

# New Bern Amateur Radio Club



foto by W2RLG & WA0ZGL

Volume 31, Issue 7, July, 2008



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, July 3, 2008

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

**Program:** speaker for the June meeting will be Dave Warwick, **K4DJW**. Dave will speak about his antenna launcher.

### FINANCIAL REPORT

JUNE 01, 2008	JUNE 31, 2008
<u>CHECKING</u>	
Balance @ May 31, 2008	\$ 1,646.77
Expenses:	
06/08 Prog Enrg	23.26
06/19 Embarq	<u>27.51</u>
Total	(\$ 50.77)
Subtotal	\$ 1,596.00
Deposits:	
06/11 Dr.Prz	\$ <u>30.00</u>
Total	\$ 30.00
Subtotal	\$ 1,626.00
<u>SAVINGS</u>	
Balance @ May 31, 2008	\$ 3,095.88
Balance @ June 30, 2008	\$ 3,095.88
<b>GRAND TOTAL</b>	<b>\$ 4,721.88</b>

Charlie, **K4VC**

### FIELD DAY -- this weekend, June 28-29

I would like to make a reminder to everyone who is coming and going to operate, to bring your favorite earphones, key, bug, paddles, etc. If you have volunteered to bring a radio, tuner, or power supply, don't forget it when you come, we are depending on you. I have contacted the paper for an article (in the 6/24 paper) and have a proclamation from the Mayor that **Saturday is Amateur Radio Day** in New Bern, in honor of Field Day and the club's efforts to support the Public.

See you there. 73.

Mark, **W2EAG**

### VE Testing report

The VE test session of 06/21/08 resulted in one new ham and two upgrades to Gen. The two new Gens were a father-son team. There was one point of difference in their scores. You guess which one had the advantage !!  
tnx to examiners, **w7oph**, **kj4iv**, and **n6jib**.

CG, **K4VC**

## PRESIDENT'S CORNER

I hope everyone had a great Month! Remember, hurricane season is here so be sure to exercise your HT's and make sure all your batteries are charged. I got one of those lead acid battery desulfator/chargers from Northern Hydraulics' magazine, and have been charging and desulfating the 115 amp hour batteries that were donated to the club. They will be ready for Field day this Saturday. I will also bring the Comm Trailer. Mark (**W2EAG**) and I stopped by Glenburnie Park to inspect the site. It looks like a real nice spot, lots of tall trees for antennas, tables are already there and the most important thing, there is a large grill for the hamburgers. Mark is doing a fine job preparing for the event so I am sure it will be a success. Tom (**KV4CQ**) did a great job building the multi-band antennas in time for Field Day. They will be a good asset to have on hand, as they do not need a tuner for most bands. Please make it a point to stop by and make a few contacts, even if for only an hour or so. I have a few Boy Scouts that are coming to help set up and make some single band antennas. We will get there about 9:00 AM Saturday and start setting up. The event does not start until 2:00 PM so that should give us plenty of time to get everything ready.

For those of you who do not know, Glenburnie Park is on the Neuse River, off Oaks Road, near the Glenburnie Road end. Turn off Oaks Road at the sign to the National Guard Armory. You will pass the Armory and Radio Station on your right, just keep going and the park is at the end of the road. Drive into the park, to the top of the hill, we have the Jaycee's Shelter, which is the second shelter on the river side. See you there!  
Thanks for supporting the club and amateur radio.

73, Dave, **K4DJW**

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### Minutes of Meeting

**NEW BERN AMATEUR RADIO CLUB** 06/05/08

The meeting was called to order by President Dave, **K4DFW**, at 6:35 PM. There were 32 members in attendance. Self introductions followed. There were no comments relative to problems with either the web site or the repeaters.

Bruce, **N8UTY**, recounted the situation relative to Neuse River Day. The fact that it occurred the Saturday prior to our meeting was overlooked by all. Bruce indicated that the personnel of the organization apologized for not making a greater effort to contact us, and Bruce apologized for his inaction. The basic problem arose because of the earlier than usual date.

Bruce also spoke of the **MS Bike-a-Thon** coming up the second weekend in September. He called attention to the new name and indicated it came about by the addition of new and more routes involving different mileages. Bruce will be attending a meeting in Raleigh, primarily devoted to safety in the near future. Ham radio is on the leading edge relative to safety features on the various routes.

Finally, Bruce referred to the Jamboree on the Air scheduled for the third weekend in October.

Dave, **K4DJW**, demonstrated one of the three new dipole antennas that have been constructed for use on Field Day. He also mentioned that several substantial batteries have been donated, and will be used then. Further, that the Club's positions of EC (Emergency Communications) and Asst EC were open and asked for volunteers. There was no immediate response.

Mark, **W2EAG**, next took the floor for a update on the coming **Field Day** scheduled for the last weekend of June, (06/28/08) He indicated there is still room for additional operators, and all are welcome. There was a discussion with Pete, **KA4SXX**, chair of the food committee, and the location of tables. John, **KR4ZJ**, called attention to the K of C yard sale, scheduled for 06/07/08.

Ken, **K4KDM**, indicated that he had received inquiry re a future school for new hams. He will follow-up and report further. Discussion was had relative to the purchase of textbooks, and the availability of instructors.

Mac, **WA0ZGL**, had the program for the evening, and presented a complete story of **PSK31**, including detailed basic instruction slides, and operating methods. He successfully answered many questions. Many members were seen taking notes. He spoke primarily of the program Hamscope, but indicated there were many similar programs available. He emphasized that world-wide contacts were made with minimum power and various modes including CW, Rtty, packet, etc.

The meeting was duly adjourned.

Charlie, **K4VC**  
Acting Secty.

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### The ARES Angle

Do you subscribe to the ARES E-Letter? The ARES E-Letter is designed to be a digest of news and information of interest to active members of ARES, but it also contains items of interest to hams who are not ARES members. Past issues are posted on the ARRL web site at <http://www.arrl.org/ares-el/>. (If you're an ARRL member and don't already subscribe, go to the Member Data Page at <http://www.arrl.org/members->

[only/memdata.html?modify=1](http://only/memdata.html?modify=1) and subscribe. You'll see a long list of various publications at the bottom of that page... just check the ones you want to receive.)

The most recent issue of the ARES E-Letter (June 20, 2008) included information from the Amateur Radio Session at the recent National Hurricane Conference. One item that caught my eye was providing weather data to the National Hurricane Center (NHC) through APRS (Automatic Packet Reporting System). The article stated that the NHC appreciates this mode because gathering the data is automatic. We could provide such weather data with home weather stations connected to APRS. The catch is that we need to be within range of an APRS digipeater to make such information accessible.

I would like to see more use of packet radio in our geographical area. In particular I'd like to see APRS used. Elsewhere in the country APRS is effectively used for both emergency communications and weather reporting, in addition to its more common use for position reporting. What NBARC and this geographical area in general lacks right now is a local digipeater (packet repeater). I see from reading the online NBARC newsletter archive that a few years ago our W4EWN 2-meter repeater was temporarily converted to a packet repeater for the duration of the MS150 bike ride. However, to encourage more packet activity of all sorts, we need a locally-accessible digipeater. I see such a repeater as one of those "If we build it, they will come" type of situations. It's pretty hard to use APRS for emergency or any other use if no digipeater is available.

Perhaps we could put a digipeater co-located with W4EWN, or maybe we could arrange for another location. Based on my own recent experience, the ideal location would be with the Trenton repeater: I recently returned from trip to Durham and I observed that I could use the Trenton repeater from my truck to points well beyond Kinston. At the intersection of Highways 58 and 264 I switched to the Wake County Skywarn repeater and used that until I returned via the same route a few days later. Also, a few weeks ago Ken Zieleck and I had a QSO on the Trenton repeater, and Ken was in Morehead City. SO... the bottom line is that we have Skywarn coverage from Morehead to well beyond Raleigh with two 2-meter repeaters! I was impressed. Of course, they're both located very high on broadcast towers. But we could expect similar coverage with similarly located digipeaters.

That's it for this month.

-jim, **KS4O**

## **HAMFESTS**

**July 12 Salisbury** - Salisbury, NC, Salisbury Civic Center, 315 Martin Luther King Jr. Ave. South, info - Ralph Brown, **WB4AQK**, Email: [rkbrown5902@bellsouth.net](mailto:rkbrown5902@bellsouth.net) **Talk-In:** 146.13/146.73 (PL 94.8)

**July 19 Cary** - Cary, NC, Ritter Park Pavillion, [301 West Lochmere Drive](#), info Herb Lacey, **W3HL**, Phone: 919-467-9608, Email: [infoman@bellsouth.net](mailto:infoman@bellsouth.net) **Talk-In:** 146.88 -0.6 (no tone)

**Aug. 9 Fayetteville**, details next mo.

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## **SPECIAL EVENTS**

**Jun 28 – 29 FIELD DAY**

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### **Swap Shop**

**For Sale:** Marine Antenna, **Shakespeare model. 479959**, 2-30 mhz, 1kw. 23 ft high, bought new in 2007, list price \$187, slightly used, mount not incl. (see West Marine) \$75. Al, **W8UT** 636-0837 or email [anchor@ec.rr.com](mailto:anchor@ec.rr.com)

**For Sale:** Garmin GPS 40XL, Personal Navigator  
Package includes :-

Carrying case, Manual, Quick Reference Guide; Operating Flow Chart; External magnet antenna (Australia); PC Data cable, 12 v DC adapter;

Operates also on 4 AA batts (not included); hand antenna.

Used very little, no defects, scratches or dings.

Home brew harness to operate laptop in ur vehicle

??> no laptop ?? We can work that out too --

\$65.00 for pkg., Charlie, **K4VC**, 633-3178

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## **California Hands-Free Law to Go into Effect July 1;**

### **Ham Radio Not Affected Says ARRL Counsel**

A new California hands-free cellular telephone law goes into effect July 1, 2008. It, like many others around the country, prohibits using mobile telephones while driving unless a hands-free device is utilized. **ARRL** has received numerous questions about its application to the use of mobile Amateur Radio stations by licensed amateurs. The law, in relevant part, states as follows:

*"23123. (a) A person shall not drive a motor vehicle while using a wireless telephone unless that telephone is specifically designed and configured to allow hands-free listening and talking, and is used in that manner while driving."*

(cont. next page)

ARRL General Counsel Chris Imlay, **W3KD**, advises that "The definition of prohibited behavior in California's recent statute does not include a prohibition of operating a mobile, licensed Amateur Radio station while driving, because Amateur Radio transceivers are not telephones. While ARRL cannot guarantee that this statute will not be interpreted by law enforcement officers or the courts of California more broadly than that, it is our view that a fair reading of the statute excludes mobile operation of Amateur Radio equipment by licensed radio amateurs.

That said, it is obvious that drivers should pay full time and attention to driving. To the extent that operating their amateur stations while mobile is a distraction to them, they should consider, if possible, pulling over safely to the side of the road and conducting their amateur communications while stationary."

ARRL Regulatory Information Manager Dan Henderson, **N1ND**, adds that while the statute on its face does not apply to Amateur Radio mobile operation, problems could still arise: "Law enforcement officers are not telecommunications experts and may not understand or be concerned about the difference between a cellular telephone and a ham radio. If you do get stopped, be polite and state that you were operating a mobile Amateur Radio transmitter as specifically authorized by the FCC and not a wireless telephone. Don't engage in an argument if the officer issues a citation -- that won't help your cause. If cited, you will need to follow the instructions about contesting the citation in traffic court. As ARRL counsel notes, the language of the statute does not appear to include amateur mobile operation. Unfortunately, you could have to go through the inconvenience of appearing in court to contest a citation."

ARRL will continue to monitor the application of this statute relative to radio amateurs.

from ARRL website:

<<http://www.arrl.org/news/stories/2008/06/18/10167/?nc=1>>

This issue is going out a week early, before Field Day, so no Field Day results or pix can be posted, -- BUT ---- Here are some pix from years past, see who you recognize.



2004



2004



2004



2004

Tnx to Bill, **K2UFC**, for pix.

# HF VERTICAL ANTENNAS- PART I

ANDY GRIFFITH, W4ULD

The HF vertical antenna is one of the most misunderstood and mis-represented antenna types used by amateurs. Let me say in the beginning that I am not a fan of HF verticals. I do not know of a single case where a vertical can achieve the gain of a rotatable dipole even at the maximum low angle radiation common to verticals when the base of the vertical is mounted at the same height as the dipole. I use the term rotatable dipole because to achieve maximum gain in the desired direction a dipole must be rotated. This is a simple matter for dipoles for 10 meters through 20 meters. Such dipoles are light enough to be rotated by the “strong arm” method or by a TV type rotator.

The primary reasons for using a vertical are its convenience, its inherent low angle of radiation, its relatively uniform radiation over 360 degrees of azimuth, and its small footprint. Often one does not have the real estate to install a dipole and needs the low angle of radiation for DX. Some wild claims are made by manufacturers of verticals. The usual are: “Low angle of radiation which is good for DX,” and “No radials required.” One should be wary of such claims because they do not tell the full story. As pointed out above, in most installations, verticals for 10M through 20M will have as much as one S-unit (6 dB) less gain than a rotatable dipole with the gain of each antenna measured at the maximum low angle of the vertical’s pattern. In addition, all ground mounted vertical antennas must have radials for optimum performance. While it is true that many verticals can be loaded and operated without radials, their performance will be compromised.

In my mind there are three basic forms of vertical antennas. (1) Those used in mobile installations where the ground plane is provided by the vehicle body or the vehicle body plus the capacity of the vehicle to ground, (2) Those that incorporate their own ground plane and truly do not require additional ground radials such as the ground plane vertical and the R-7 type multi-trap vertical, and (3) ground mounted verticals that depend upon a high quality ground and radials to return RF currents introduced into the ground back to the feed point of the antenna.

HF mobile vertical antennas of all types fall into the first category and have been covered in my first antenna series. Most of the technology described in this series also applies to other forms of verticals; for example, antenna efficiency and loading.

The second category, as mentioned above, include the ground plane antenna and the R-7 type multiband vertical. Both of these antennas act like verticals but are really bent dipoles. They consist of a vertical section from which most radiation occurs and horizontal radials. The radials also radiate. The two antennas are fed at the base of the vertical. All traps are in the vertical section of the R-7.

Category 3 refers to ground mounted antennas such as those used by AM broadcast stations. Such antennas depend upon the earth ground to simulate the “missing bottom half” of the antenna and their performance is highly dependent upon the quality of the ground. To improve ground conditions to where the ground resistance is less than one ohm and the antenna efficiency approaches 100% at least 100 buried radials are required. The length of the radials is usually equal to the height of the antenna. The vertical portion of these antennas may be from about ¼ wavelength to 5/8 wavelength. Usually the higher the antenna up to 5/8 wavelength, the lower the angle of radiation will be. A few amateur antennas of this type are still used and one commercial variety (the Hy-Gain Tower) is on the market.

Cast of Characters:

President: Dave Warwick, K4DJW  
Vice President: Pete Koonce, KA4SXX  
Secretary: Ray Hemphill, W7OPH  
Treasurer: Charlie Gould, K4VC  
Public Svc/Special Events: Bruce Arnold, N8UTY  
Trustee: Billy Morton, KE4YMA  
Photography: Mac Eutsler, WA0ZGL  
Emergency Communications: Jim Wright, KS4O  
Assistant Em. Comm.: Dave Warwick, K4DJW  
Program Committee Chairman: Bill Lindquist, K2UFC

The Newsletter Team:

Al Parker, W8UT, Editor  
Charlie Gould, K4VC, Data Base/Labels/P.O.mail  
Bob Chamberlain, W2HVX, & Eve, graphics & photography  
The NBARC Newsletter is the newsletter of the New Bern Amateur Radio Club, Inc., 103 Outrigger Rd., New Bern, NC 28562. NBARC is an affiliated club with the ARRL and ARES.  
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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: 3926 kHz, 0745 daily  
Carolina Slow Net (CW): 3.571 kHz, at 8PM ET (5wpm) daily  
Coastal Carolina Emergency Net: 3908 kHz, 1900 daily  
Carolinas Net (CW): 3573 kHz, 1900 (25 WPM), 2200 (12-15 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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103 Outrigger Rd., New Bern, NC 28562