

# ARC-SHORTS

September, 2013

Club Repeaters: 147.315 (PL 107.2), 444.6 (PL107.2), 224.82 (PL107.2), 53.13 (PL107.2) Down for replacement, 927.6 (-25Mhz, PL107.2), and 1282.600 (PL 107.2), DSTAR 145.38Mhz, 442.060, and 1284.600

## **NEXT CLUB MEETING**

Our next meeting is **September 13th** at the Alexandria City's new Emergency Operations Center at 3600 Wheeler Ave. We will meet in the Community Room on the first floor. Parking is the public lot right in front of the building.

This month's program will be presented by Ed W4EDF who will provide a program on DIGITAL MODES.

DINNER before the meeting is usually an informal get together at Atlantis Restaurant. As we need to start the meeting at 7PM we usually start gathering at the restaurant about 5:30 plus / minus.

## **AUGUST MEETING MINUTES**

ARC Meeting, was held on August 9<sup>th</sup>. Our guest speaker was Bob Anderson, KJ4RBD, who explain the complexities of the Metro communications systems.

Looking at the complexity of two systems that span the metro area above and below ground makes for an interesting set of problems. Add to that the desire of the riders for increased commercial conductivity. Thanks Bob. Great show.

## **PRESIDENT'S CORNER – Tom KJ4FUU**

### **Future Programs**

Joel – RF Connections – Connectors without instructions. – When we can get him.

Working on DARPA Spectrum Management, ARRL, AMRAD - SDR radios, AMSAT – Eagle Sat, NERA – Wide area UHF repeater system, Cell Phone/Trunked Radio Systems, Field Day – Planning, RFI chasing, Metro Radio system. And any others you suggest.

## **MARINE CORPS MARATHON SIGNUP OPEN**

<http://www.ncacdc.com/>

**From:** Howard Cunningham <[wd5dbc@arrl.net](mailto:wd5dbc@arrl.net)>  
**Date:** July 7, 2013, 5:57:32 PM EDT  
**Subject:** 2013 Marine Corps Marathon volunteer registration is open

Hi All...

The 38th Marine Corp Marathon is this October 27, 2013 and we are looking for licensed hams to help provide communications support for the marathon.

<http://www.ncacdc.com/> describes who is needed and a link to the direct registration page within the MCM web site.

We are looking for 136 operators. We put hams at the aid stations, mile markers, half mile markers on the second half of the course, at food stops, at water points and the check in location. We have hams that shadow the division commanders, hams at the Arlington and DC fire/ems command vehicles, and net control ( off the course and accessible during the race).

New hams with HTs only can fit in to some of the positions or be assigned to a team with a fully equipped volunteer. Aid station hams MUST have far more complex portable higher power gear to handle 9600 baud packet and 128kbaud DD data (and know how to set up). Hams who have experience running traffic or emergency nets are sought for the NCS positions.

Our goal is to have everyone registered by mid August so we can assign volunteers to the different teams by 1 Sept. Main teams are the Race A and B, the shadows, and the aid stations.

Please consider this and sign up. Is a rewarding event and we hams are the eyes and ears on the course for the medics. A critical role. IN past years 3G cell phones have been jammed due to the crowds, so we hams provide the robust connections.

We would also appreciate it if you would forward this email to any other ham radio organization that you are a member of.

Please email me with any questions that you might have.

73  
WD5DBC

### **ELMER'S Corner – Mobile Antennas**

Many new hams start with a handheld because it's an all in one arrangement. All self contained, no need for a power supply, additional antenna / feedline or external microphone. But, soon after we all find out that the antenna on the radio is not good for any real range. The next step is usually a mobile whip of some kind put on a metal plate or file cabinet. This magnetic mount antenna also works for going mobile.

We've covered some homemade portable antennas, but let's look at mobile whips. In the past we worried about ONE band at a time, but many now have dual band radios (2m/70cm) and there are many mobile antennas that will do this.. One we overlook is the 2 meter quarter wave. A 19.25" whip. Because 70cm is the third harmonic of 2 meters, the simple quarter wave will work on 70cm. Nice thing about the quarter wave is that it is small enough so that it can be placed on the roof of your car and not cause in door parking problems.

If your working just one band or need more gain, look at the 5/8<sup>th</sup> wave antennas. This antenna flattens the pattern and give you an effective 3db gain so your 5 watt handheld sends out 10 watts Effective Radiated Power (ERP). Unfortunately, the 2 meter 5/8<sup>th</sup> wave will not work on 70cm, but it will work as a 1/4 wave on 6 meters. Some of these antennas can be found at hamfests cheaply.

There used to be many types of mounts that could be found either on mag mounts or as installable by drilling a hole in the vehicle. These days the most popular is the NMO or Motorola mount. Shop around for mag mounts they can be expensive. I purchased one with a BNC connector for \$32. The advantage is that you can use it in the home or on the vehicle.

I have also used the 3/8s thread mounts which are common to the HF whips and CB whips. At hamfests you can find the Hustler 5/8ths antennas (Buckbuster) fairly cheaply and Hustler use to make a family of collinear antennas that provided 7db of gain but it is a BIG antenna and it only works on 2 meters. I have one for 2 meters and one for 220MHz and they work well.

Comet and Diamond make dual band and other antennas that work well but any multi-band antenna will be a compromise.

73 Rick  
N4ASX

### **Hamfests –**

September 14 – Virginia Beach Hamfest, sponsored by Tidewater Radio Conventions. This is a great excuse to go to the beach for the weekend while the weather is still warm and most of the beachgoers have left for the summer. The hamfest is located at the Virginia Beach Convention Center, right off I-264 in VA Beach.

October 6 – Maryland State Convention, sponsored by the Columbia Amateur Radio Association. The hamfest is located at the Howard County Fairgrounds, right off I-70, near the intersection of Route 32 and Route 144. This hamfest is known for spotting some really hard to find items.

### **Training -**

Our next class is scheduled to start October 1. We are starting to get some interest in the class with some email traffic asking general questions and occasionally something specific about the class. There is still plenty of room. If you know someone who is not licensed, or you are not

licensed, and would like to be, send me an email at [ka4gfy@arrl.net](mailto:ka4gfy@arrl.net). As always, we don't make our students find an exam on their own. The last class on December 10 will be the exam. If you are a Tech, time to upgrade to General or Extra.

## **Contests**

September 14 & 15 – Arkansas QSO Party. Exchange is RST and state.

September 14 – Ohio State Parks on the Air. Not really a contest. Exchange is your state and park if you are operating from one.

September 14 through 16 – ARRL VHF Contest. 50 MHz and above. Exchange is your grid square. Most of us in the Alexandria Radio Club are in FM18.

September 15 – North American Sprint, Phone. Exchange is both calls, a serial number, name and state.

September 21 – South Carolina QSO Party. Exchange is RST and state.

September 21 – Washington State Salmon Run. Exchange is RST and state.

September 28 – Texas QSO Party. Exchange is RST and state.

September 29 – Maine QSO Party. Exchange is RST.

73,  
Rich, KA4GFY

## **ARES**

After one of our nets, I talked with a station that asked how ARES and in a larger context, how amateur radio interfaces with FEMA or Government offices.

SO, Lets start with the LOCAL operation. ARES is an organization set up by the ARRL. ARES supports Governments, Served Agencies and the Public when asked. The ARES structure starts with the Section Emergency Coordinator (SEC) who is appointed by the Section Manager. Neff, Ellsworth [K4LXG](mailto:K4LXG) is the current SEC. Working for him are District Emergency Coordinators (DECs). For Northern Virginia the DEC is Howard Cunningham WD5DBC, Howard's district includes: Arlington, Alexandria, Fairfax County, Loudoun, Prince William and Fauquier Counties. Each of these locations has an Emergency Coordinator. In Alexandria the EC is Rick Bunn, N4ASX.

Each EC is responsible for establishing liaison with served agencies. Alexandria ARES works closely with the City's EMS office as our SINGLE point of contact. This is part of the City's Emergency Management Plan. While we are willing to work with any other agency in the city, we want to have a SINGLE point to report to. This, in an emergency means that we are called up under the city's plan and not by 6 different people all expecting our support. This does not mean we would NOT support other agencies, but we would coordinate with City EMS. Should a disaster or emergency affect a larger area or if a location other than Alexandria has an emergency, drill or public service event we may be asked by the EC in that area to support or via the DEC. The DEC may decide to coordinate a larger response.

The Commonwealth of Virginia has a State Emergency Operations Center and they work with the SEC who may engage DEC's and EC's as needed.

Federal involvement is a little less solid, but in a major event, FEMA may take over operational control of a disaster recovery effort and at that point we would establish a liaison with the FEMA on site personnel.

In a day of high speed data, digital communications, what could we do with our radios? Well think of our systems as more or less free of major infrastructure requirements. Even if our repeaters go down we should all understand simplex operations, net set up and procedures and how we can implement HF for beyond line of sight communications.

Most of us have mobile and portable capability. Many of us have portable HF capability. Your knowledge of how each band operates gives you the ability to work with those capabilities to provide a needed near term capabilities. One example has been when we worked the races along the Occoquan reservoir and

### **Social Events**

Monday Night Half Price Burgers – There is a group that gets together at Shooter McGee's (Duke and Paxton Streets) on Monday evenings at 6:15 PM. A good burger and soft drink runs about \$9.00.