

New Bern Amateur Radio Club



foto by W2RLG & WA0ZGL

Volume 32, Issue 5, May, 2009



Logo tnx to Eve, XYL of W2HVX

W4EWN/R

146.610 / 146.010 PL 100 Hz.
444.900 / 449.900 PL 100 Hz.

Website: <http://www.nbarc.org>

Next Meeting -- Thursday, May 7, 2009

6:30 PM at Famous Subs & Pizza, 2210 Neuse Blvd.

Program: *NOTE: this meeting will start a 6PM* SKYWARN Training by Jim Wingenroth, a meteorologist with our local NWS office in Newport. Mark, W2EAG, also will be discussing FD again and will be looking for more members to sign up.

FINANCIAL REPORT

The finance report is essentially the same, with the exception of the power bill; it is up. The checking account currently stands at \$1480.26, and the savings account stands at \$3,460.38. The power bill was \$45.42 and the telephone bill was 29.95, and both of these bills are on automatic withdrawal. Short and sweet my friends.

Ray Hemphill, W7OPH

President's Corner

In preparation for a 30 mile hike on the Appalachian Trail with the Boy Scouts next month, I have been experimenting with different antennas to see what would be most efficient, and easiest to carry. Bruce, N8UTY, and I plan to use a local 2 meter repeater for our main communications and try and do some CW work on 40 meters. I will use Bruce's MFJ QRP 40 meter CW radio on the trail and he will use my Icom 706 in my pickup truck. I made a lightweight 40 meter dipole out of 20 gage wire and RG-174 coax. I trimmed the wire portion of the antenna so the SWR was below 2:1 on CW portion of the

40 Meter band, so I do not have to carry the tuner. I started with about 41 feet of RG-174 as the lead in wire, with a calculated line loss of about 1 dB. But that was a little long for an antenna that would probably only be about 8 to 12 feet off the ground. Antenna height will be limited by how far I can throw my pocketknife with a line attached over a tree limb. Set up and take down time is also a factor when backpacking. I tried to field test it on a practice hike a few weeks ago. It received fine, but my battery went dead after only a few minutes so I could not transmit. I had purchased a small Red Cross emergency batty from Wal-Mart (automotive section) and the charge indicator said it was fully charged, but I guess I should have charged it over night before testing it. On my next trial I will carry a spare battery (8 AA pack) and shorten the coax by about 20 feet. That should reduce the line loss by 50 percent and make it a little easier to set up. I am also considering using a Buddy Pole antenna, two 40 meter ham sticks that can be stored in a pvc pipe and used as a hiking stick, or using an Outbacker antenna that I borrowed from Mark, NK9K. It will all depend on what is lightest, and easiest to carry and set up. I will keep you posted on what works out the best.

Remember, the program for this month's club meeting is **Skywarn** training. In order to have enough time for the

training we will start the meeting at 6:00 PM instead of the normal 6:30. See you at the meeting on Thursday.

73's Dave, **K4DJW**

Minutes of Meeting

NEW BERN AMATEUR RADIO CLUB

2 April, 2009

The regular monthly meeting of the New Bern Amateur Radio Club was held on the above date and the meeting was called to order at 6:30pm by President Dave Warwick, **K4DJW**. Introductions were made from the floor with 38 members that signed the roster.

Dave mentioned that the minutes and the finance report were published in the newsletter.

He then asked for committee reports and Ken, **K4KDM**, mentioned that St. Andrews Lutheran Church had approved a request by Bruce, **N8UTY**, exam coordinator, to hold amateur radio exams there at the church on the third Saturday of each even month. It was also mentioned that exams would be held, 11:00am, at the Downeast Hamfest next Sunday at Lenoir Community College in Kinston. Ken also mentioned that amateur radio classes would also be held at the church, with coordination between Dave, Ken, and Ralph, **N4RAB**. Tom, **KJ4IV**, announced that he had plenty of hamfest tickets to sell.

Jim, **KS4O**, Craven County EC, mentioned that it was time to think about storms and shelters and asked for volunteers to assist him in making sure that the antennas were functional at all the shelters as well as the County EOC. He also mentioned that a sky-warn class will be held at the next meeting. He also mentioned that he would see about getting the **ARES** members registered with the county as **RACES** operators. Mark, **W2EAG**, announced plans for this year's field day. Bill, **N2GAH**, said he would help Mark with some of the administrative leg work. Mark also went into the importance of proper message formats and traffic handling, which included a couple of handouts. He also mentioned that he would like to go into greater detail at a meeting for those interested in traffic handling.

Dave mentioned the things that need to be done at the repeater site and enlisted volunteers to assist in that project. The meeting was adjourned at 8pm.

Ray Hemphill, **W7OPH**, acting secretary.

VE Tests

NBARC held two **VE** tests in April. The first was at the Downeast Hamfest in Kinston. Charlie Gould had traditionally been the liaison for this test, and I agreed to follow suit when I took the job. We had one examinee who passed his Tech exam. He is a member of a ham radio club which is forming at Pitt Community College, so we are glad to hear of this development.

The second test session was on Saturday, April 18. This was our regularly scheduled "even-months" test. It was the first time we have held it at our new location -- St. Andrew Lutheran Church on Neuse Blvd -- and everything went well. I should say, we have held tests there before which were part of a Tech class, but this is the first time we've held it there as being our regular location. Many thanks to the Lutherans for accommodating us. We had three examinees this time, and all three got their Tech licenses. One was a boater who is planning to head out for Bermuda, the Azores, and parts unknown sometime early in June. There was also a young man who is another member of the new club at Pitt CC. Congratulations to all!

Bruce, **N8UTY**

Public Service Events in May and June

We have two public service events coming up. First is the **Neuse River Days**. This event will be held on Memorial Day Weekend this year. Ham radio support will be on Saturday as usual, which will be May 23. I will have further information about this, and sign-up sheets for the various operating stations, at our club meeting in May. If you want to take part and cannot attend the club meeting, please let me know via email (n8uty@arrl.net) and I will make sure you get a position. As usual, we will have some on boats and some on land.

The 2nd event is a **5K race** at Creekside Park near the airport. It will be held on Saturday, June 13. I will have more information on this event shortly. Go ahead and mark it on your calendar if you want to work it.

As a side note, I met with Haley Transou of the **MS Society** on April 21. We went over the new routes for the **MS-150**, which will be the 2nd weekend of September as always. Since we have used nearly identical routes for the last three years, it was felt that new routes are in order. What she showed me should be a great change of pace. It is possible that the Cherry Branch Ferry will be incorporated. Haley is meeting with NCDOT in the next few weeks to see what they can do. This would highlight the maritime character of our beautiful coastal area.

The big news is that in addition to the 75 mile and 100 mile routes which we are used to, and the 30 mile routes which were added a few years ago, there will also be a 50 mile route. Something for everyone!

The way things look on the route maps, they are all well integrated with each other and will not require extra rest stops or SAGs. In fact, it will eliminate the Century Loop rest stops, which will free up a couple of hams from rest stop duties, and make them available for shadowing or SAG-ing. I am tickled with these developments and I think our long-term **MS-150** hams will be delighted also.

Now, if they could only get that pesky drawbridge completed!

Bruce, **N8UTY**

ARES ANGLE

Hurricane Season is really close now. To help us prepare, we'll have SKYWARN Training at the upcoming meeting on May 7. This presentation will be given by Jim Wingenroth, a meteorologist with our local NWS office in Newport. This knowledge should be interesting and valuable. It will put us in a better position to be helpful to the NWS during severe weather events. If you know people who would be interested in this training, feel free to invite them. A ham license is not required to be a Skywarn spotter.

We're now in The Age of NIMS

NIMS is the National Incident Management System. The acronym we may be at least slightly more familiar with is ICS, the Incident Command System. You've probably heard about a series of online courses that are recommended for everyone in ARES. I have not taken any of the courses, nor has my predecessor Bruce, **N8UTY**. Now that we've continued to procrastinate, the "old" courses have been revised and replaced with new ones.

BUT... there is one kind of training that is very important for us, and that is training related to communications. After all, we're hams, and what we do is communicate. The importance of training cannot be overstated, particularly when we're talking about training for Emergency Communications in the sometimes hectic and often less than ideal conditions of an actual emergency. For our purposes, we want some standardization, and standardization of message formats is high on the priority list.

As hams many of us are familiar with the **ARRL** Radiogram. It's been our accepted form to send messages, and works very well for the National Traffic System (NTS). BUT... now we're in the Age of NIMS, and anyone in any way connected with FEMA/DHS is expected to use the ICS Message Form known as ICS-213. Unfortunately, it appears that none of the form designers were hams. So while the ICS-213 form is required, it needs some modifications to be compatible with NTS. (There's a good article on this in the May 2009 QST on page 76.)

Mark, **W2EAG**, will be conducting training on using the proper message form for emergency communications. Mark has extensive experience with NTS using the standard **ARRL** Radiogram form, and he has recommended that for now we in Craven County **ARES** adopt the example "ICS-213 (ARES VERSION)" developed by Yolo County **ARES** in California (and illustrated in the QST article). screwed up scheduling, but no one mentioned it.

I sent an email to all **ARES** members stating that this training would be on May 7 at the River Bend Town Hall. Fortunately, our alert President Dave, **K4DJW**, spotted the conflict. We will re-schedule the Communications training and notify **ARES** members by email of the new date and time.

That's the **ARES** Angle for this month!
73 de jim KS4O, Craven County **ARES EC**

HAMFESTS

May 23, Sat. DurHamFest, Durham FM Association

Talk-In: 147.225 or 145.45 (no tones) Bahama, NC, Little River Community Complex

map [8307 North Roxboro Road](#)

<http://www.dfma.org/index.php/content/view/53/38/>

Swap Shop

For Sale: (1) Astron 12 volt, 20 amp power supply, model **RS-20A**. As new, \$70.00

(1) **Icom** Marine radio, model **IC-302**, 25 watts (not a handheld). New in box. \$100.00.

(1) **Calrad** 12 volt, 4 amp, power supply, model **45-738**. Good condition. \$25.00

(1) **Heathkit** 12 volt, 15 amp, power supply, model **HP1175**. Good condition. \$50.00

Contact Sid Purvis, **WA4VBC**, at 252-349-3333.

For Sale: **Cushcraft 13B2** Two Meter Broadband 13 Element Boom, \$80.

Diamond X510MA 2m/70 cm Dual Band High Performance Vertical, \$105. Contact Jim Dugan, **W1JFD**, 252-637-5319

For Sale: Marine Antenna, **Shakespeare** Style 390, 2-30 mhz, 1kw, 23 ft high, bought new in 2007, list price \$187, used less than a season, \$75.

Hammarlund HQ-180A general coverage receiver, refurbished and ready to go, \$250.

Contact Al, **W8UT**, 252-636-0837, anchor@ec.rr.com

World travelers

Vince and I are presently (5/1) at the National Naval Medical Center in Bethesda, MD, taking care of medical appointments, but enjoying the free days for sight seeing. This weekend is the Embassy Open House, and we are looking forward to seeing as many as we have the energy to do.

This was our fourth year to go to Southeast Asia, and it was especially nice because we were able to get a space available hop from Seymour Johnson AFB, just 80 some miles from our driveway. We flew from Japan to Travis AFB, CA, and were amazed and overjoyed to get a hop from there right back to Seymour Johnson, where our car was parked just below the control tower. I don't think the military space A hops would be everyone's cup of tea, but it is a real adventure for us.

Hope we'll be back in time for the May meeting!
73, Mj & V.J. Sipple

The Kinston Down East Ham Fest

was fun and we had great weather however, traffic was a little light. The NBARC was represented well, as usual.



Our President, **K4DJW**, Dave Warwick and son, Ethan, **K4EAW**, were there for the numbers and had a fun time.



As nearly always, **W7OPH**, Uncle Ray Hemphill our club treasurer was there with a big greeting for everyone!

Carrying on **K4VC**'s tradition, **N8UTY**, Bruce Arnold coordinated the VE session with several more VEs present than applicants. But hey, that's what we are there for... to serve.



We can always count on our senior VE to keep us newbies straight. **KJ4IV**, Tom Hill checks with Bruce to ensure all is correct.



KØUXZ, Dick Hallberg, trying to decide if he needs the book ... or not.



W8UT, Al Parker, our newsletter guru, trying to remember where he put it. Article & pix, tnx to **WAØZGL**

ANTENNA HEIGHT

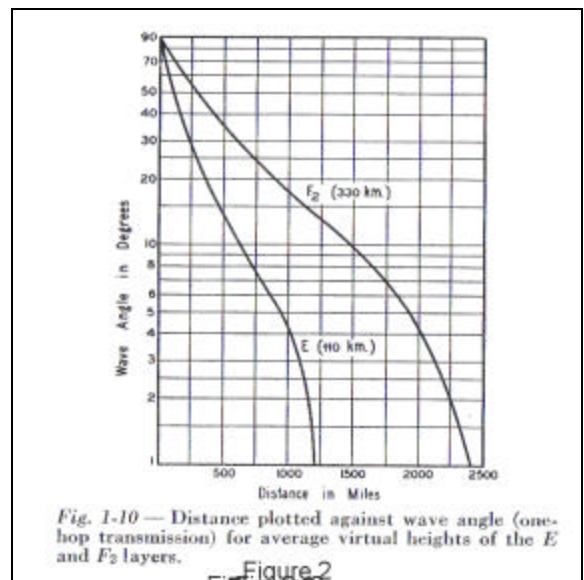
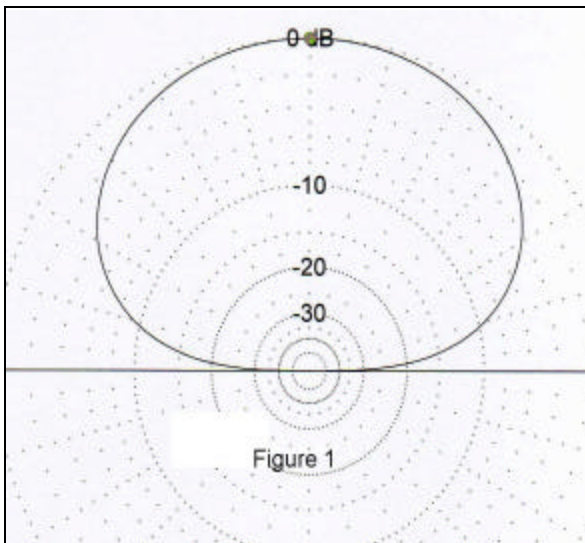
Andy Griffith, W4ULD

3-24-09

In many of my articles I have referenced the gain of a 75M dipole to 45 degrees elevation. That is because most 75M dipoles are installed at 35 to 40 ft. high or less than $\frac{1}{4}$ wavelength. This is shown in Figure 1. Under these conditions the maximum gain of the dipole is straight up; thus, 45 degrees is a practical way of comparing gains.

Most amateur communications are conducted by a sky wave reflected off the F2 ionized layer which ranges from 150 to 250 miles above the earth. At an average height, a signal at 45 degrees radiation angle will come down about 350 miles from the transmitter. This is a common distance for 75M nets. However, many 75M nets extend for a distance of about 1000 miles. The average radiation angle for this distance is about 18 degrees. Thus one should read the radiation pattern of his antenna to estimate the gain for the distance he intends to work. However, one thing is clear. A 75M antenna height of 35 to 40 ft. is near optimum for most nets.

Figure 2 is a plot of the first hop distance vs. angle of radiation for an average height of the F2 layer of 330KM. The plot was copied from The ARRL Antenna Book of 1956



Cast of Characters:

President: Dave Warwick, K4DJW
Vice President: Pete Koonce, KA4SXX
Secretary: Bob Melle, KJ4HJH
Treasurer: Ray Hemphill, W7OPH
Emergency Communications: Jim Wright, KS4O
Assistant Em. Comm.: Mark Rappaport, W2EAG
Public Svc/Special Events/VEC: Bruce Arnold,
N8UTY
Repeater Trustee: Billy Morton, KE4YMA
Program Committee Chairman: Igor T. Troll
Photography: Mac Eutsler, WA0ZGL

The Newsletter Team:

Al Parker, W8UT, Editor
The NBARC Newsletter is the newsletter of the
New Bern Amateur Radio Club, Inc., 802 Bluebird
Dr., New Bern, NC 28560. NBARC is an affiliated
club with the ARRL and ARES.
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proper credit is given. Any inquiries, comments,
items for Swap Shop, suggestions, contributions,
and letters for inclusion should be sent to the
Editor, W8UT, at e-mail: anchor@EC.RR.COM

Selected Local Nets Times are local time, unless otherwise stated

Club Net Manager: position open
Craven County ARES: 146.61 MHz, 2000 before threatening
wx; monitor during ARES activations
NC ARES Net, 3.923 MHz, 19:30 daily
Waterway Radio Cruising Club: 7268 kHz, 0745 daily
Fairfield Harbor Cruising Net, 7224, 0730 M-F
NC Morning Net: 3927 kHz, 0745 daily
Carolina Slow Net (CW): 3695 kHz, at 8PM ET (5wpm) daily
Coastal Carolina Emergency Net: 3908 kHz, 1900 daily
Tarheel Emergency Net: 3923 kHz, 1930 daily
Carolinas Net (CW): 3573 kHz, 1900 (20 WPM), 2200 (10
WPM) daily
Carteret County ARS/ARES: 145.45 mHz, 1930 Tues./ Emerg
Traffic handling 1st Tues. after 4th Sat., monthly Skywarn:
145.21 mHz, 2100 Tuesdays
Pamlico County ARES: 147.210 MHz, tone 151.4, 1930 Wed.
ENC Emergency: 146.685 mHz, 2100 Thursdays
ENC Traffic: 146.685 mHz, 2030 daily
NBARC Ragchew: 146.61 mHz, 2000 daily

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<http://www.nbarc.org>
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