

ARC-SHORTS

JUNE, 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 **JUNE 14th** 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. You may now park on the street!!!!

Our program this month will be provided by Erik, KG4DZA on updates to the City's communications systems and Jack, K5OTZ will provide an update on Field Day preparations.

MAY Program – Mr. Jack Hranicky K5OTZ – Field Day Chair

Field Day is a MAJOR event for the club. Jack volunteered to 'hurd cats' this year and presented an outline of how we will execute field day this year. Band Captains have been assigned and as of now we are going to run a 7A operation. This means 5 voice stations and two CW / digital stations. At this time we do not have a CW lead for Saturday, but anyone who wants to can set up a station for CW. We will check the rules to see if the VHF/UHF station is still a free station. We will NOT be running a Get on the Air station as it interferes with our other stations. The other item is that the GOTA station was designed to get NEWBIES to operate when clubs wanted their contesters on all the other stations. As we are not a contest club, NEWBIES are NEEDED to operate any of the club's 7 Stations.

No one stepped forward to be the food manager, so Jack has arranged for catering. It was brought up that there was no meal planned for Saturday lunch. Operations start at 2 PM but set up starts at 10AM. The club discuss the need to feed those who come to set up and Rick, N4ASX volunteered to cover that mean with sandwich materials. Nothing fancy, but....

The American Radio Relay League (ARRL)

It's that time of the year when the club needs to renew its affiliation with ARRL. Why do we do this? Why is it important?

1 – Field Day is an ARRL / ARES sponsored event.

2 – ARRL provides us with lobbying representation at a time when amateur radio and amateur radio spectrum is under attack.

3 – Our classes and our Volunteer Examine sessions are affiliated with ARRL. ARRL provides the test materials as well as the text books we use.

4 – As the Alexandria Radio Club is a forum for sharing information locally on amateur radio, the ARRL's QST and other publications provide a larger forum, Outgoing and incoming DX bureaus provide savings to those who exchange QSL cards.

5 – Awards that encourage proficiency in radio are sponsored by the ARRL.

6 – While commercial communications has replaced the old ham-gram, The ARRL still sponsors the traffic nets which not only pass traffic but allow us to train for the time when commercial communications may not be available in an area.

7 – ARRL sponsors the Amateur Radio Emergency Services (ARES) program which allows us to have a unified support network for disasters and public support that can either be local, state wide, regional or nationwide in response.

What do we need to do? The club needs to be 51% ARRL members. Please let the club president know if you are an ARRL member or not. (Positive or Negative replies requested.)

If you are not a member of the ARRL, give it serious thought. The magazine (QST) is a quality product and provides something for everyone, even if you just look at the ads.

Alexandria Radio Club Meeting Minutes – 10 May 2013

Meeting called to order by President Tom Kirby, KJ4FUU
There were 24 attendees. We now have 47 active members.

Net Controls for next five weeks:

16 May Rick, N4ASX

23 May Erik, KI4BXU

30 May Rick, KA4GFY

6 Jun Don, KI4D

13 Jun Ted, W9TCE

Jack, K5OTZ led off with a Field Day discussion. Field Day will be held Jun 22nd and 23d at Armistead Booth Park

Setup is Saturday Jun 22nd at 10 AM. We will have 4 hours to setup then begin operations
Takedown is Sunday at 2 PM

Salient points of Jack's brief:

We will be reporting as a 7A for this field day

Don't show up with a radio and expect to use it. Radios for use have already been planned

Band Captains must keep Jack informed of their activities and plans

Purpose is not to test equipment but to use equipment already tested
Another purpose is to practice using equipment we would use for emergency communications
In case of thunderstorms cease all Ops protect equipment and shelter
Unless you have an Extra class amateur present at the station you are using, you are limited frequency-wise and by mode to your current license privileges (Tech, General, etc)
We will be using Win-EQF logging software and the HamCall CD
No GOTA station planned for this year Instead we will use the 10 Meter station for newbies

A Motion was made and passed by those members present to increase the funding allocated for Field Day meals from \$250 to \$350. The motion passed.

Steve Wagner said there is now a Boy Scout patch for any scouts who qualify as radio amateurs.

Tom Kirby read the audit committee report of the club's finances. All finances were found to be in order by the audit committee.

Rich, KA4GFY stated that 13 students took exams following the last class and there were 12 new licenses. (Ten Techs and two Generals). It is too early to book the training facility for the fall training class. That will be done as soon as the facility schedule becomes available.

Trailer - Rich and Rick are planning to provide a cost estimate and recommend a solution to replace the batteries in the club's trailer which are now inop.

ARES Status - We had a good turnout for the Bull Run Run. Eric Parker will present a brief on the city's radios at a future meeting. We are trying to get an AMSAT program in the future and a Cell Phone presentation as well. The ARES web site is down and has been for quite some time. Rick will bring ARES forms to the next meeting. Background checks have been completed for those who have already signed up.

Repeaters - The 6 meter duplexer is not yet installed. Plans for installing were reviewed by Craig, K4GOR. An antenna spec sheet for the 6 meter antenna was circulated at the meeting. The 440 repeater is inop. All others are up. The Alex. Hospital antenna issue needs to be resolved.

Website - Roy, K4AXQ will post the new amateurs call signs to the website. Don has photos of the class which he will provide to Roy. Roy has added color graphics to depict Sun conditions to the site.

Members names, call signs and attendance records have been added to the site. Roy would like to add photos and bios of club officer in the future.

Field day media contacts were discussed. Rick will invite Mark Penn to attend. Other contacts are being planned.

Larry, KK4CBL presented survey results for the weekly network meeting. Eight responses were received. Equipment and time constraints were the most often cited causes for not participating. Rick said he would be on the 220 repeater (220.482 PL 107.2) Saturday at 8 AM for those who would like to join him.

ARRL reports are due once per year. Larry is to provide a list of ARC members that are also ARRL members to Tom for use in that report.

Events:

The 224.82 Repeater Net

We held our first Saturday morning 8AM 220 net with four check in's. The repeater sounded great. If you have 220 FM equipment, we will continue this with the exception of Field Day. Our format is a little different as we will have fewer check-ins. We go around until no one has any comments or items of interest. I would like to try out some changes on this net and if they work we may make improvements in the club's 2 meter net.

When the 6 meter repeater comes on-line, We will see about either adding a six meter net or working both nets one after the other.

73

Rick /N4ASX

President's Corner

Recently, I had to do the annual club update at the ARRL web site. We are an ARRL affiliated club, and they needed to know how many members we had, how many had licenses, and how many were ARRL members. Most of our members are, but if you are not a member, you might want to go to the web site and check out the benefits. The most obvious is the QST magazine, but there are others that you may find beneficial.

Field Day is approaching. If you can help, contact our coordinator, Jack K5OTZ. However, I know that there is one thing we DON'T need: people who bring their radios unannounced. The club has plenty of radios, but if you have one think we would be interested in seeing, contact one of the band captains. It may be usable as a spare if a primary radio goes on the blink, or the band captain may want the option of a different radio, but as a rule, we have enough radios, and only the set number of antennas. After the stations are set up and tested, the decision about what class we will be running in will be made by Jack (5A, 7A, etc). If you were to show up and set up your own radio and antenna, you would mess up our scoring. Jack is having to do a lot of hard work; please don't make him work any harder than he has to.

Finally, a little note: A 2-meter transceiver with a portable antenna in a modern building's gymnasium is not an optimum operating site. I went to an emergency preparation event, set up my P1 portable vertical antenna, and an Icom 2100 2-meter mobile running 50 watts, and I just barely made the W4HFH 2-meter repeater. Rick N4ASX and Rich KA4GFY were able to hear me simplex, but I think if I had to do it again, I would concentrate on the 23-cm repeater, since my little Alinco G7T was able to key it up using only 1 watt. 23-cm is great for environments like that, and I'm very glad that repeater guys got that one back on the air.

Maintaining our repeaters is hard work, and I wish to thank all of the members who do this work, especially Tim KT4MV, who has worked tirelessly to keep them on the air at a minimum cost to the club. Thanks for everything, Tim!

73,

-- Tom KJ4FUU

Future Programs

Working on 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.

ELMER'S Corner – Power Supplies

Last month I talked about cheap, homemade VHF/UHF antennas. I've already gone over the availability of used and inexpensive VHF equipment.

Now you find that your new handheld doesn't quite make it to the repeaters you want to operate on so you've tried an antenna from the list of DIY designs and still not good enough. You've also found out that needing to recharge your handheld batteries is a pain and holding your radio sometimes leads to hot radios and lots of weight.

The next step is to find a used mobile two meter radio and as we covered before, you get one with CTCSS / PL encode and between 10 and 50 watts output. Now comes the need for a power supply to make it work. You're happy that you only paid \$100 for the radio and \$15 in parts and coax for your antenna, but now you find you need a power supply for that new radio.

Now, How many amps do you need. If you're running your handheld at 5 watts then figure $P = IE$ with 5 watts out this would indicate that you need 5/12 amps, but you also need to remember that the output is only from the final amplifier of the radio and does not cover the other components. Best rule of thumb is to go for $5/12 * 2$ (assume that you will need twice what the finals use). So for your 5 watt handheld you need about 1.7 Amps. There are many 7 Amp and 10 Amp supplies available that will work. If you're running a 10 watt radio that would be about 3.5 Amps on transmit but again 7 or 10 are available. For a 50 watt radio most of us would go with

a 20 Amp supply. The 20 Amp supply will provide sufficient current for a 50 watt or more mobile and also sufficient current for most 100 watt class HF radios as long as you do not transmit on both at the same time.

If you go for a commercial power supply, there are two kinds. One is the basic power supply and the other is a switch mode power supply. The switch mode power supply converts the incoming AC into DC then converts it to AC at a high frequency. The higher the frequency the smaller the transformer. Switching supplies are more expensive but much smaller and lighter.

Several solutions come to mind.

1 – You can build your own. You will need a AC cord with plug, a transformer from 117AC to 24 -30 Volts AC, Diodes that can handle the current you need, a few electrolytic capacitors and maybe an inductor to filter the rectified AC. See the Amateur Radio Handbook or the web for detailed designs. Not a hard project, but,

2 – Look for a used power supply at a hamfest or from someone in the club. New commercial power supplies go from \$60 to \$200 for the kind of current you might need, so you should not pay more than \$70 for the basic 12 VDC supply.

3 – A cheap way to go is also to find a car battery (or marine deep cycle battery) or even a 35 Amp Hour sealed car battery can work and buy a cheap car battery charger. The battery provides the filtering and high current when needed and on receive. If you have a car battery you've recently replaced then all you pay for is the core charge. You will find that buying a new battery may set you back as much as a new power supply, but you will also get a back up source when the power goes out.

4 – Buying a new supply. Good names are Astron, MFJ, Radio Shack, Samlex, Jet Stream and Diawa. Most of them have good protection circuits and many now have Anderson power poles. These power supplies (20Amps go from as low as \$85 (MFJ).

If I had an old car battery, I would start with that, and then go to the hamfest looking for a used power supply. Take a volt meter with you and have your ELMER look at it if you have any questions. The Astron 20 Amp power supplies sell on the web for \$120 new. Some of the switching supplies can be had for the same price on Amazon or from ham radio stores, so offer less for a used unit. A new power supply is not a bad investment as it will also support other gear.

Connectors are a consideration. Most VHF/UHF radios now use a T-Connector but many of us use Anderson power poles. Rather than cut the T-connector, I usually leave the T-connector in place and put Anderson 20 Amp power poles on the cable. If the power supply has binding posts, make up a short piece of 10 gauge red/black cable with Andersons on one end and ring

connectors for the binding posts on the other. Just wrapping stranded wire on the binding posts will cause problems later.

Hope this helps. If you have a question, send it to N4ASX.

73 Rick

N4ASX

Training -

Here are the call signs assigned on Friday, May 10 for our test session earlier in the week:

| | |
|-------------------------------|--------|
| Rima Azzam | KC3AOQ |
| Joshua Salpeter | KC3AON |
| Hala Azzam | KC3AOP |
| Paul Davis | KK4RAW |
| Patrica Gabaldoni Inurritegul | KK4RAV |
| Dennis Albrecht | KK4RAX |
| Maxwell Albrecht | KK4RAZ |
| John Hucke | KK4RBB |
| David Cloft | KK4RBA |
| Thomas Cole | KC3AOR |
| Bjorn Jemudd | KC3AOO |

Congrats on a job well done!

Be sure to welcome them to ham radio when we hear them on the air. All of us are either learning or Elmers.

73,
Rich, KA4GFY

DAYTON After Action

Dayton 2013....

Hamfests -

Training -

Our Spring class concluded with 11 new licensees. Congratulations to all of them on a job well done. Be sure to listen for KC3AOQ, KC3AON, KC3AOP, KC3AOO, KK4RAW, KK4RAV, KK4RAX, KK4RAZ, KK4RAZ, KK4RBB and KK4RBA. A few have been heard on the Thursday night nets.

73,

Rich, KA4GFY

Hamfests -

June 9 – Manassas Hamfest, sponsored by the Old Virginia Hams of Manassas. Located at the Prince William County Fairgrounds on Rte 234, just outside of Manassas. This is a nice hamfest and very close by.

July 21 – Maryland Hamfest and Computerfest, sponsored by Baltimore Radio Television Society. Located at the Howard County Fairgrounds, just off I-70, MD Rte 32 and Rte 144 in West Friendship, MD. Easy drive from our area and always some odds and ends to be found.

August 4 – Berryville Hamfest, sponsored by the Shenandoah Valley Amateur Radio Club. Located at the Clark County Fairgrounds, just off Rte 7 in Berryville, VA. Great hamfest under the trees. Barbeque lunch served by the Ruritans Club.

73,

Rich, KA4GFY

ARES

Public Service events like the American Diabetes Association Tour de Cure, the Marine Corps Marathon, The GW Birthday Parade are major yearly events for our club, but of the 50 members maybe 3 to 10 operators volunteer to support these events.

As Amateur Radio Operators we all buy equipment and we all know that as a minority our hobby is always under attack. Home Owners Associations want to restrict our antennas, Commercial interests are interested in our spectrum and our hobby is no longer seen as leading the way with radio technology.

One way to keep our hobby secure is to create a good image in the public mind. In an age when 7 year olds have cell phones and kids are addicted to text messages and the internet is available anywhere anytime, the utility of ham radio is in question. Our support of public service events not only prepares us for disasters, but it also tells the public that it takes more than an iPhone to provide emergency communications.

When we use to meet at the Red Cross, I use to say that public service events paid the rent.

73 Rick
N4ASX

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.