



BARA

Facts

Newsletter of the Binghamton Amateur Radio Association

April 2008

Website: <http://w2ow.org> OR <http://www.wtstn.binghamton.edu/bara>

The President's Corner

My last article mentioned our increasingly technological and "wireless" surroundings. In fact, the number of radio signals being added to our environment is increasing at a staggering rate, with cell phones, wireless internet points, cheap radio-controlled toys and what-have-you becoming commonplace. Certainly this is of interest and concern to our hobby!

Among amateur and shortwave radio enthusiasts, one of the most talked about concerns these last few years has been the introduction of BPL, or broadband over power lines. For those of you who aren't already aware, BPL is a brainchild of the power industry, and is a method which is supplying high-speed internet access through power lines, primarily targeted at those in rural areas beyond phone and cable-TV access. The problem, as any of you who understand the rudiments of radio propagation will quickly gather, is that power lines, being unshielded, are basically HUMONGOUS LONGWIRE ANTENNAS! What's worse (especially for hams, but also emergency services that rely on long-distance radio contact such as the Red Cross), BPL utilizes the shortwave spectrum.

For those of you who are new to this subject, I'd like to bring you up to speed on this important development. For those of you who have been following the controversy, I'll bring you up to date on the latest developments.

Luckily for us, BPL is not in use by any utilities in our region. As a matter of fact, it is used far more commonly in Europe than in the U.S.* But when it was rolled out experimentally around the year 2000, several amateur radio groups (most notably the ARRL) began a thorough analysis of the potential threat to the airwaves. It was immediately obvious that close proximity to BPL components indeed led to interference problems on shortwave. Utility companies responded by

using filters to block their signals from propagating on particular bands that were reportedly causing interference.

With proper filtering in place, it appears that BPL does not constitute the interference threat that was once feared. A 2001 joint study by the ARRL and HomePlug powerline alliance (see Citation) concluded that "moderate separation of one's antenna from BPL devices rendered interference 'barely perceptible'". The ARRL still considers BPL a threat to the shortwave spectrum, however, and continues to lobby against its use. As recently as this past October the ARRL was in the U.S. Court of Appeals facing the Federal Communications Commission over their perceived lack of properly regulating the technology, but the FCC does occasionally go after utilities which flagrantly ignore major interference issues associated with their BPL systems. The ARRL maintains a web page at <http://www.arrl.org/tis/info/HTML/plc/> which details the latest on this controversy.

If BPL were to be rolled out far more widely I might be concerned about more interference, but for the time being technological hurdles and cost issues appear to render that prospect unlikely any time soon. Even still, I recommend (if you don't already) that you support the ARRL, as these folks appear to be the only serious voice raising legitimate concerns over the potential of BPL to seriously pollute the shortwave spectrum. — 73! allen lutins, KC2KLC

**For those who are interested — the technical reason that BPL is more common in Europe than in the U.S.: BPL doesn't transmit well through transformers (due to high impedance), so each transformer in the line requires a small repeater to be installed to boost the BPL signal. In the U.S. there are small transformers at the pole for every few houses (and often for each individual house), while in Europe transformers*

generally serve far more (tens or hundreds) of dwellings at a time. It is therefore more cost-effective to roll out BPL in Europe because of the need for far fewer repeaters.

For further details, see HomePlug & ARRL Joint Test Report, January 24, 2001 available Online at http://www.arrl.org/tis/info/HTML/plc/files/HomePlug_ARRL_Dec_2000.pdf

Keep a Cool Head and Hug a Tree

How to use a compass — Sounds like an “old” thing we learned so many years ago. The new technology makes a compass *passé*. Hmm, think again. Last December, the *Portland Press Herald* ran an article titled *How to use a compass, and take it with you*. I found it interesting both as a refresher and a reminder of items and actions necessary to assure a safe venture. So often we hear of a person having a “GO KIT” but leaves it in the other car or decides it’s not necessary to take some “stuff” on a short trip in unfamiliar woods. From my personal experiences I’ve learned the hard way how easy it is to screw up. More about that some other time. Even though the story references Maine, the state of, the lesson is applicable to anywhere. Now a number of excerpts from the article by Bob Humphrey.

“Getting lost is a tragedy [*at the least an embarrassment - GHH*] that involves far more than just the victim. Worried families sit at home anxiously awaiting some news. Hundreds of hours and thousands of dollars are spent on search-and-rescue efforts. If you don’t want to be the cause of all that grief, there’s a lot you can and should do. The first step is to keep yourself from getting lost. However, if you do, you should know how to stay alive until you’re found, and how you can make being found easier. A couple of things stood out to me about that lost Vermonter. First, news releases referenced several times that he had a GPS unit with him, but never mentioned if he had a compass. A GPS unit is a great tool for finding your way around, but should always be considered secondary or supplementary.

“Never, ever venture into the woods without a compass. First, because they’re small, light and take up little space, you’re far more likely to carry one. Second, they don’t run on batteries, which can go dead. Third, they’re simple, and far easier to use than a GPS. In fact, a GPS without a compass is of limited value, particularly if you get lost. Never doubt your compass, either. Compasses rarely fail. If you think yours is wrong, simply take out your spare and check it — a

dozen compasses weigh less and take up less space than one GPS. (It should go without saying, but make sure you know how to use your compass.)

“You can also tell direction with a conventional wristwatch if the sun’s out. Orient the watch so the hour hand is pointed toward the sun. Halfway between the hour hand and 12 O’clock is due south. The second thing that stood out was the hunter’s admission that he had a survival kit but left it in his truck because he didn’t expect to be in the woods overnight. No one does. But I’ll bet if you did some research on lost hunters, you’d find those who have a survival kit are far more likely to be found alive and safe. Anyone who’s taken the Maine hunter safety course already knows the contents of a rudimentary survival kit. Each student must bring one to class in order to pass. At the very least, every time you go in the woods you should carry a compass, spare knife, waterproof matches (or fire starter), whistle, emergency fire starter and any necessary personal medicine. There’s plenty more you can carry. A flashlight will help you find your way in the dark. [*A head lamp is ideal — GHH*] You can use rope or twine to fashion a shelter. [*A packet of floss, small and strong. — GHH*] A space blanket will help keep you warm, and to a certain extent, dry. And a plastic garbage bag makes an acceptable raincoat substitute in a pinch. It’s also a good idea to let someone else know where you’re going and when you’ll return. The smaller the potential search area, the better your odds of being found. Your chances of being found are also better if you stay put. It’s quite common for someone who is lost to panic and begin running. This causes them to sweat, dramatically increasing the risk of hypothermia — a wet body loses heat much faster than a dry one. Extreme body heat caused by exertion also leads people to take off their protective outerwear, and sometimes more. It’s quite common for rescuers to find their victims in some state of undress, soaked in sweat and scratched from head to toe. There are exceptions to staying put. An easy-to-remember guideline is: find a place, show your face. If you can find a high point or open space where you can be seen from the air, without getting yourself lost further, by all means get there. [*Learn how to use a signal mirror - a CD will work as a substitute — GHH*] If you remembered your survival kit, you can also build a fire. [*Carry three methods of making fire: water proof matches; flint kit; road flare — GHH*] Flames will show up at night and smoke can be seen during the day. You really should sit tight, but if you insist on trying to find your own way out, there are

a few things to keep in mind. Even the most remote parts of Maine [*state of, maybe parts of town of — GHH*] usually have some type of woods roads. These roads were made as heavy equipment pushed deeper into the woods. As a result, trees pushed over on the roadside will lean away from the way out. Where smaller roads intersect larger roads, the “V” of the intersection points the direction out. Also, brooks flow into

larger streams, then to rivers and ultimately to the ocean. Fortunately, you usually don't have to go that far before encountering civilization. Perhaps the most important thing is to keep your head. As noted above, panicking will only make things worse, and could get you killed. Take your time and think out your actions. Being slow and deliberate helps you make better decisions and take better actions. Sit still and listen for rescuers. Hunters can use guns to signal — three shots means ‘I need help’. If you run out of bullets, use an empty shell casing as a whistle; or simply holler. Low-frequency sound travels much farther in the woods. Hopefully, you'll never experience being lost. At best, it's a tremendous embarrassment. At worst, you could lose your life. Still, if I ever get really, really turned around, I'd rather be red than dead.” — *via our Good Friend, Jack, WB2GHH*

MS Walk — Communicators Needed

Ford, AB2HS, reminds us that the annual MS Walk will be held in Binghamton on Sunday, May 4th. Our help with this event is always appreciated and if you have never been involved in Public Service Communications for an event, this is a relatively low-stress way of becoming involved.

The Walk does not take all day, so everyone should be home with time to spare for other activities and equipment requirements are minimal.

Please contact Ford Drake, AB2HS, if you are willing to assist.

Annual SKYWARN Training Our April Program

Jack, WB2GHH, informs us that our April Program will be the annual Summer Training for SKYWARN Spotters. Please join us at the General Meeting for this always-useful and ever-informative session presented by the National Weather Service. Those of us who have attended past sessions can attest to the fact that there is always something new to learn and that the images and videos often represent memorable weather events from the past twelve months.

The program is open to Members, Family, Friends, and Any Interested Parties. Why not bring along a “Doubting Thomas” who questions the relevance of Amateur Radio in these Internet Times so that they can learn how we assist the National Weather Service with real-time on-the-ground reports.

Remember, Wednesday, 16 April at 7:30 PM at the Town of Binghamton Hall. Be there for our SKYWARN Training Session!

BARA Hamfest May Third

Remember that Marvin Park in Owego (the Tioga County Fairgrounds) is the place to be on Saturday, May Third as we conduct the annual BARA Hamfest! Help is needed at all levels and we ask all members to help out with an hour or so of time for Hamfest Setup, Execution, and Teardown.

We will begin Setup around Noon on Friday the Second at the 4-H Building as we begin setup. Bring a broom and work gloves and remember: The More the Merrier! Besides sweeping out the building and moving Picnic Tables, we will also set up the PA System and prepare for the Hamfest.

On Saturday we need help with Ticket Sales, Traffic Direction, Announcements, and many other tasks. An hour here will make things easier for everyone working the Hamfest, but we need you to sign up now.

After Noon when the final prize is drawn we will tear down. It goes quickly if everyone pitches in and with plenty of help we will wrap up plenty soon.

Come to the April General Meeting for additional details and to sign up for your slot!

Empire State Games

July will soon be here and plenty of help will be needed for the 2008 Empire State Games. Mel, WE2K, is organizing the Ham Radio end of the Games and it is estimated that about 120 Communicators will be needed. If you are interested, please see the application on our Website <<<http://w20w.org>>>.

Of the many reasons for having the Games in Binghamton again, we understand that the range of available Facilities, the Friendly Local People, and the Available Accommodations are all points in “Our” favor.

Sign up early, sign up now and help with the Games! Filling the roster early helps the planners to assure that shift coverage is reasonable and that there are no holes in the Communications Coverage.

Binghamton Amateur Radio Association, Inc.
P.O. Box 853
Binghamton, New York 13902

First Class

Club Officers and Committees			
President	allen lutins	kc2klc	729-4817
Vice President	Jack Connors	WB2GHH	724-8822
Secretary	Don Pierce	AB2HT	
Treasurer	Paul Slocum	N2NCB	687-2057
Directors	John Carrington	WB2SGS	648-8364
	Warren Marks	KC2NGR	648-6840
	Bill Jaker	WB8RAE	785-5361
	John Rudy	WB2FQZ	669-4308
W2OW Trustee	Mel Snitchler	WE2K	723-9612
Newsletter	Ed Plesnar	KB2SCF	754-3810

Next General Meeting
7:30 PM, Wednesday, April 16th
Town of Binghamton Town Hall, 279 Park Avenue, South of the
Ross Park Entrance

Board Meeting
7:00 PM, Wednesday May 7th
Broome Community College Campus, Office of Emergency
Services (West Side of Campus)

Exam Session
7:00 PM Monday, April 28th
Vestal Public Library, Route 434 Vestal

BARA Dues
\$18/year Single Member; \$27/year Family

DX Cluster
W2OW on 145.070 MHz with a Data Rate of 1,200 baud;
questions to n2bc@stny.rr.com

Local Repeater Nets
146.73 MHz STAR Net (NTS Feeder) Every
Evening at 6:30 PM Local Time
146.82 MHz BRAT Net (Informal BARA) Sunday Evening at
8:00 PM Local Time



BARA, The Binghamton Amateur Radio Association is an ARRL Affiliated Club

e-Mail Address: w2ow@arrl.net



Our Printing Sponsor: Unicorn Electronics, Valley Plaza Drive, Johnson City, NY