



The Spectrum



Issue 11 06

November 2006

From the President

Hard to believe it's the start of a new club year! They say time flies when you are having fun and that must be the case for this club!

What a busy year the club has had. We had one of the best field days the club has had in a long time from what I have been told by members who have been to them for years. The new 146.82 is up and running and the 440.000 repeater will soon be operating at Butts Station with the same range as the new .82.

The 146.61 repeater will have the new controller installed and make it more user friendly. IRLP repeater linking will be up and running soon. Don't forget the new 6 meter repeater system is coming down the pike.

Make sure you pay attention to the radio and listen for the new call signs that will be on the air. Every one of the students at the recent tech class who attended the recent testing session passed and either got their ticket or an upgrade. Congratulations to everyone for a job well done.

If you have not already done so please submit your ham of the year nomination to Ricky Lee, KC4RIC. If we have more than one nomination we are going to hold a secret vote for ham of the year at the November general meeting. The winner will be presented the award at our holiday dinner in December at the Silver Diner.

We are in need of folks to help out with various functions in the club. Net control operators for Skywarn, for instance. Please come forward if you are able to lend a hand.

I want to thank the members who voted me in for another term as President. This club is really a home to me and I thank all of you who have made it feel that way. I want to see only good things happen for the club.

73's
Keith, KG4ZXX

Two antennas met on a roof, fell in love and got married. The ceremony wasn't much, but the reception was excellent.

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Links of Interest

[Virginia Beach Amateur Radio Club](#)

[Portsmouth Amateur Radio Club](#)

[Home - KG4ZXX.COM - IRLP and much more!](#)

[South Hampton Roads Skywarn Net](#)



Local Nets

SKYWARN NET Fridays 1900 hours.	146.820 MHz
CARS 2M Net Sundays 2030 Hours	146.820 MHz
CARS 10 Meter Net 2000 hours on Mondays CARS doesn't meet	28.400 MHz
Hampton Roads Public Service Net Mon-Sat 2100 hours	146.970 MHz
VBARC 10 Meter Net 2000 hours on Thursdays VBARC doesn't meet	28.400 MHz
Portsmouth "RagChew" Net Monday & Wednesday 1930 hours	146.850 MHz
Southeastern Virginia Traffic Net Sun, Tues, Thurs @ 2000 hours	146.850 MHz
Portsmouth Amateur Radio Emergency Services Net Fridays 2000 hours	146.850 MHz
Tidewater Radio Association WT4RA net Thursday 1930 hours (code drill follows net)	147.195 MHz

Upcoming Events

CARS General Meeting

Monday, Nov 6th, 7:00 PM
QRM Room

Public Service/ARES

Wednesday, Nov 15th ... 7:00 PM
QRM Room



Emergency Radio Part II

This article is but a brief overview of equipment issues for Amateur Radio Emergency Communications. As described in the previous article, emergency shelters in Chesapeake should have radio boxes. Each box has either a mono or dual band VHF/UHF radio. Common repeater frequencies have been programmed in. Radio manuals should be in the boxes to help with frequency changes and radio operations. When you check out the box, make sure a representative of the shelter manager initials the back of the large envelope on top of the equipment. If the shelter manager wants to keep the envelope until the radio is returned, that is fine. Otherwise, keep the envelope with the box. Please keep all packing material with the box. When shutting down a station, the radio should be repacked in the shipping box. Logbooks and any other written material should be put back in the box.

In the envelope are some instructions about logging. Each box should have a radio, power supply, power extension cord and coax. Set up the radio the best you can. Often the antenna drop is in a small room or even in a storage closet and there may be a lot of stuff to move. The boxes are big enough so that if you turn them on their side, you can set the radios inside such that you have a darkened enclosure with some shielding of noise. If columns have not been made in the logbook, you will need to set them up as described in the instruction sheet in the envelope. Log your name, call sign and time. When leaving the radio unattended, take the microphone with you, so that no one can make a transmission.

Not all boxes have SWR meters. If you don't have one, please listen first. If you can copy signals, try using low power first. With the new repeater heights, low power should be sufficient to be heard from any shelter using the installed antenna. Increase the power as needed.

All emergency shelters should have an antenna drop and emergency power. In reality, the antenna may not be working or gone and the generator may quit. This has been the case during hurricanes the last 5 years.

During an emergency, be prepared to bring some extra gear. Backup antennas are probably one of the most useful pieces of gear. Magmount antennas are the easiest to carry around and can be placed on a metal tray, metal cart, metal file cabinet or even on aluminum foil. You must place the antenna near a window since most steel framed buildings do a great job in shielding the signal. Suction cup holders/dent pullers (lookup “suction glass” on Ebay) can be adapted to hold antennas on the outside of windows of buildings, cars and buses. A j-pole would also be an excellent gain antenna. In the case of prolonged communication crisis, the j-pole can be mounted on an extension ladder or mast.

RG8U or better is the preferred coax. However, RG8X of lengths 50 ft or less are usable especially if this allows location of the antenna at some height or outside the shelter. It is also a good idea to bring some adapters. These include barrel connectors, BNC to SMA, UHF to SMA and UHF to BNC connectors. Just as for Field Day, some tools, electrical tape, extension power cords, a volt meter and SWR meter can be quite handy.

A backup transceiver should have 2-meter capability as a minimum. VHF/UHF rigs with crossband repeating capability are particularly useful when located in a mobile setup outside a shelter. HT signals are greatly attenuated inside most buildings and operating 440 MHz out to a mobile station outside, which retransmits the signal on 2-meters has worked quite well. All rigs should have the ability to program PL and CTCSS tones. Most transceivers built in the last 10 years have this capability. Along with the radio, you should have a power supply capable of supporting the radio. Switching power supplies rated for 15-20 amps will be fine for VHF/UHF FM transceivers.

Emergency power in the form of a 12-volt deep cycle battery with the transmitter set on lower power can last for a couple days if transmissions are kept to a minimum. If running a high duty cycle communication such as packet for extended periods, a generator (gas/solar) would be needed.

The Anderson Power Pole connector has been adopted as the standard for ARES/RACES and when facing the connector, black and red connectors are mounted side by side with the red on the right with the tongue or connector tab up. Related articles can be found at www.westmountainradio.com. This is the convention used on commercial 12-volt power strips. The connectors are made in several sizes depending upon the intended load. The 30-amp connector is the most popular and is the standard for ARES/RACES. These are sold at many of the hamfests. One word of caution, the most common type of crimper sold at hardware stores will not work well, because it widens the metal part of the connector when flattening it around the wire. This prevents the metal part from sliding inside the plastic housing. I usually solder the connector onto the wire.

I have covered some basic equipment needs. One can go overboard in any hobby. If you really want to be prepared, you will have several radios with multiple bands, crossband repeating and digital mode capabilities. A spare tower, and backup repeater, HF capability with digital modes and computers would also be handy. A multiple rig Field Day Station is the ultimate emergency communication station.

It is not necessary to have any equipment to be part of ARES. Even if you don't have any equipment, a good attitude and operating skills can make you a valued asset. When operating during an emergency, particularly at a shelter, THE most important thing to bring is a GOOD ATTITUDE! Your attitude can make you the most valuable person in the situation or a true hindrance. Unfortunately, there have been cases of ham operators being forcibly removed by law enforcement! A level head, good listening skills, common sense and flexibility, and a little humor go a long way in performing your role in a professional manner. Your primary role is in communication, however, it does not restrict you from assisting in other activities, time permitting.

After attitude, you should have good operating skills. If you check into a net regularly, you have the basics. These include listening and operating the microphone properly so you don't clip your speech or tie up the frequency. You will also need to end each of your transmissions with your call sign. Speak slowly! The operator on the other end of the transmission may be a Ham operator from outside the region or one who does not participate on local VHF/UHF nets.

In the shelter, your boss is the shelter manager. Shelters will have Red Cross volunteers, city officials and possibly other groups such as the Salvation Army present. You will be responsible to both the Net Control Station and the shelter manager. The organization of emergency management is based upon the Incident Command System. For more information, consider taking the courses online at <http://www.training.fema.gov/EMIWeb/IS/crslist.asp>, specifically the IS-100, IS-200, IS-700 and IS-800 courses.

Shelters are just that, shelters. You should be prepared to bring a change of clothes, toiletries, medications and some food that do not require any preparation or refrigeration.

The next article will cover operating practices in greater detail. For a more complete discussion, consider taking the ARRL Emergency Communication Courses at <http://www.arrl.org/cce/>. Assisting our community during an emergency is very rewarding. Of the reasons that we exist as set forth in the FCC regulations, emergency communication is the best understood and appreciated by the general public. Please don't hesitate to assist when you can.

73
Leo
KG4PWC
CARS Public Service Coordinator
ARES Emergency Coordinator



Ready for anything!

2006 SKYWARN Recognition Day

December 2nd, 2006 (0000 - 2400 UTC.)

For frequently asked questions refer to link below.

[FAQ for SKYWARN Recognition Day](#)

I believe we will probably be starting around 10 am on Saturday morning. Information about IRLP and Echolink usage has not been posted on the site yet, I will keep checking the site and let you know. Also, be aware that the Battle of Great Bridge has their day also next to us. So things might get a little crowded. Get your radios ready, to do some contacting, I am hoping we can do better than we did last year. We will be contacting other weather stations across the US, and giving a short weather report, Location, and signal report. There will be more information to come later.

SKYWARN TRAINING NET

The SKYWARN Training net is in need of NCS. If you are a spotter/ham and would like to be a net control operator for the Friday night net, please consider contacting me at Deborah.dianne@verizon.net and give me your call sign, spotter ID # and phone number so that I can have it for reference in case I need to contact you. We only have a few hams/spotters that are doing this and when they are busy and cannot do it, then we fall short of help. This is our net and I want it to be the best it can be. We also need to have people who are not afraid to use their radios during an actual storm so that the net can be activated. Currently there are only two others beside myself who have volunteered, more is needed. So please give this matter full consideration and get back with me.

Speaking of SKYWARN activations, there is an email list that is at the yahoo website that has been set up for SKYWARN announcements and activations. To subscribe to the list:

[South Hampton Roads SKYWARN](#)

Well that is all for now, more to come later on.

Thanks for reading,

73

Dee Dee



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CARS : Repeaters

146.610 MHz (PL 100.0)
146.820 (PL 162.2) MHz
444.000 (PL 100.0)MHz

W4CAR Trustee: Bill Runyon WF4R

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