

# **ARC-SHORTS**

February 2016

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 1284.600 ALL AR UP AND RUNNING – HAM IT UP! Get on the air!

## **NEXT CLUB MEETING**

Our next meeting is February 12! Dr. Fong's Skype presentation at the January meeting is a hard act to follow. Don, KI4D did a great job in setting this one up and feedback has been overwhelming. BUT, Our friends who sponsor the VA QSO Party have made changes to make a great contest even more fun and we will be hearing from them at the February meeting.

Now that we are all back from the holidays, and new officer's are in place, I would expect we will discuss this year's events.

The next BIG event, that I need help with, is the WASHINGTON'S BIRTHDAY PARADE, If your free on February 15<sup>th</sup> from 9AM to 3PM I could use your help. Please send me an e-mail if you can volunteer. More on this later. At this time I have Rich and the club trailer at the start point of the parade and Jack and Ian at the reviewing stand. I could use at least two APRS handhelds to walk the parade from start to end and about 6 or so folks with handhelds to work with the marshals on safety and order of march.

## **President's Corner**

Hello, all! I'm Erik Misavage, KI4BXU, the club president for 2016. Just a quick reminder for all members that we have our program/business meeting this Friday the 12th at 7 PM at the Alexandria police headquarters building at 3600 Wheeler Avenue. Topics for that meeting include the upcoming Virginia QSO Party coming up in March and our participation in the Washington Birthday Parade in downtown Alexandria on Monday the 15th, weather permitting.

For those wanting to do some operating, the ARRL is sponsoring the upcoming International DX Contests. The Morse code contest is the week after the meeting (the 48 hour period starting Friday the 19th at 7 PM EST), and the sideband portion two weeks later starting on March 4th, also at 7 PM EST. The aforementioned Virginia QSO Party starts on Saturday the 19th at 10 AM EDT for 12 hours and resumes on Sunday the 20th for another 12 hours starting at 8 AM EDT. Good time of year to get some operating done. And if you don't have an HF station at your home location or in your vehicle, it's a good time to pay a visit to somebody who does have such a setup.

73 Erik Misavage, KI4BXU <ki4bxu@arrl.net>

## **DECEMBER MEETING MINUTES.**

For those who missed the January meeting, you missed an exceptional program! Dr. Ed Fong, had applied some real antenna science into the workup of the J-pole style of antenna. One of the point's Ed made was that nothing is for free. If your antenna resonates at each odd harmonic of the fundamental frequency, they a 146 MHz antenna should work well on 438 MHz, just off the 446 that would center up in the 70 cm band. He explained that on J-pole designs there is a cost and so "no free lunch". But he has figured out a way to apply trap theory to the design and give back the lost gain. He even presented a way to get the 220 Mhz band into the mix. As this band is not harmonically related, that was very interesting.

Don, KI4D did an outstanding job, with setting this up and following up with a group order.

I'm looking forward to trying out the antennas in a laziness driven application. I have VHF antennas up on the tower, but those connect to the radios in the shack, I have a hard time connecting to the repeaters with a handheld in the rest of the house, So, we will see if the improved performance over the rubber duck will be enough. The secondary application is to see if I can mount one of the PCV pipe covered antennas

73 Rick

N4ASX

## **George Washington's Birthday Parade**

HELP NEEDED!!!!!!!

This is a simple drill, but it support's one of the City's BIG events. I need about 10 volunteers with handhelds to help with the parade. Plan below

Time Line

9 AM – 10 AM – Meet at the Fire Training Center Parking lot at the Club Trailer (End of Franklin Street just east of US 1 and north of the beltway.) Also known as the back of the Nanny J. Lee Center. Parking down town is hard to find so we will need to carpool.

10 AM to 11 AM move to the parade start area and tag up with Parade management. The trailer will be set up to collect information to send to the reviewing stand.

11 AM to 1 PM work with Parade Marshals to organize the Divisions. – This is a short parade, so as soon as your division is FINALIZED please pass your changes to the Trailer. Please make your notes clear, We will need to make the CHANGES to the order of march based on your

notes. Try to get the latest and greatest, but we would like your CONSOLIDATED notes by 1230.

1 PM Parade step off

2:30 PM ABOUT the end. Off to late lunch.

We will have Ian, N8IK and Jack K5OTZ at the reviewing stand using either packet or D-Star to collect the changes and provide the new list to the reviewing stand.

Rick and Rich will be in the trailer. We will need TWO ARRS handhelds (I can loan out one) to walk the parade as start and end markers. And all others will work with the Parade Marshals.

Details on locations and the parade route at <http://www.washingtonbirthday.net/>

73 Rick

N4ASX

### ARES

I am working to get a meeting with the new City EMS manager to discuss the installation of the equipment they purchased last year for the Hospital and for the the City's EOC. This includes HF, HF digital, VHF/UHF D-Star and ARPS capability as well as 1.2GHz D-Star for data sharing. A great deal has changed in the ARES tool kits in the last 20 years. Use to be that a 2 meter HT and a few preset frequencies were all we needed and we provide continuity of communications at tactical levels. Now messages are in text form with picture. The idea being to make sure we have 100% understanding and accountability.

Given the greater need for security, I will also address the design of an ARES ID Card for all volunteers. We have some pictures of our volunteers on file, but we will find out what the City and the Hospital want on the badge to provide us access for emergencies and drills. Don, KI4D has been a great help in this area.

I recently sent out the ARES SIGN UP FORM. If you have not updated/filled it out and wish to volunteer please fill one out and add at the bottom any D-Star capability.

Speaking of D-Star – The city purchased 10 ID-51 PLUS handheld D-Star radios for use by CERT liaison ARES operators. (They want to be able to communicate with CERT but the radios being in the amateur bands cannot be handed out like a city radio. At first, we had not figured out how to handle and maintain inventory control of these radios, so figured we would program them and .... At the January meeting, Eric KG4DZA ‘issued’ me one of the 10 radios, with the idea of starting the process. I have an ID-91AD and it's a nice piece of gear, but 51 plus has a great deal of potential! As many of our members have the ID-51 Plus or an ID-51, We will “Assign” these ten radios to those who volunteer for ARES who will check into 50% of the

weekly nets. The sign out will need to be such that if the volunteer leaves the area or decides to become inactive we can reassign the radio and a yearly inventory can be taken to keep the city's books up to date.

What did I learn this month regarding the ID-51A PLUS?? First, I never have a radio without a backup battery, DC supply and speaker mic, So my issue radio cost a few more dollars in accessories. Programming the radio is a piece of cake, if you have the RT Systems software. I need to find out more about linking over the internet and the optional sending and receiving of text and pictures using an android phone. More to learn.

73 Rick

N4ASX

Alexandria, ARES EC

### **Icom 51A-Plus review**

If you don't feel like reading the whole thing, the 51A-Plus is a great little radio. The end.

For starters, it's built like a brick, IPX7 level of waterproof, meaning it's perfectly happy under 1 meter of water for 30 min. Making it great for worry free outdoor use during inclement weather.

Being dual band is nice, though I think I'd still love this radio if it were only 2m.

It has DSTAR! A mode that I think is a lot of fun. You can talk all over the world even when HF propagation is poor, and you tend to have real conversations during a DX QSO, something more substantial than "59, 73"

It's easy to use! Even those new to ham radio won't have a problem getting this little guy to work for them. It also has a large easy to read screen, as well as speech for those that are visually impaired.

Even the rubber duck is good. I can hit the Alexandria 2m FM and the DSTAR repeater from anywhere inside my house with the rubber duck.

If you're bored with the standard features most handhelds have, the 51A Plus also has a GPS built in and data transfer abilities. You can send pictures from your android device to another user. I haven't used that feature yet so I can't comment much on it.

I have one complaint. Icom boasts about its repeater directory, for both FM and DSTAR repeaters. In conjunction with the GPS, you can hit a button (several buttons actually) and nearby repeater information will pop up. I thought that was cool. If you're travelling, and unfamiliar with the repeaters in that area, they're already in your radio, no carrying around that paperback repeater directory, right? Wrong. The DSTAR list appears pretty complete, but I

think there is only 3 FM repeaters listed for the state of Virginia. I've been told that you can download a more complete list from [dstarusers.net](http://dstarusers.net) and upload them to your radio. I tried and failed, maybe someone who reads this has done it and can share their wisdom with the rest of the class.

Icom sells many accessories for this radio too (none of which I have), they have programming software for your computer, cloning cable, cases, car charger, a couple different hand mics, larger batteries, battery pack that takes AAs, and possibly other stuff that I'm not aware of.

If you're thinking about getting one of these, I say go for it.

73,

Monica, KC2IAY

### **Hamfests –**

We had a large turnout for this year's Richmond Frostfest. I counted 13 ARC members in attendance. Using the output of the club's 70 cm repeater worked well. For future events, we can keep that as a backup option for other hamfests and events.

The Vienna Wireless Society's Winterfest comes up March 20 at the Annandale campus of Northern Virginia Community College. We have table space reserved so club members can sell items that need a new home.

Its not too early to start thinking about the Dayton Hamvention. Its always the third full weekend in May, so that means May 20 through 22. Thursday is the travel day, so we have a full day at the Hamvention before the really big crowd arrives on Saturday.

I have 4 rooms at the Fairfield Inn Fairborn and 1 is already spoken for. There are several other hotels in the area, but they are filling up fast. Other club members may have a room or two available nearby. Gas may remain cheap for the foreseeable future, so plan on making the trip. The breakdown is usually \$60 to \$80 for gas, plan on \$350 for hotel, \$28 for the Hamvention ticket and bus fare, along with your meals and purchases.

I will need to know by the April club meeting so I can order tickets.

### **Training -**

Our last class was deemed a success by the number of newly licensed hams. We have been hearing a few on the air, but it would be great to hear more of our new hams become active. Don't be bashful about making that first contact. If you need a little coaching, reach out to any

of the club members and we will be happy to be your first contact or help you get equipment set up. Remember, we were all there once.

We are already starting to sign people up for our next class starting March 8 and running until May 10, 2016. If you know of somebody who has wanted to get into ham radio, now is their chance. Signing up for the class is easy through our website. The \$50 tuition covers the book, test fee and class materials.

### **Contests -**

February 13 – New Hampshire QSO Party. Exchange is RST and state.

February 20 and 21 – ARRL International DX Contest, CW. Exchange is signal report and state. DX stations will be sending signal report and power.

February 27 and 28 – South Carolina QSO Party. Exchange is signal report and state.

February 28 and 29 – North Carolina QSO Party. Exchange is your state.

March 5 and 6 – ARRL International DX Contest, SSB. Exchange is signal report and state. DX stations will be sending signal report and power.

March 12 and 13 – Oklahoma QSO Party. Exchange is signal report and state.

March 13 and 14 – Wisconsin QSO Party. Exchange is your state.

### **Club Repeaters -**

The Alexandria Radio Club owns more repeaters than other club in the area. We have repeaters on every ham radio band between 6 meters and 23 cm. Here is a great opportunity to try a new band. With the exception of the 23 cm repeater, all our analog repeaters are commercial grade equipment which should run for many years with minimal work.

We are one of the few radio clubs in the area with a 1.25 meter (better known as 220 MHz) repeater. It's a converted Motorola MICOR station. The MICOR was never designed to operate in that frequency range, but ham ingenuity figured out what components to change out and take a repeater originally designed for the 150 to 174 MHz range and re-purpose it to our 220 MHz band.

The 220 MHz band is a ham band in North America and a public service band in other parts of the world. That's why there is not a lot of new 220 MHz equipment advertised. One of the Japanese manufactures has been making 220 MHz mobiles and handhelds, while an American company has started advertising handhelds, mobiles and a repeater.

If you look at a spectrum chart, there is not a lot of activity on either side. Military aircraft use the spectrum above. There is not much activity below 222 MHz and the types of transmissions don't really cause much interference to us. As a result, 220 MHz is very quiet. No constant sources of noise like on 2 meters or 70 cm. Propagation is similar to 2 meters while the antennas are smaller.

Our repeater has very good coverage around Alexandria and surrounding area. The 220 MHz band is one of the best kept secrets in ham radio. Get on and find out why.

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

73,

Rich, KA4GFY

### **Club Repeaters - Future Programs**

**January – Dr Ed Fong via SKYPE on design and building of J-pole antennas  
Installation of NEW Officers – Post holiday social meeting**

**February – GW Birthday prep, VA QSO PARTY**

**March – Update on MESHNet**

**April – Gary Sessums – Katrina Response**

**May – Field Day planning part I and D-Star for beginners**

**June - D-Star Ops and programming**

July – VHF Contesting (tent.)

August – DX Contesting (tent.)

September - HF Portable Operations (tent.)

October – ARES ops and City interface

November - Club Elections

December – Club Party

Let me know what you want to hear about. HELP !!!! If you have an idea for a program, please let Rick know and he will try to find someone to provide the program.

### **Social Events**

Monday Night Burgers – There is a group that gets together at 6:15 PM on Mondays at a local burger joint. Mark up on the 147.315 repeater and join them for the fun.