



The Spectrum

Issue 0905

September 2005

From The President

Keith - KG4ZXX

It's hard to believe that summer is almost gone. Time to get ready for shorter hours of daylight and the brrrrr... Cold weather. Guess that means it's time for most people to get back into radio and staying nice and warm inside sitting beside their amps and power supplies.

At our last general business meeting we had three newly licensed amateurs come to join the CARS family. They are Bill Swartz, KI4KNX, Mark Drew, KI4KNY and Henry Davis, KI4KOA. When you get a chance please welcome them to the club and to amateur radio.

The beginning of this year was busy. We had several training sessions, Monitor Merrimac special event, Skywarn recognition day, Spring fest and the Tour De Cure. We also had a wonderful time during Field Day at Great Bridge Locks Park.

Elections will be coming up in October for the 2005-2006 club year. If you would like to run for office please contact Reggie White, W5SSB, the VP with your name to throw in the hat. Right now we are in SERIOUS need of someone to take over the duties of secretary of CARS. I know we have some folks here who would do very well in the position. Don't be shy. We need your help and support for this upcoming year.

Please keep our neighbors in the south in your thoughts and prayers. As I write, Hurricane Katrina is heading full steam towards New Orleans. They are going to need the assistance of all of us to get through these difficult days ahead. The best way I can think of to help is to contact the Red Cross and see what can be done. I'm sure they are also going to be in need of blood donations as well as money to help with recovery.

73's
Keith
KG4ZXX

INSIDE THIS ISSUE	
2	Upcoming Events / Does these make HAM Radio better? Skywarn
3	Local Nets
4	Amateur radio operator loves thrill of the "fox hunt"
5	Emergency power operating event
6	Emergency preparedness for the Amateur Part I of III
7	My QTH
8	General Meeting Minutes
9	Officers / Armature Code / Red Cross Needs Your Help

Links of Interest

[Virginia Beach Amateur Radio Club](#)

[Portsmouth Amateur Radio Club](#)

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

[ARRLWeb: Jamboree On The Air](#)

[American Red Cross](#)



Schools Starts Sept 6th....Drive Carefully

Upcoming Events

CARS Board Meeting

Wednesday September 7th, 6:30 PM – QRM Room

CARS General Meeting

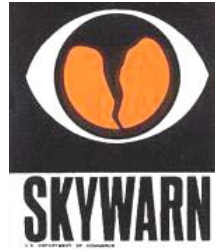
Monday September 12th, 7:30 PM – QRM Room

VBARC Meeting

St Andrews United Methodist Church, 717 Tucson Rd & Princess Anne Rd. September 1st

VA Beach HAMFEST

SEPT 17TH & 18TH AT VIRGINIA WESLEYAN COLLEGE



Greetings Everyone!

Hope everyone is doing well, I would like to apologize for not putting in my usual SkyWarn article. So please accept my humble apologies.

Okay to start off with we still have till November 31st for hurricane season to be over. It has all ready been an active year so far with 9 named storms, and the NOAA has upgraded their predictions for the remainder of the season. Here is the URL for the NOAA news article.

<http://www.cpc.ncep.noaa.gov/products/outlooks/hurricane.html>

Thankfully we have dodged the bullet with Irene and we can say "good bye Irene"!! You can get hurricane notifications through the email if you would like to receive them, look for the menu on the left hand side of the web page for NHC you should see email advisories. Here is the link if you are interested:

<http://www.nhc.noaa.gov/signup.shtml>

If you are into tracking the hurricanes as I am a good program is [Tracking the eye](#) it will enable you to get coordinates from the web for about 10 day. Then after that, if you don't sign up for Gencode's net service, you will still be able to use it but will have to manually put in your own coordinates. I get most of my information from the email advisories from NHC.

Speaking of storms and weather, I coordinated a trip to the NWS office in Wakefield Va, for the Chesapeake CERT groups, and anyone else that was interested in going along to take a tour of our own NWS office. It was quite an interesting trip and I enjoyed it, have never been to the NWS office in Wakefield, although I have met our Warning coordinator Meteorologist Bill Sammler once before. I do have some pictures that I will include with this article so all can see them.

73s

KI4DNN – Dee Dee

Does This Make Ham Radio "Better"?

In preparing a presentation for the Pacific NW DX Convention on new ways of visualizing radio information, I felt that it was important to evaluate the ideas for their possible effect on ham radio.

After all, if new technology, techniques, or activities don't make ham radio "better", then why implement them?

The implied part of that question is that we actually know what "better" is. The quick reply is usually, "Well, of course I know!" But when pressed, it can be difficult to say exactly where the Good Arrow points. A legalistic definition would be to point to the FCC's Part 97.1 - the Basis and Purpose for the Amateur Service, paraphrased here as:

- Voluntary communications, particularly emergency communications
- Advancement of the radio art
- Advancing skills in the communications and technical phases of the (radio) art
- Expansion of trained operators, technicians, and electronics experts
- Enhance international goodwill

see BETTER on page 3



LOCAL NETS

SKYWARN NET Fridays 1900 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

BETTER from page 2

Those are a little dry, so translating those principles into more personable statements in no particular order:

- Increase understanding of the physical environment of radio
- Improve an operator's efficiency, accuracy, and breadth of expertise
- Encourage technical learning about communications systems
- Develop new radio services and techniques
- Create new opportunities for building and innovation

These are pretty much where my particular Good Arrow points. I don't expect every possible change to ham radio to score a plus on every one of those five points, but if a change can't muster a little enthusiasm in any of those areas, then maybe it's not going in the direction of the Good Arrow. Conversely, the more goals a change promotes, the better the change may be.

Some changes have uniformly good effects, but most will be of the "some steps forward, some steps backwards" variety. This leaves us to count the steps, weigh them, and decide whether there is a net benefit. Things get even more complicated when combinations of changes are occurring. Two rights might make a wrong! Then there is the fact of having thousands of humans all acting and reacting at once - that makes life genuinely interesting, doesn't it?

When presented with such a rich and frothy brew of possibilities, it's usually easiest to just pull the covers over one's head and reject them all. Better the devil you know than the devil you don't. If it's not broke, don't fix it. Of course, this conveniently ignores the fact that radio and radio operators are continually changing, whether we embrace change or not.

Undoubtedly, amateur radio is in a watershed period, just as it was in the years following World War II, a period of dramatic technical change and a rapid change in the population of amateurs. While there was a lot of complaining, that upheaval seems to have turned out OK.

Today, the rapidly hybridizing Internet-Radio combination, changing license requirements, and accelerating technical evolution of radio will probably transform ham radio to the same degree as before and after WWII. Radio in 1960 looked an awful lot different to an amateur that got started in the 1930's - a situation in which many of us find ourselves today.

As you browse the Web, read the magazines, and kick things around with your friends, you'll encounter divisive and difficult topics such as CW testing, spotting networks, digital radios, bandwidth and band plans, and on and on. Even in such an environment, where it's difficult to know the long-term benefits and costs of changes, one can still apply Good Arrow measuring sticks and support the aspects of change that line up closest. Then it becomes a question of whether you choose to dwell on features that measure up or the ones that don't. Ham radio is molting - all we have to do now is decide which parts will make up the new lobster and which parts the old shell.

73, Ward N0AX

Reprinted with the permission of ARRL from the August 10th "Contesters Rate Sheet"

Amateur radio expert loves thrill of the 'fox hunt'

Gloucester man has turned a simple hobby into one that entertains, teaches and even saves lives.

BY JENNIFER WORRELL

Published August 18, 2005

In the age of the Internet, cell phones and other forms of high-speed connection, there are many people communicating with each other around the world with little more than coaxial cable, wire, batteries and radios. These amateur radio enthusiasts, or ham operators, can set up efficient communication stations should bad weather or other emergencies cause phones and computers to fail. Gloucester resident Scott Fenstermacher, an avid ham operator, has all the necessary equipment in his home to set up one of these stations. In fact, he can, and has, used it to speak to people as far away as Siberia.

Fenstermacher caught the amateur radio buzz several years ago, when his son, Phillip, became interested in weather forecasting.

"He became a weather watcher for Channel 3, and then we took a SKYWARN class together at the Newport News EOC," said Fenstermacher. "There, we met amateur radio operators from Gloucester who got us interested."

Father and son began learning about this new pastime and found that the FCC required them to take a series of tests to legally use the radios to transmit and talk to people. They took a technician's class, where they learned the information necessary to transmit locally. Fenstermacher bought his son the books he needed to read to pass the first test - the boy answered the 35 questions successfully and could then begin transmitting.

Fenstermacher decided to take the test as well, and he, too, soon received his technician's license. Completely hooked by now, Fenstermacher wanted to gain more certifications so he could transmit farther away.

"The technician's license allows you to work from 54 megahertz, or 6 meters, and up," he said. "You can talk locally, but you have somewhat spotty reception at times."

Six to eight months after passing his first test, he took another exam and gained his general license.

"The general license gives you access to frequencies all over the ham spectrum, and you can talk around the world," he said. "There are two tests - one with 35 questions, and another where you receive Morse code at five words per minute and translate it."

Fenstermacher joined the Middle Peninsula Amateur Radio Club in 2000. He has been president for two years. The group does a variety of ham radio events across the area, including "Field Day," where they transmit for 24 hours to other clubs across the country. This activity allows the different organizations to practice transmission techniques they could use in the event of an emergency within their communities.

The group also participates in National Lighthouse Weekend. Members set up their equipment at New Point Comfort Lighthouse and contact other lighthouses. They also receive communication from interested people.

"We spent an hour talking to a group of elementary school kids and their teachers at the Franklin Institute in Philadelphia who thought it was really neat to get to talk to people at an actual lighthouse," said Fenstermacher. "We have also contacted lighthouses on the Great Lakes and some in Florida."

Fenstermacher also enjoys "fox hunting." One person hides a transmitter in an area within approximately a six-mile radius. The "hunters" use their equipment to detect the Morse code sent by the transmitter to locate it. The group with whom Fenstermacher "hunts" passes around a stuffed fox to the most proficient hunter of the day. He is currently in possession of the trophy.

Continued on next page

Even though amateur radio fox hunting might seem like fun, the game could be a lifesaver in an emergency.

"We can use our equipment to find downed aircraft," Fenstermacher said. "In another instance, if someone stole an emergency vehicle, we could track the signals from the radio and find it quickly."

In addition to their tracking capabilities, ham operators could be a vital link in the event of a weather emergency. As hurricane season makes its annual descent on the East Coast, the Middle Peninsula Amateur Radio Club is ready. Club members could set up their equipment at local shelters and emergency operations centers. MPARC owns and maintains a repeater on top of the water tower at Page Middle School so area ham operators can transmit. The Amateur Radio Emergency Service group could use this repeater to share lifesaving information with emergency services outside the area in case communications on the Middle Peninsula were lost.

Fenstermacher heard the end of a different type of lifesaving communication one evening while listening on his radio.

"A guy in Maryland was having a heart attack, and his phone was out," he said. "He sent a distress call through his ham radio - someone heard it and called the local authorities to help him."

In addition to transmitting to different places, Fenstermacher constructs much of his own equipment. He has built antennas from PVC, copper wire and folded tape measures.

"They are pretty effective," he said. "One of the things I really enjoy is tinkering and building. You can buy lots of things but I enjoy building them myself."

Most of his fox hunting equipment is homemade. Since the stuffed fox has spent a great deal of time at his house, Fenstermacher is pleased with the results of his work and continues to be excited about his hobby.

"Amateur radio is such a neat thing to do," he said.

Reprinted with the permission of the Daily Press

**EMERGENCY POWER OPERATING EVENT
SATURDAY, SEPTEMBER 17**

Amateurs will participate in a 15-hour operating event on emergency power. On that day, amateurs make contacts with others who are also using only emergency power to demonstrate preparedness for emergency communications for the public.

Emergency power can be any source that is completely separate from commercial mains: solar panels, generators, storage batteries, alternators powered by bicycles, battery packs in HTs, and wind power, for examples. Operation can be from home or field.

Times: 9 AM Eastern (6 AM Pacific) on Saturday, September 17, 2005, until 12 AM Eastern (9 PM Pacific). All bands and modes included. The exchange is up to the individual operators but can include the traditional signal report, location, and the type of emergency power being used, for examples. W1AW will be QRV on generator power. A special QSL card will be available to those stations using emergency power that contact W1AW. (A regular QSL card will still be available to those stations that wish to contact W1AW, but who are not using emergency power). Please include an SASE with your card request, and please indicate the power source that was used (if applicable).

Emergency Preparedness for Amateur Radio Operators Part I of III

As licensed Amateur Radio operators, we are expected to be able to know how to setup and properly operate a radio station. The more experience we have in constructing and using and improving a station, the more we understand how to make an emergency field station. Field Day is a great example of setting up an emergency field station.

In creating your own station, and using it regularly, you know how the radio performs and should be able to change settings such as PL tones, offsets, switch from duplex to simplex and listen on the reverse. You should be able to know when and how to change the squelch settings. You may need to review the manual, but hopefully you know where the manual is!

Some areas have poor reception from our 146.820 MHz repeater. During the Tour de Cure, mobile stations near the Northwest River Park and areas in North Carolina could not reach the repeater. The NCS either listening on the reverse (repeater input frequency) or the transmitting to the field station using simplex on the repeater output frequency could reach the outlying stations. In the worst case, relays or even using a cell phone was necessary.

Understanding the limits of antennas such as a rubber duck, $\frac{1}{4}$ wave whip, an elevated ground plane and J-pole is useful out in the field. Understanding the concept of SWR, and how it is effected by a short circuit or open circuit in your feed line or interaction of your antenna with surrounding structures is also handy in dealing with problems at a portable station. Many antennas can be effective in a poor location. The magmount antenna can work by setting it on a cookie sheet, metal trashcan lid or metal file cabinet. But using any antenna inside a large building can be a problem.

In the city of Chesapeake, we are in the process of outfitting all the shelters with radios. Both on a cost and functional basis, we have chosen the Kenwood TM 271a and the Yaesu 7800r radios. For more complex situations, we are relying on individuals with more sophisticated radios to possibly setup crossband repeat and packet stations. The radios at the Chesapeake EOC, Western Branch High School and Middle School are Kenwood V7A, which are capable of crossband operation and dual receive. This capability would allow a HT typically on the 70 cm band to work full duplex through the base/mobile station transceiver to reach a 2-meter repeater. Therefore someone with a HT could crossband through the Western Branch station and reach repeaters all over the tidewater area.

Even in an emergency, the FCC expects good operating practice, station identification, sharing the frequency and appropriate language. Remember everyone with a scanner can hear what you are saying. When people make disparaging editorial remarks on the air, it discredits us as a group.

If you gather from above that a good knowledge of your technician license Element-2 information is what will make a good emergency operator, you are correct! That and being able to rapidly gather personal necessities, water, clothes, medications and a few tools including paper and pen, will make you a valuable addition to any emergency operation.

The next level of preparedness/training is the ability to operate on backup power and proper net operating procedures. I will cover net procedures as another article. However, when participating in a directed net, listen, listen and listen and obey the Net Control Station.

It is always wise to have at least one deep cycle battery, charged at all times and spare batteries for your HT. All batteries will loose their charge with time. With a good antenna, most radios can hit repeaters easily on 5-25 watts. Since most of the time, you will be listening and not transmitting, the current draw will be around 1-2 amp hours. Depending upon the deep cycle battery, this could be 1-2+ days. Shelter and repeater backup generators have been known to malfunction during major hurricanes. If you can buy a trickle charger and one deep cycle marine 12-volt battery, you will be set for most emergencies. To have an effective emergency station, the biggest constraint is the emergency power source.

As a final recommendation, design your station so that you can pull your gear out for emergency use without too much difficulty.

MY QTH IS IN HAMPTON ROADS...To many cities, too many roads

Chesapeake is actually one of seven major cities and four counties in coastal Virginia: Norfolk, Portsmouth, Chesapeake, Virginia Beach, Suffolk, Hampton, Newport News, Williamsburg, Poquoson, Mathews County, James City County, York County and Isle of Wight County that makes up the commonly identified as Hampton Roads. The area is bordered by two bodies of water and one state. The bodies of water around are the Atlantic Ocean on the east, and the Chesapeake Bay on the north. The southern border is the state of North Carolina. Chesapeake has the Southern Branch of the Elizabeth River, which runs north into the bay through Norfolk and Portsmouth.

The area is usually referred to as simply Norfolk because no one outside of the area knows the names of the other cities and most people in the area work in Norfolk. Other names used to label the area are "Hampton Roads", "Greater Hampton Roads" and "Tidewater." "Tidewater" is generally disregarded because it infers the coastal and inland waters affected by tide changes and includes regions west of the area all the way to Richmond.

"Hampton Roads" is another maritime term referring to waterways and the navigation charts which display the area in map form. Some of the people who live in Hampton think it's a cool name. No one knows what "Greater Hampton Roads" means except the Chamber of Commerce and they aren't telling.

For the purposes of this enlightenment, I will refer to the area north of Chesapeake as the "City of Norfolk", pronounced exactly that way by Northerners who settle here. Southerners who settled the area pronounce it "Nawfalk", sailors pronounce it "Nof***" and everyone else calls it "Norfick" or "Norfork". The word "Norfolk" actually originated in Southern England, gradually over time as a combination of the words "North" and "Folk", their way of referring to their brethren to the north, very much like our own term "Gauldarnyankees."

Hampton Roads is composed entirely of "Roads Under Construction". Just look at I-64, it has been undergoing widening for the last 10 years in Hampton and Newport News. The year-round seasonal weather allows for year-round construction. The only way to get into downtown Norfolk is to move there. Chesapeake is beginning to have the same problem, just try to go to the market between 3 PM and 7 PM Friday. Don't worry about getting there and back in less than an hour. Those arrangements will be made by your next of kin. All directions start with "Get on 64..." and include the phrase "Turn at the 7-Eleven." Most people navigate the area using Interstate 64 because of oddball location naming. The immediate problem is that the signs on the interstate continue to read "East I-64" after it turns westward entering Chesapeake. The largest interstate in the state, ends in the west end of Chesapeake after going about 20 miles in a westerly direction.

The land mass east of Chesapeake is "Virginia Beach" however the beach area is approximately 1% of the city's total land area. The city of Portsmouth which is northwest of Chesapeake is not at the port's mouth - that would be Norfolk. But, Port Norfolk and West Norfolk are in Portsmouth. The city of Chesapeake is named for the Chesapeake Bay (and the Indian tribe or an old sailing barge), is 15 miles away from the bay. Newport News is not a newspaper. The city is, in fact, served by The Daily Press newspaper. South Norfolk is in Chesapeake and "Suffolk", an old English combination of 'South' and "Folk" is not south of Hampton Roads, but west.

Now take the road and street names. Hampton Boulevard is in Norfolk and does not go to Hampton. Northampton Boulevard is not in the north of Hampton. It is 22 miles southeast of Hampton, in Virginia Beach. Chesapeake Boulevard runs parallel to Hampton Boulevard and does not go to Chesapeake. Virginia Beach Boulevard starts in Norfolk and only becomes a boulevard when you reach Virginia Beach. Portsmouth Boulevard is in Chesapeake and Portsmouth. Most people in Portsmouth use it to go to Chesapeake to shop. There is no Norfolk Boulevard but there is a Norfolk Avenue in Virginia Beach. It does not go to Norfolk. Atlantic Avenue parallels the Atlantic Ocean. Strangely, so does Pacific Avenue. Chesapeake Beach, nicknamed "Chick's Beach", is in Virginia Beach. Chicks do not go there. Meanwhile, Ocean View Avenue has no view of the ocean unless you use a high-powered telescope and a crane. Bayview is too far from the Bay to see it and Riverview has no view of any rivers. Shore Drive has no shore but runs along beside miles and miles of military bases. Oceana Boulevard does not come near the ocean. London Bridge Road has no connection to London and has no bridges. It is, however, falling apart. Military Highway, an apt name for the main thoroughfare of a primarily military area, will not actually take you to any military bases. Ironically, Independence Boulevard ends at once.

Sonny – K4WYS

Next month.....Water, Dams and, Sports

AUGUST MEETING MINUTES

Meeting called to order by Keith KG4Z XK at 7:30.

Brad Taylor, KW7USA presented an informative lecture on the Winlink system.

Keith KG4Z XK again announced the vacancy of the club's Secretary office and called for volunteers for that position. There were no takers.

REPORTS

MINUTES - Keith KG4Z XK read minutes of the July 11 club dinner meeting. Paul KI4IRL moved to accept them as read. Seconded and approved. Paul K4PRB read from the minutes of the July 27 BOD meeting.

TREASURER - Rich KI4EUM read the Treasurer's Report. Paul K4PRB moved to accept the report as read. Seconded and approved.

COMMUNICATIONS OFFICER - Paul K4PRB reported that the inventory was 90% complete with only one variance found.

FIELD DAY– Our score was aprox. 1500 points.

REPEATERS– Leo KG4PWC moved put the 162.2 Hz PL tone on the 146.20 repeater. Seconded and approved.

NEWSLETTER – Rich KI4EUM announced the August issue has been posted.

PUBLIC SERVICE – ARES meeting will be held 7:30 pm August 18 at the shack. A CERT drill August 9 which will use the .820 repeater exclusively that morning.

SKYWARN – No report.

OLD BUSINESS

Corps of Engineers property next door – no change, the City is holding the paperwork.

NEW BUSINESS

Reggie W5SSB is preparing requests for SERA re-coordination of the .61 repeater at a higher elevation at Bowers Hill and the .82 and 440 repeaters on a new tower in the Greenbrier area.

Linking IRLP to one of the repeaters was discussed, no decisions were made.

Our next club meeting will be September 11.

Ricky Lee KC4RIC won the 50/50.

Meeting adjourned at 9:40 pm.

The Spectrum

Monthly newsletter of the Chesapeake
Amateur Radio Service (CARS)

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CARS : Repeaters

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

W4CAR Trustee:
Bill Runyon WF4R

CARS OFFICERS & CHAIRPERSONS

President:
Keith Ainsley KG4ZXK

Vice President:
Reggie White W5SSB

Secretary:
TBD

Treasurer:
Rich Graham K14EUM

Communications Officer
Paul Buckwalter, K4PRB

Past President:
Ruth Bigio KB4LIF

Public Service Coordinator:
Leo Kusuda KG4PWC

Repeater Committee Chairman:
Bill Runyon WF4R

Spring Fest Coordinator:
Leo Kusuda KG4PWC

The Amateur's Code

The Radio Amateur is:

CONSIDERATE - Never knowingly operates in such a way as to lessen the pleasure of others.

LOYAL – Offers loyalty, encouragement and support to other amateurs, local clubs, and the American Radio Relay League, through with Amateur Radio in the United States is represented nationally and internationally.

PROGRESSIVE – With knowledge abreast of science. A well-built and efficient station, and operation above reproach.

FRIENDLY – Slow and patient operating when requested; friendly advice and counsel to the beginner; kindly assistance, cooperation and consideration for the interests of others. These are the hallmarks of the amateur spirit.

BALANCED – Radio is an avocation, never interfering with duties owed to family, job, school or community.

PATRIOTIC – Station and skills always ready for service to country and community.

The original Amateur's Code was written by Paul M. Segal, W9EEA, in 1928.



The local chapter of The Red Cross could use your assistance. They are desperately looking for volunteers to man telephone lines and pass health / welfare messages into and out of the Hurricane Katrina affected area. You can contact the Red Cross via the following:

Pam Wakefield

(757) 446-7740

wakefieldp@seva-redcross.org