

New Bern Amateur Radio Club



Volume 25, Issue 3

March, 2002

W4EWN/R

146.610/ 146.010 PL 100 Hz.

444.900 / 449.900 PL 100 Hz.

Website: www2.cconnect.net/newbernarc

View the Newsletter there in color

March Meeting -- Thursday, Mar. 7, 2002

6:30 PM at The Berne Restaurant

Program speaker for March is Ed Valentine, **W2YPM**. Ed will speak about his career as an engineer in the broadcast industry and the many projects he was involved with. An excellent program for all, don't miss it.

Door prize: A 2 meter amplifier, 1 watt in 15 watts out. Perfect for your 2mtr. handheld has been donated by Mac, WA0ZGL.

Something new: Ten minute question & answer session will be included in our monthly meetings regarding Amateur Radio, time permitting.

Dues are due

The roster has been temporarily updated to reflect members who have remitted their 2002 dues.

For now, we are within one of 50%.

As a reminder, the By-laws' provisions indicate that a non-paying member will be dropped from the rolls as of March 1. We have been lax in this area -- but may get mean this year.

Dues for 2002 remain at \$20.00, as they have been for the past 10 years.

If you are in the unpaid 50% --

- 1) bring \$20.00 cash to the March meeting: or,
- 2) mail a check or money order to the Club at: PO Box 12483, New Bern, NC 28561 or,
- 3) mail a check or money order to:
K4VC, 103 Outrigger Rd.,
New Bern, NC 28562.

President's Corner

IRLP (Internet – to – Radio Linking Project) is very interesting.

As scheduled, I attended the Kinston ARC meeting on the 12 of February. Bill, KG4IUA rode shotgun with me. The meeting was held in the Kinston library on Queen Street. The folk from Raleigh put on a very nice slide show and demonstration.

Dave Cameron, VE7LTD takes credit for this new avenue of communicating. He has developed the software and interface package that makes getting on line rather easy and inexpensive. For \$150.00 one can obtain the package from Dave, round up an old computer, load the freeware operating system LINUX, and put all this between a repeater and an Internet connection.

The ARES Angle

The North Carolina Severe Weather Awareness Week & Drill will be from March 11th thru March 17th this year. The drill will be on Wed. March 13th, from 0900-0930 local time. The back-up date is Fri. March 15th, same time. This is an important drill, across the state, to get everyone thinking of the start our spring time severe weather season. Tune into the Skywarn net on Tues., March 12th, for an update.

In taking my own advice from last month's column, I checked out my station for preparedness. Coax and connectors are OK, SWR checked out fine, but a couple of my 7 ah batteries had bit the dust -- this is to be expected after several years' use. They are now replaced, with a 7 ah and a 19 ah battery. Any Radio Shack will be glad to take your old batteries for proper recycling -- do not put them in the trash (but you knew that, didn't you?)

Has anyone in NBARC signed up for the on-line emergency communications classes being offered by ARRL? There are three levels. I would like to hear

This makes for real time worldwide communications. This mode is very user friendly.

Currently, between the coast and Raleigh, the Kinston UHF repeater is the only gateway. It may be that the Carteret County group is pondering using their UHF repeater on-line. Stay tuned.

The demonstration mentioned earlier was impressive. One of the Raleigh operators used his HT to bring up the Kinston UHF machine and had a brief chat with a station in Virginia and a station north of Liverpool in the UK. It was armchair copy.

If you are interested in getting better acquainted with the new mode, go on-line to the web site www.irlp.net.

HAVE FUN – wa0zgl

from someone who has taken them, to find out what they are like and if it is worth doing.

Sometime in April, before our public service event "season" gets started, we will set a time to get together on a Saturday morning to play around with cross-band repeating. There was interest after last month's presentation in getting some hands-on experience. If you have a mobile rig or a handheld which is cross-band capable (generally, if the display will show both the VHF and UHF frequencies at the same time, it is capable) then plan to join us in April for this drill. Date/time to be announced in the next newsletter.

And for now, that's the ARES Angle.
Bruce, **N8UTY**
Craven County EC

see page 3 for the info handout that Bruce gave last month at his talk on **Crossband Repeating**, and two pix taken.

Crossband Repeating

Why use Crossband Repeating?

Simple: it allows the use of a low-power UHF HT, while giving the range and strength of a mobile rig. This permits longer battery life for long activations such as public service or emergencies. It also allows you to get out of a building that is opaque to 2 meter wavelengths, such as the Weather Service office, the New Bern Convention Center, or the Craven County EOC.

Simplex to Simplex

For instance, set the VHF side to 146.49 and the UHF side to 445.900 and configure for cross-band repeat. Example: Tryon Palace event.

Two-way Crossband

Set the UHF side to 445.900 and the VHF side to the 146.61 repeater. When the UHF HT is keyed up, the crossbander will put the signal back out on 146.01, and will then receive the signal coming back on 146.61, sending it back to the UHF HT where it is heard. Example: MS Walk, Neuse River Days. Problem: if the repeater has a long squelch tail, you have to wait before transmitting. Can make it hard to impossible to get in on a busy repeater.

One-Way Crossband

This solves the long-squelch-tail problem. Set the crossband rig to transmit on the repeater input frequency as though it were a simplex frequency; receive the repeater output on the VHF side of the HT. This only works if your HT displays both VHF and UHF frequencies at the same time. (Or you could carry a VHF HT to listen on and a UHF HT to transmit on – you might feel over-radioed, but it would work.)

Full Duplex Crossband

This requires two crossband rigs. One is set to handle the input frequency, the other to handle the output frequency. For instance, set the UHF HT to the 445.70 repeater pair. This is a negative offset, so it transmits on 440.750. and listens on 445.750. One of your crossband rigs is set to listen on 440.750 and transmit on 146.010. The other crossband rig is set to listen on 146.610 and transmit on 445.070. This also solves the squelch tail problem, and if you have

a radio that cannot handle both VHF and UHF simultaneously, or if you are in a location where you cannot receive VHF (New Bern Convention Center), this will work perfectly.



Bruce, **N8UTY**, demonstrating, with an unidentified participant in the photo below.



W2HVX fotos

FINANCIAL REPORT

Feb. 1, 2002 ---- **Feb. 28, 2002**

CHECKING

Balance @ Jan. 30, 2001 \$ 1,484.75

Expenses

02/07	C P & L	\$ 22.32
02/19	Sprint	<u>36.89</u>
	Total	\$ 59.21

SUBTOTAL \$ 1,425.54

Deposits

02/08	\$ 441.00
02/18	<u>120.00</u>
Total	\$ 561.00

Balance @ Mar. 01, 2002 **\$1,986.54**

SAVINGS

Balance @ Mar. 01, 2002 **\$1,134.39**

GRAND TOTAL **\$3,120.93**

Meeting Minutes

7 February 2002

The regular monthly meeting of the New Bern Amateur Radio Club was held on the above date and the meeting was called to order by President Mac Eutsler, WA0ZGL. Usual introductions were made from the floor with 38 signatures on the enclosed roster. Aubrey Haddock, KG4RHJ, joined the club as a new member and was so recognized. Aubrey is a long time New Bern resident who has retired from the telephone company as an electronic engineer.

Mac made several comments with regard to club activities. The first order of business was to install club officers for 2002. All would remain as the previous year with the exception of adding a new Communications Officer, Bruce Arnold, N8UTY. Bruce is also Craven County EC, so both hats are relatively the same size. Mac also discussed the possibility of combining efforts with Carteret County

when it comes time for Field Day. Mac mentioned that Bob Chamberlain, W2HVX, was the committee chairman of the special event activities of the club, that Al Parker, W8UT, is heading up the committee on the monthly newsletter, Dave Sousa, K2CQV, continues to be the program chairman, and Billie Morton, KE4YMA, would continue with conducting the local nets.

The finance report was read by Charlie Gould, K4VC, and approved. Bruce mentioned that the ARRL now is certifying instructors for teaching amateur radio. Tom Hill, KJ4IV, mentioned that he and John Jaskolka, KR4ZJ, had tickets available for the Downeast Hamfest, in Kinston, on Sunday, March 24th.

Mac displayed his 'Sardine Sender', a qrp cw rig that was contained in a real sardine can.

With all business being conducted, the meeting was turned over to Bruce Arnold for a discussion on VHF/UHF crossband transmitter and repeater operations.

The door prize handled by Dave Sousa, was a rain gauge, and the winning ticket was held by Bob Chamberlain. The meeting was adjourned at 8:00pm.

Respectfully submitted by

Raymond A. Hemphill, **W7OPH**, Secretary.

Cruising Report 15 from Rick & Tammy

GEORGETOWN, EXUMA ISLAND, BAHAMAS
21 FEB 2002

Today was the last day of the "code" sessions, a pretty good bunch of people, and tomorrow is the day that all the work pays off. There are about 40 applicants to test in the morning. Not all of them will do the code, but the volunteer examiners are going to have quite a busy day. All in all there will more than likely be about 140 total tests given to all the folks,, up to four tests each.

Since we are sorta talking about radios and that sort of stuff, going to address:

"Emergency communications"

Just why in the heck do we have radios in these damned boats anyway?

If you are a ham radio operator and just want to have something to do ham radio "stuff" you install a system suited for that type of need. Using the keep

it simple stupid mode (my favorite the "kiss" method) simple one or two band antenna, and you can talk to people.

Band choices are going to be somewhat limited, and the selectivity of the antenna is going to determine that pretty much. The range of the system will be somewhat limited due to the radiation pattern of 5 foot being a whole lot different than, say a 23ft whip, or a backstay. But for 'hamming' it should do just fine.

Now if you want to do e-mail, you just complicated matters a bit. The digital portion of the bands does not match the phone bands. In order to do e-mail you just increased your antenna requirement way out of the simple mode, now you have to have more simple antennas, and the ability to change them to do e-mail and then go back to voice (phone). So to have a full compliment of antennas for phone and e-mail you will either have to adjust each antenna element for phone and then digital or get two of all bands.... lets see now, where did I put the 80 meter ham stick that I use for e-mail, or darn, I can not find the 40 meter phone ham stick. But, you say I can always get a "outbacker" sure you can, for 250 bucks, and then you will need two of them, one for phone and one for digital....

But, you say, I am going to use a inverted "V". That is all well and good, but that is a balanced antenna and to use it on other bands it will require a tuner. and that will be a manual type tuner. And the radiated elements of the inverted "V" are going to be right close to all that other "Stuff" sticking in the air. And I really betcha that there is going to be quite a bit of "reactance" to all that steel hangin' in the air!!!!. Will it work on some bands, you betcha, will it work on all, well, sorta, will you be happy with the results, I doubt it. In fact I betcha you are going to hear "say again, over" a whole lot... And that inverted "V" is going to get all beat up, and hit the sails, and just be a complete pain in the ass.

Wait a darned minute, you say you are going to use a long wire, and a tuner. If it is grounded well, it will probably be satisfactory, but it also will slap around and is copper and will turn green, and corrode and probably collapse when you need it, unless you take it up and down all the time to keep out of elements. and it is going to whip around a lot and chafe into stuff that you do not want it to.

Lets go back to the basic question.....Why do I want a radio on the boat anyway!!!!

If you are like a certain Marine in Camp Pendleton, you don't,,,Yo McChuck, you be excused go drink a beer. But if you are like normal people, you got people that (really McChuck, just kidding) count on you, and count on your decisions.

A radio is a large expense, a good one is close to a grand, a radio like we use on "Pelago" cost that much, and we got Two of em!!!. So if you are going to go to the trouble to buy and install a radio, then do it all the way. Get as much out of the radio as you can. This one installation can do more to save a life, than anything else (with the exception of common sense) This radio can get you weather, can get medical help, can get e-mail, can get entertainment and news (cruisers nets and BBC/VOA) It can clear you in to a foreign country....And it can get the USCG if your ass is SINKING!!!!

I really do not want to get in to the argument about "type accepted FCC marine versus a opened up ham radio". I have heard just about every argument and just will not get involved in it.

Here is the channel alignment on "Pelago", and this is on a ICOM 706 MKII G which is not a type accepted marine radio, but will transmit and receive from 1.6mhz to 30 mhz....

- CH#1 2.182mhz international hailing and distress
- CH#2 2.670mhz international hailing and distress
- CH#3 ITU CH 424
4.426mhz(rec) 4.134mhz(transmit)
- CH#4 ITU CH 601
6.501mhz(rec) 6.200mhz(transmit)
- CH#5 ITU CH 816
8.764mhz(rec) 8.240mhz(transmit)
- CH#6 ITU CH 1205
13.089mhz(rec) 12.242mhz(transmit)
- CH#7 ITU CH 1625
17.314mhz(rec) 16.432mhz(transmit)
- CH#8 12.359mhz (SIMPLEX) SOUTHBOUND II
(HERB, WEATHER AND ROUTING
S. ATLANTIC)
- CH#9 6.215mhz (SIMPLEX) SHIP TO SHIP
- CH#10 8.152mhz (SIMPLEX) SHIP TO SHIP
- CH#11 4.003mhz (SIMPLEX) SHIP TO SHIP
- CH#12 to CH360 filled with all kinds of stuff, from weather to BBC to Voice of the Netherlands.

This is only a partial list in as much as nearly 60 channels are dedicated to memory. The first seven channels are all USCG monitored channels and are the, "Come and get my ass, I am sinking"

frequencies the the USCG monitors 24/7. And, they are labeled as to the correct usage and description in the memory circuits. The system is simple, direct, and it works. Every pre-programmed channel or frequency is a touch of a button away, and the automatic tuner loads and tunes the backstay to each and every freq.

Today we did a actual test of the radiated freq on 7.268 mhz on the backstay with the tuner, and a comparison test using a Ham stick for forty meters (I have a couple of ham stick antennas for emergency backup only) The first was to a ham station in the pan handle of Fl I was about 8db over S-9 (good!) with the back stay and a S-2-3 signal with the ham stick and it was quite noticeable on the receive here on the boat...But the ham stick did work, would I ever even consider using it as a primary, no way... The other test was to a friend in NC backstay was solid S-9 (good!) the ham stick was S-1. The conditions at the time were marginal at best, propagation was just not all that good, but then again that is a pretty good time to do a test of something that could just save your life.

In conclusion, I guess that anyone that reads this and is thinking of a radio for the boat is going to have to ask the question, "Just why am I putting a radio on the boat, just for fun and occasional ham radio stuff, or am I putting it on the boat as a communication asset and I want to get as much bang for my dollar as I can." Or put it this way, you are between St. Petersburg and Isla Mujeres (common cruising grounds) your spouse falls down and has a compound fracture of the left arm, there is no pulse below the break, blood loss is large. Get out the ham stick and try to reach someone, or go to channel #6 and say "mayday, Mayday, Mayday, medical emergency" and actually talk to someone.....

Well, ham tests are now over, have to say that I am real proud of the whole class, had 100% of the "every day go to class bunch" pass, and only one failure and that was a French Canadian that missed three weeks of class.... And there was no doubt that any one of 'em passed. They did it with 100% copy from start to finish!!!!

73, Rick, **WB6LNH**

aboard s/v Pelago in the Bahamas

I'm sorry there was not space to include their report #14 on Spear Fishing - maybe next mo. ed.

(if you want to get in touch with them while they're away, email to **wb6lnh@winlink.org**, but keep it in text only, as they get their mail via ham radio and long msgs & attachments take forever to download.)

for some of their activities and a pic of Pelago, see: <http://www.ornot.com/regatta/index.shtml>

Upcoming Hamfests

Mar 9-10, Charlotte, NC Mecklenburg ARS
<http://www.w4bfb.org> or email Tom Hunt,
KA3VVJ hamfest@w4bfb.org

Mar 24, Kinston, NC, Down East Hamfest
Association, Doug Burt, **W4OFO** Email:
jeanhd@icomnet.com - or see Tom Hill, **KJ4IV**,
or John Jaskolka, **KR4ZJ**, for tickets.

coming soon;

April 14, Raleigh, North Carolina State
Convention <http://www.rars.org/hamfest>
Details next month

See the latest QST or <http://www.arrl.org>

Upcoming Operating Events

Mar. 2-3 ARRL International DX Contest--
Phone, 0000Z Mar 2-2400Z Mar 3; see Dec QST, p
113.

Mar 25 Spring QRP Homebrewer Sprint--CW
and PSK31, sponsored by New Jersey QRP Club
from 0000Z-0400Z Mar 25.
[http://www.njqrp.org/qhbsprint/Fall2001/qrphomebr
ewersprint.html](http://www.njqrp.org/qhbsprint/Fall2001/qrphomebr
ewersprint.html)

Mar. 30-31 CQ WW SSB WPX Contest--SSB,
sponsored by CQ Magazine, from 0000Z Mar 30-
2400Z Mar 31 <http://home.woh.rr.com/wpx/>

Feb. 23-25 Russian DX Contest, CW and SSB,
from 1200Z Mar 16-1200Z Mar 17.
<http://www.rdx.org/>

For further info on all above items, see the latest
QST magazine or ARRL website:
<http://www.arrl.org>

Tower available, free - if you are interested, there is a light duty tower, about 40 ft tall, with hinged base, available for the taking down. Located in New Bern, for info, contact Al, **W8UT**, 636-0837, or Ken, **K4KDM**, 638-5283

SWAP SHOP

FOR SALE: Johnson UHF/2F/PL 4 watt Talkie, remote mike, hvy duty chgr, 25 extra xtals. \$125 or best offer. Steve, W9MMD, fone 637-7330

WANTED 2 Motorola Startac cell phones - buy outright, no service, or trade + \$ for talkies. Steve, W9MMD, fone 637-7330

WANTED: High impedance mobile mike, i.e. Shure 440, Astatic 531. In working condition.

Telegraph keys, bugs, paddles & keyers.

Contact, **Dave K2CQV**, 636-1548, email k2cq-v-di@coastalnet.com

WANTED: Will Buy -- Old tube-type ham equipment or test gear -- working or even preferably not working. Will buy tubes & parts for use in getting & keeping things going. Will help anyone who wants to get tube type equipment working and on the air (I work free, or for junk).

Al, W8UT anchor@ec.rr.com or 636-0837

Cast of Characters:

President: Mac Eutsler, **WA0ZGL**

Vice President: Pete Koonce, **KA4SXX**

Secretary: Ray Hemphill, **W7OPH**

Treasurer: Charlie Gould, **K4VC**

Communications Officer: Bruce Arnold, **N8UTY**

Trustee: Tommie Phelps, **WA4EME**

Assistant Secretary: Doug Whitford, **KF4YHG**

Assistant Treasurer: Ralph Bitely, **N3XID**

Program Chairman: David Sousa, **K2CQV**

Public Service/Photog: Bob Chamberlain, **W2HVX**

Emergency Communications: Bruce Arnold, **N8UTY**

Assistant E. Comm.: Dave Warwick, **KB4EBT**

VE TEST SESSIONS

Morehead City, NC -- third Saturday of odd months.

Contact, Mac, **WA0ZGL**, at 252-447-8338, or wa0zgl@coastalnet.com.

New Bern, NC -- third Saturday of even months, except December. Contact Charlie, **K4VC**, at 252-633-3178, or k4vc@arrl.net.

Jacksonville, NC -- all eve. sessions, last Tuesday of each month with the exceptions of June, July and August. Contact Tom Hill, **KJ4IV**, at 910-326-4536, or tomhill@gibraltar.net.

There have been several recent inquiries as to how to change the FCC database re your personal information. The most common question is how to change your address.

The confusion results from the changes relative to Form 605. In the past, 605 was a multi-purpose form. The same form was used by amateurs to make license modifications, as well as by the VEs in testing.

The FCC concluded that the 605 should be used all across the radio spectrum and it is now so used; commercial, mobile, maritime, broadcasting, amateur, etc. However, it is not used in the amateur testing service. Rather, a new form, NCV605, is used only in testing, not in general license modification.

Currently, for example, to change your amateur license address, you can:

- a) ask the ARRL to do it for you, if you are a member.
- b) change it yourself, at www.fcc.gov, if you have internet access,
- c) get a hard copy of form 605 and its six pages of instructions, by calling the FCC Forms Distribution Center at 1-800-418-3676.

73,

Charlie, **K4VC@arrl.net**

The Newsletter Team:

Al Parker, **W8UT**, Editor

Charlie Gould, **K4VC**, Data Base/Labels/P.O.mail

The NBARC Newsletter is the newsletter of the New Bern Amateur Radio Club, Inc., PO Box 12483 New Bern, NC 28561. NBARC is an affiliated club with the ARRL and ARES

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 or fone 636-0837

Selected Local Nets

Club Net Manager: Billie Morton, **KE4YMA**

Craven County ARES: 146.61 MHz, 2000 before threatening wx; monitor during ARES activations

Waterway Radio Cruising Club: 7268 kHz, 0745 daily

NC Morning Net: 3927 kHz, 0745 daily

Carolina Slow Net (CW): 3685kHz, 2000 (5-7 wpm) daily

Coastal Carolina Emergency Net: 3907 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

NBARC Traffic: 146.61 mHz, 2000 Tuesdays (suspended)

Skywarn: 145.21 mHz, 2100 Tuesdays

ENC Emergency: 146.685 mHz, 2100 Thursdays

ENC Traffic: 146.685 mHz, 2030 daily

NBARC Ragchew: 146.61 mHz, daily, after ENC Traffic closes

New Bern Amateur Radio Club

W4EWN/R

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444.900 / 449.900 PL 100 Hz.

Website: www2.cconnect.net/newbernarc

View the Newsletter there in color

March Meeting -- Thursday, Mar. 7, 2002

6:30 PM at The Berne Restaurant

New Bern Amateur Radio Club, Inc.,

PO Box 12483

New Bern, NC 28561