



Newsletter of the Binghamton Amateur Radio Association August 2003

Website: http://www.wtsn.binghamton.edu/bara

### **BARA Picnic**

Don't forget: The August General Meeting will be our annual picnic, so come to the picnic on the 20th and not to the Church. This year we will meet at the Ross Park Picnic Pavilion beginning at 5:00 PM on 20 August.

As is our custom we will begin the event with a "Tailgate Fest". Bring your Extras & Treasures and be ready to Wheel & Deal in the parking lot. Because of the limited space in the parking area there will probably not be enough room for "flea market" tables so we ask anyone who is planning to tailgate to park near the pavilion and to open their trunk with the goodies inside.

There are tables and benches for the feast under the pavilion, so it won't be necessary to bring tables and your own chairs as in prior years. BARA will provide meats & drinks while everyone is invited to bring a dish or dessert to pass.

Come early and bring your family. Invite a friend to meet our club. Call some less active or former members and invite them to join us for a good time. The carousel and zoo will be open for their regular hours and will be closing down around the time our fun starts, so if you bring the kids early in the afternoon they may be ready to "decompress" on the swings by five as our party gets underway!

### **BARA Elections**

At our November General Meeting we will conduct the annual election of Club Officers and Directors. Consider this a first call to anyone interested in serving and an invitation to each member to seriously consider taking a term as either an Officer

Members have suggested a number of sites and many have been "surveyed". Some locations were eliminated quickly because of the lack of access (for anyone except Ron, AA2EQ) or because of the lack of commercial power coupled with other undesirable or a Board Member.

The duties are not difficult and it is a chance for you to participate in making BARA the best Radio Club possible. Our Club has members with diverse interests and abilities and — speaking for the current group of Officers and Directors — we strive to make the Club attractive to you, however we can't do this on our own. Your input and your participation are needed and one of the most significant ways you can participate is to join the team.

I'll go out on a limb again and speak again for the Team by noting that many of them have been serving as Officers or Directors for several years now (with perhaps an occasional year off). Let's be blunt, they are dedicated, but sometimes they serve because nobody else is willing to step up to the job. Their generosity with their time keeps Our Club going, but it's not fair to expect them to "always be there".

Please give the matter some thought. If you are interested, please see Jack, WB2GHH, who will coordinate the elections.

## Shack Search Update

At the July General Meeting our Vice President Jack, WB2GHH, gave a summary of our Club's efforts to locate a new Shack Site. Some members had been wondering what was happening and Jack wanted to make sure everyone knew that the search was moving forward.

features. Serious consideration has been given to other locations and the owners have been approached about the possibility of a purchase or easement for use of the property. Some owners have no interest, so there is no reason to proceed further and sometimes the owner has interest with more zeros than BARA can support. We have written to the owners of one property through a lawyer (and paid for this service) because although the site is ideal, it was difficult to locate all of the owners. We have no further news on this site. We also had a strong possibility in the form of a property owned by a local Shooting Club, but this came to an impasse because the Shooting Club wanted access for Dog Trials and Horse Trials that would have absolutely precluded any form of Guy Wires or Radial Fields.

Since none of these investigations have come anywhere near the point where a serious investigation and offer by the Club would be under consideration there has been nothing much to report at the General Meetings. All members are invited to bring suitable sites to the attention of Ron, AA2EQ; the Officers; and Directors. Your assistance is welcome and needed and any member is free to attend the Board Meetings where ideas and suggestions are "hashed out".

Thanks also to Jack, WB2GHH; Ron, AA2EQ; Mel, WE2K; Ron, N2RWK; and all the other members who have assisted in the search thus far.

## Jane Barbe, SK

On Tuesday, 22 July a familiar and comforting voice went silent. Jane Barbe, the voice of WWVH and of many standard telecommunications announcements passed away at age 74 from complications due to cancer.

Born in Florida and raised in Georgia, Jane began recording the announcements in 1963. She continued to work until February of this year. By some estimates Jane's voice is heard in over 90% of the recordings announcing a problem on telephone lines and 60% of telephone Time and Temperature announcements. From the Western Hemisphere to Hong Kong, Saudi Arabia, and beyond Jane was the calm voice that informed millions of telephone users as well as the authoritative voice of WWVH. — *Compiled from materials in a report of Ed Sharpe in the Tempe Boatanchors Digest, the Associated Press, and the ETC Web Page.* 

### W2OW DXCluster

At our July General Meeting the Club authorized the expenditure of funds for DXCluster Software and the use of Club Equipment to establish an Internet Link to the DXClusters. Bill, N2BC, has been arranging this experiment which is in the initial test phase now. At present the Internet Link for the W2OW DXCluster is up and running for testing on 145.070 MHz (1200 baud) and is located at Bill's house. Aim your antennas to Southwest Vestal and give it a try.

Bill is still "tuning" the system parameters and he notes that there may be interruptions as he plays with configurations and adds a second RF port. He is also looking for recommendations from the local packet users on the "best" frequencies to use (where "best" is defined as having a potential to link/digi to other nodes on frequency without undue collisions).

This DXCluster is fed via the Internet from a member of the YCCC group and Bill notes that there have been an average of 3,000 spots/day over the last week or so!

Once the system is established and working it will be moved to a location with better RF Coverage. Comments, questions, and suggestions can be directed to Bill on the cluster (via SP N2BC) or by email to n2bc@stny.rr.com.

# Four Long Dashes

In the mind of most people the prosign SOS is the beginning of a distress call and the warning signal of disaster. The reality is a bit different because a Morse Code Distress Signal begins (or began, for we seem to be in the post-morse age on the High Seas) three minutes before the first SOS is sent. Three minutes that alerted ship and shore stations by setting in motion a most remarkable and almost forgotten piece of electro-mechanical automation the Autoalarm.

The Titanic Disaster and other early examples of peril at sea demonstrated that radio assistance could mean the difference between death and life for the survivors of a wreck and pointed out the need for skilled operators on duty twenty-four hours a day and seven days a week. The responsibility was great and the skills required were of a high order. By international agreements the 600-meter wave (500 kHz) was set aside as a common calling and working frequency. Ship and Shore Stations were required to monitor the 600-meter wave and any and station in need of assistance could be assured of a response from another station within range. As traffic increased, however, the activity on 600-meters threatened to swamp the signal of a station in distress (and perhaps running reduced power) in a confusion of signals. To alleviate this problem the international regulations decreed two Silent Periods (15-18 minutes and 45-48 minutes after the hour) During

these periods only distress communications were permitted, all other stations were required to listen. A further refinement was the requirement that all Distress Communications use A2 Modulation

Although Modulated CW is less efficient than true CW it has the advantage of being broad-banded (useful if the receiver is slightly mis-tuned) and it can be demodulated by any receiver— including a simple Crystal Set. It is interesting, in fact, to note that the international regulations for many years (even up to and past the Second World War) required that a crystal receiver be available as a backup to the main receivers for shipboard stations. While true CW cannot be easily received on a Crystal Set, Modulated CW presents no problems and can be heard using the most primitive emergency equipment.

Although 600-Meters and the Silent Period convention bought order and procedure to the airwaves and although the A2 mode reduced receiving technology requirements to the simplest, these conventions were procedural and did nothing to alleviate the need for skilled radiotelegraph operators listening for the faint rasp of a distress signal. A more complete solution was found by melding existing telegraph technology with the new medium of radio and the adaptation of "selective calling" on a telegraph line to wireless: Four long dashes would literally send a message heard throughout the world.

Four dashes of four seconds separated by spaces of one second became the general call that activated a primitive piece of electro-mechanical automation called the Autoalarm. On every ship that was required to carry Radio Equipment a special Autoalarm Receiver was installed and the Radio Operator was required to set the Autoalarm whenever the Radio Room was unmanned. The receiver was permanently tuned to the 600 Meter wave and the silent sentinel stood watch whenever no Operator was on duty. As signals came in relays and timing equipment would count and analyze the sifting content. the pulses through an electromagnetic sieve to distinguish atmospheric static and heterodynes from normal 600-meter calls from the four dashes that signaled distress. If Four Long Dashes were detected relays would latch, lamps would illuminate, and bells would ring in the Radio Room, on the Bridge, and in the Radio Operator's Cabin. The alarms would continue until (Modulated CW, where the carrier is modulated by an audio frequency similar to the technique used for many Repeater IDs).

deactivated in the Radio Room by the Radio Operator.

The system provided a prefix to the actual distress traffic. An operator leaving the Radio Shack unattended would set the Autoalarm certain that a distress call would trigger the system. An operator on a ship in distress could be certain that signaling distress with the Autoalarm Dashes would wake every ship within hearing. To assist the process the Radio Room clock was marked with lines and spaces beginning at "12". Five seconds on, one second off. For one full minute the ship in distress would send the long dashes - twelve in all - Only four dashes were required to activate the Autoalarm, but twelve were sent to assure at least one set of four would be received. Then the operator would wait (if possible) for two long minutes — an eternity of worry — to give operators at receiving stations time to get to their sets.

As Autoalarms triggered, 600-meters would go into an extended Silent Period and would remain in that state until the Controlling Station for the Distress Call ended the Silent Period. Operators would leap to their receivers and listen carefully as the ship in distress began to send a message prefixed with SOS. Each operator would copy the message, log it, and be ready to respond. Their replies would also be prefixed with SOS because the prosign signifies not simply a "Distress Message", but rather any traffic associated with distress. During the Extended Silent Period only traffic with the SOS Prefix could be legitimately transmitted.

Some other features of CW Distress Traffic are worth mentioning.

After the Autoalarm Dashes are sent and the operator on the Ship in Distress begins to establish contact a long (ten second) dash is sent to permit receiving stations to activate Radio Direction Finding equipment. Likewise, Shipboard Telegraph Keys or Transmitters are equipped with Shorting Switches. The last action of the Operator before abandoning ship is to close the switch and effectively go Key Down so that rescue craft can home in on the signal so long as the transmitter continues in operation. On the receiving end there are often two receivers: One tuned to 500 kHz (600-meters), the other tuned about 500 Hz off frequency to allow reception even if the transmitting station is zero-beat with the receiver. — *Compiled from various sources including an extensive summary by Jeffery Herman found* at <<http://webhome.idirect.com/~jproc/radiostor/cw500 pt2.html>>

## September Reminder

Remember that the BARA Program for September will be "Junkyard Wars". We want to make this a fun event and just about anything goes. Team projects are welcome and can include projects created with a son, daughter, friend, or anyone else. You don't need to be a BARA Member (or even a Ham) to join the fun and we hope to see many interesting creations in September!

| Club Officers and Committees |                |        |          |
|------------------------------|----------------|--------|----------|
| President                    | Bob McCabe     | KC2DSS | 748-9808 |
| Vice<br>President            | Jack Connors   | WB2GHH | 724-8822 |
| Secretary                    | Ron Regan      | N2RWK  | 722-6790 |
| Treasurer                    | Paul Slocum    | N2NCB  | 687-2057 |
| Directors                    | Bob Handel     | K2FU   | 693-4310 |
|                              | Steve Orzelek  | N2MSB  | 775-0281 |
|                              | Ed Plesnar     | KB2SCF | 754-3810 |
|                              | Mel Snitchler  | WE2K   | 723-9612 |
| W2OW<br>Trustee              | Frank Scoblick | N2HR   | 729-4249 |
| Newsletter                   | Ed Plesnar     | KB2SCF | 754-3810 |

BARA, The Binghamton Amateur Radio Association is



an ARRL Affiliated Club

# Next General Meeting

7:30 PM, Wednesday, August 20th Ross Park Picnic Pavilion (South Washington Street to Morgan Road)

## **Board Meeting**

7:00 PM, Wednesday September 3rd Broome Community College Campus, Office of Emergency Services (West Side of Campus)

## **Exam Session**

7:00 PM Monday, August 25th Vestal Public Library, Route 434 Vestal 1:30 PM, Saturday September 13th Endicott Fire Station, Across from UE High School

# **BARA** Dues

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