D-Star voice, there are 10 Aid Stations where we need to pass medical patient traffic.

DATE: October 30th.

How to volunteer: Go first to WWW.MarineMarathon.com
Go to the HAM RADIO signup and enter the information.

NEXT: go to the MCMHAMS website and fill in more details. If you have a particular spot you want to work, limitations on what you can do, need to leave the course before the end of the race. This is the site that you get to enter that information. This is also where they ask you about your vehicle, equipment, and experience. The leadership committee will make assignments about three weeks prior to the MCM and let you know. Due to security concerns, you will need to check in on Race Day prior to 5AM (this may change) at a particular location. You will get your course pass, your ham radio credentials, a vest and lunch. As all the ham radio folks are volunteers, be patient. DO NOT ASK THEM TO PROGRAM YOUR RADIO. The frequency plan will be sent with your assignment. Should you volunteer, and if for any reason you cannot make it on race day, PLEASE call the point of contact and advise them. NO SHOWS reflect BADLY on our hobby, our club and make it difficult to cover critical assignments.

Call Rick, N4ASX, if you have any questions on the MCM.

ANNUAL ARMED FORCES DAY CROSSBAND TEST (14 May 2022)

The Army Military Auxiliary Radio System will host this year's Armed Forces Day (AFD) Crossband Test on May 14, 2022. This annual event is open to all licensed amateur radio operators and will not impact any public or private communications.

For more than 50 years, military and amateur stations have taken part in this event, which is an interoperability exercise between hobbyist and government radio stations.

The AFD Crossband Test is a unique opportunity to test two-way communications between military communicators and radio stations in the Amateur Radio Service (ARS), as authorized in 47 CFR 97.111. These tests provide opportunities and challenges for radio operators to demonstrate individual technical skills in a tightly controlled exercise scenario that does not impact any public or private communications. Military stations will transmit on selected military frequencies and will announce the specific ARS frequencies monitored.

All times are ZULU (Z), and all frequencies are Upper Side Band (USB) unless otherwise noted. The frequencies used for the test will not impact any public or private communications and will not stray outside the confines of the exercise

For more information send a request to Gary KC5QCN.

FIELD DAY

Field Day is one of our biggest yearly events. With a club of almost 100 members, we should have a well-attended Field Day. Field Day is 10 AM JUNE 25th at Armistead Booth Park off Picket Street in Alexandria and ends at 3-4PM on JUNE 26th.

Ian, N8IK has already reserved the park for us, Chief Whatley has arranged for us to have the park overnight and at no cost.

What is needed are Teams of operators to run 5 HF stations and a VHF station. Because only two or three can operate at any given time, we will need to set up schedules, but these schedules do not say you only show up for your radio time. We need people to set up at 10AM to 2PM on Saturday to include Antennas, Generators, tents, etc. 2PM is start time. Each station will cover a band and should be capable of SSB, Digital and CW. Logging will be by using the N3FJP Field Day logging program and a flash drive. Each station will need a logging computer.

There are also BONUS points for many things. We get 100 points for being in a public place, for having a public relations table, for having youth engagement, battery power/solar power, ARES message to the SEC and copying the ARRL message. And a few more.

Digital and CW count as 2 points while voice is 1 point. If all our stations are below 150 watts our score is doubled.

We have some club radios, we have 2 2KW generators available. We need a food chairman band leaders and others to help plan the event. MOST OF ALL we need members to come out and operate.

We will set up planning meetings shortly.

ELMER'S INPUTS

Our last program talked about attic antennas, and we have many new amateurs who do not have outdoor space or have HOA restrictions.

Let's assume you just earned your General class license. CONGRATULATIONS the WORLD is now open you!

First, Find an HF radio – Like most of us starting out, you don't have thousands of dollars to spend on an HF radio, but because there are older amateurs who want to buy those expensive new radios, there are lots of EXCELLENT HF radios that can be had for less than \$500. Many very find radios were made in the early to mid-1980s that I have been an amateur for 50 years and my primary HF radio is a Ten-Tec OMNI VI+ These can be had with the power supply for less than \$500 in good shape and they are excellent radios with lots of features. Many of the older Kenwoods (TS-430A, 440S, 450s) can be had for under \$500 and have good receivers and

are all solid state and work very well. The club has a TS-450 that should be out at Field Day and I ran a TS-430 for 15 years and had great success with it on contests, and DXing.

Second – Even the BEST radio is worthless if your antenna is a DUMMY LOAD. For HOA considerations and if you plan to stay at 100 watts or so then you can use a variety of wire antennas that can be put up in trees and unless it interferes with something, you may know it's there but your neighbors will walk right by. Long wire antennas, adapted mobile HF antennas. Simple dipoles, and loaded attic antennas can be made to blend in with the environment. Lots of great books on this issue. If you're not running over 100 watts or so, then you can use RG-8x coax which is easy to conceal. An antenna tuner or matching unit will allow you to use that one antenna on several bands.

Another point with antennas. While a 75 meter antenna is 128 feet from end to end. You can put up a shorter dipole say 10 meters which is 16 feet from end to end. Or you can hang it vertically in a tree.

Third, power supplies. Most 100 watt class radios need a power supply that's rated for 20 amps at 13.8 volts. But you can use a car battery and a small battery charger. Watch out for used power supplies and make sure they work before you pick one up at a hamfest. ASTRONs are the standard and they will repair failed units.

In becoming a General Class operator, what ever club you belong to becomes more valuable. Elmer's can help with all aspects of getting you on the air.

73 Rick
N4ASX

ACTIVITIES – by Rich KA4GFY

Hamfests –

The spread of COVID-19 (AKA Corona Virus) put a major damper on hamfests for 2020 and much of 2021. However, with people getting vaccinated, there are more hamfests showing up on the calendar. Let's hope this continues.

The Raleigh Amateur Radio Society's RARSFest on April 16 in the Jim Graham Building at the North Carolina State Fairgrounds in Raleigh. Talk-in on 146.640 (no PL). Here's the link: <https://www.rarsfest.org/>

The following week is the Delmarva Amateur Radio and Electronics Expo on April 23 at the Cheer Community Center in Georgetown, DE. Talk-in on 147.000 repeater (PL 156.7 Hz). Here is the link: <http://www.radioelectronicsexpo.com/>

The Maryland Mobileers Hamfest will be held on April 24, 2022 at the Odenton Fire Hall in Odenton, MD. Talk-in is on the 146.805 repeater (PL 107.2 Hz). Here is the link: <https://sites.google.com/view/marylandmobileers/hamfest?authuser=0>

On April 30, 2022, the Antietam Radio Association's Great Hagerstown Hamfest is at the Washington County Agricultural Center. Talk-in on 147.090 repeater (PL 100.0 Hz). Here is the link: <https://w3cwc.org/hamfest/>

Closer in, the Olde Virginia Hams hamfest returns to the Manassas Park Community Center on June 4. Talk-in on 146.970 repeater (PL 100.0 Hz). Here is the link: <https://w4ovh.net/tailgate/welcome-to-manassas-hamfest/>

Speaking of Hamvention, I have 4 rooms reserved from May 18 through May 22. We travel out on Wednesday so we can take in one of the museums in the area on Thursday, such as the US Air Force Museum, the Packard Museum, or the Mound Museum. At least 2 rooms are spoken for. If you have never been, it's worth the trip to go at least once. I suspect the crowd will be large this year because Hamvention was cancelled in 2020 and 2021. I will be ordering tickets week of April 11, so let me know ASAP.

Training –

Our latest licensing class began on Tuesday, March 1 with 21 students signed up between the technician and General classes. Like the previous classes, they are online via Zoom. The exam at 7 PM on May 3, 2022 at the Alexandria Police Department HQs building, 3600 Wheeler Avenue. We will also look at doing an online exam for the class members not in the area.

Contests -

- April 9 and 10 – Nebraska QSO Party. Exchange is state.
- April 9 and 10 – New Mexico QSO Party. Exchange is name and state.
- April 9 and 10 – Texas State Parks on the Ir. Exchange is RST and state.
- April 9 and 10 – Georgia QSO Party. Exchange is RST and state.
- April 9 and 10 – North Dakota QSO Party. Exchange is RST and state.
- April 10 – ARRL Rookie Roundup – SSB. Exchange is name, year first licensed and state.
- April 16 and 17 – Michigan QSO Party. Exchange is RST and state.
- April 16 and 17 – Ontario QSO Party. Exchange is RST and state.
- April 17 – Quebec QSO Party. Exchange is RST and state.
- April 24 – North American SSB Sprint Contest. Exchange is other station's call, your call, serial number, your name and state.
- April 30 and May 1 – Florida QSO Party. Exchange is RST and state.
- May 7 and 8 – 7th Call Area QSO Party. Exchange is RST and state.

- May 7 and 8 – Indiana QSO Party. Exchange is RST and state.
- May 7 and 8 – Delaware QSO Party. Exchange is RST and state.
- May 7 and 8 – New England QSO Party. Exchange is RST and state.

Don't forget the Armed Forces Cross Band Test on May 14, 2022. This is an opportunity to work MARS stations throughout the country. WAR at the Pentagon, AIR at Andrews Air Force Base and NSS at the US Naval Academy are scheduled to be on. The MARS stations listen on amateur frequencies we listen for them on MARS frequencies just outside the ham bands. Many of the military ops are hams themselves, so they are pretty good about QSLing, and they have some really neat QSL cards.

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](http://StateQSOParty.com).