

November 2011



The Standing Wave

The monthly newsletter of the Hiawatha Amateur Radio Association of Marquette, Michigan. Comments and suggestions can be sent to the club at P.O. Box 1183, Marquette, Mi 49855 or to the editor at ki8af@arrl.net Club info, membership, dues, etc can be found on our website at www.qsl.net/k8lod

MONTHLY MEETING: Marquette County Health Department Bldg., Lower Level, Negaunee Township.
Date: **November 3, 2011**
Time: 7:30 PM

CLUB OFFICERS, 2011

Pres. Lou Gembolis KG8NK
VP: Lane Dawson WD8PAJ
Sec. Mike Beltz KD8JIR
Tres. Fred Mouser KD8JIP
Board Members:
Past Pres. Paul Racine KB0P
EC Rich Schwenke N8GBA
Eric Pellinen N8TEV

STANDING WAVE

Editor, Greg KI8AF
Publishing, Lane WD8PAJ
Distribution, Greg KI8AF

REPEATERS

KG8YT, 147.270 / .870 with 100 Hz PL-Tone Marquette
K8LOD, 146.910 / .310 Ishp.
N8RRZ, 146.640 / .040 Gwinn with 100 Hz PL-tone
K8LOD-3.144.390 APRS Digi Mqt

WHAT'S NEXT FOR US

Christmas Party

Annual HARA Christmas Party/Dinner

It's close at hand. That is our annual Christmas Party/dinner. Plans are well underway to have an even more successful get together than we had last year. Getting the word out early and early RSVP's will help. Plans are to hold the event on the first Thursday of December, that being December 1st. We will once again have a couple of great door prizes, one drawing for all the paid up (2012 dues) membership attending and one for a paid up (2012 dues) student (thru 12 grade) and is a licensed amateur radio operator. More information will be forwarded soon but in the meantime contact Lane WD8PAJ at laned@chartermi.net or 486-8697.

HARA Monthly Meeting Program

The program at the November 3, 2011 meeting will be about EchoLink. Paul KB0P will teach us all there is to know about EchoLink so you can enjoy another facet of amateur radio.

HARA Dues are due

Attend the November 3, 2011, enjoy the EchoLink program and remember to pay your 2012 annual dues if you haven't already. Then you can attend the Christmas party and have a chance at winning a great door prize.

V.E. TESTING:

12/10 **Marquette:** 8:30am eastern time, (arrive by 8:00am) Marquette County Health Dept. Bldg, U.S. 41 just east of the Michigan State Police Post. Contact Rich Schwenke, N8GBA at 906 249-3837 or e-mail: n8gba@chartermi.net

Jan **Hancock:** 9:00am eastern time, ZION LUTHERAN CHURCH, 400 INGOT STREET, HANCOCK, MI
Ingot street is located across from the Quincy hill lookout, just north of Hancock...
Contact: Glenn Ekdahl, WA8QNF at (906) 482-7743 if you have questions

11/05 **Iron Mountain:** 9:00am central time, (arrive by 8:30am) Dickinson County Library (conference room), contact Mark J. Lewis N8UKD (906) 776-1553, 412 Fairmount St. Kingsford, MI 49802

Jan **Gladstone:** Delta County Amateur Radio Society Time: 10:00AM (Walk-ins welcome) Contact: Dave Palmgren - N8DP, n8dp@dcars.org, (906) 428-2271 VEC: ARRL/VEC Location: Gladstone City Hall Main Meeting Room 1100 Delta Ave. Gladstone, MI 49837

Please arrive one-half hour early for test sessions to give time to process applications. Testing applicants should bring the following items with them: Two pieces of I.D. one being a photo I.D., Original license and one clear copy of their license if applicable, Completed form 605 (one will be provided if you don't have one), pencils, calculator and the test fee of \$15.00. Please have the correct fee as examiners do not carry change. *Please contact the individual(s) listed to confirm date(s), location(s), etc.*

Birthday Wishes

The "Birthday Wishes" column is now back by request. If you notice an error or your birthday is missed please advise the editor. Birthday Wishes for the month of November go to: Lee KD8BJC, Debra KC8ULA, Pete K8PT, Lou KG8NK, John W8AT, Blaine KD7HOH, Nicholas KD8LMV and Don KB8PEL.

What's Your Favorite Ham Website?

Check out this little Dual Band HT and at a great price.

<http://www.maintradingcompany.com/cart/MTC-UV-X4-Dual-Band-Pocket-Portable-Radio-Black-Free-Shipping%2521.300?sort=featured&layout=list>

See Paul's review of the UV-X4 in this issue of the *Standing Wave*.

Here is a site recommended by Pete K8PT <http://n1eu.com/>

Hiawatha Amateur Radio Association of Marquette County Meeting Minutes of Oct 6, 2011

Meeting was called to order at 7:30pm. President KG8NK and Treasurer KD8JIP present. There were a total of 17 members and 1 guest attending.

Motion by Rich N8GBA and seconded by Mark KF8RV to accept the Secretary's report as presented. Motion approved.

Motion by Bill KC8EWD and seconded by Norm W8NWD to accept the Treasurer's report as presented. Motion approved.

Committees

Correspondence: Fred KD8JIP reported that our raffle ticket license for the 2012 Swap'n'Shop has been received.

Repeater/Tech: Paul reported that his west end of the county (Marquette) 440 repeater is running and will be linked to his Ishpeming 440 repeater. Our repeaters are all working well and no report yet from Yaesu on the repeater that was sent in for repairs.

ARES/RACES: In the near future TV6 is supposed to do a video about Amateur Radio. SET exercise was held on October 1st. The exercise was to have counties statewide to pass traffic via nets to the SEOC down state.

Public Relations: Lee KD8BJC reported that information is being passed to the news media but it isn't always being reported.

Old Business:

Election of Officers: Election of officers for our 2012 year was held. Since there were only one candidate for each position, (Lou KG8NK for President, Paul KB0P for vice-President, Mike KD8JIR for Secretary and Peter KC8YTX for Treasurer) a motion made by Greg KI8AF and seconded by Bill KC8EWD that we cast a unanimous ballot for those running for each position. The motion was approved. Each was elected by unanimous ballot.

New Business:

Discussion and plans were made for our annual Christmas party/dinner. Plans are to have it on December 1, 2011 at the Trinity Lutheran Church in Ishpeming. A motion by Rich N8GBA and seconded by Lee KC8BJC to purchase two HT radios for doors prizes. One would be for the paid up general membership attending and one for a paid up student as was done last year. The motion was approved and Greg KI8AF will purchase the two HTs.

Rich N8GBA mentioned that he would like to start a Technician level class, hopefully starting January 12, 2011. He'll inform us on any date change.

Skywarn Recognition Day will be December 2, 2011 starting at 2000 hrs (8:00PM). There should be a sign up sheet at the November meeting. If you can't make the meeting please contact Mat Zika at the NWS Office to sign up.

50/50 drawing was won by Paul KB0P.

Motion to adjourn by Rich N8GBA and seconded by Bill KC8EWD. Motion approved and meeting adjourned at 8:00pm

A program on winter weather was present by Matt Zika KD8EFY

Acting Secretary
Greg KI8AF

REVIEW: Baofeng UV-X4 Dualband VHF/UHF Handheld

By Paul, KB0p

On Friday, October 22, 2011, I received in the three (3) brand new dual-band handheld Monday and waited all week in anticipation-- it was like how I felt at Christmas-time as a slowly as the greatly awaited day drew closer radios finally arrived! I cut open the box, peanuts and pulled out three radios and four was time to assemble the components and get

I first heard of the UV-X4 radios through an from a User Group; our IRLP Linked Repeater handheld radio is manufactured by Baofeng replacement for the earlier model, UV-3R. This handheld radio is very small (weighing about 4 Oz and only 8 inches tall to the tip of the antenna), inexpensive (I paid \$65 each with FREE shipping), and flexible in operation (covering both HAM and business frequency ranges). I don't know a whole lot about the Baofeng product line, but I will do the best I can in describing my experience with the Baofeng UV-X4 handheld radio.

The UV-X4 reminds me of the Yeasu VX-2R that I once owned. I was told that this radio is similar in appearance to the newer Yaesu VX-3R, right down to the operation of the selector knob at the top of the radio (pulls out to operate, and then pushes inward to lock).



mail a box, which contained radios. I ordered the radios on reminiscent of years gone by-child; time seemed to drag by and closer. The UV-X4 raked through the Styrofoam small boxes of accessories. It on the air.

email advertisement received User Group. The UV-X4 and is being advertised as a



Radio Dimensions

The Baofeng UV-X4 handheld radio measures in size of about 3-3/4 inches tall, 2 inches wide, and 1 inch thick; it is as thick as the width of a stick of chewing gum, and about as tall as the length of a piece of chewing gum. Including the 4-3/4 inch long antenna, the entire length of the unit is about 8 inches long in all. With the battery installed, the radio is feather-light and weighs about 4 ounces. From what I can tell, the radio is currently only available in black, even though one may find pictures of multi-colored units on the Internet, if you look closely, the multi-colored units appear to be of the previous model, the UV-3R.

Frequency Range

The UV-X4 is a dual-band handheld transceiver that covers the VHF frequency range of 138-174 MHz and the UHF frequency range of 400-470 MHz, capable of transmitting and receiving in these ranges using FM (wide or narrow bandwidth). The unit also receives in the FM broadcast band between 87.0-108.0 MHz (wide FM). This radio is FCC type 90 approved (according to what I have read on the Internet), allowing it to be utilized on business frequencies as well as on amateur radio frequencies.

The Receiver

As most handheld radios, the receiver sensitivity is hot and the receiver can easily be overloaded by strong signals in the vicinity. For instance, I have a simplex node located at my home, and whenever it is transmitting, RF overwhelms the receiver and I find it difficult to listen to other frequencies on the same band at that time. I expect this with a wide-band radio, so this is not a surprise to me. Aside from the occasional interference (from strong, nearby RF sources), I was surprised by how sensitive the receiver is and pleased with how well it pulls in weak signals, from distant stations. When a signal is received, the LED in the upper-right corner switches to green as an indication of signal, and there is an S-Meter on the display, just below the bottom frequency display, which indicates general signal strength. I did notice, however, that the S-Meter reading is somewhat lagging, but this is not a big deal.

The receiver audio is plentiful, and I generally keep my volume level turned down to the lowest setting. The volume level is menu driven and incremental, which is unfortunate, because even at the lowest setting, I wish I could lower the volume even more, but the next click downward is mute.

The display is somewhat deceiving, showing two frequencies at the same time, when in fact the radio only receives one frequency at any given time; this radio is not a full-duplex dualband radio. In other words, the UV-X4 cannot listen to a VHF and UHF simultaneously.

But, there is a Dual-Watch mode (DW, option 8 in the menu), which basically allows the radio to "scan" back-and-forth between the two displayed frequencies.

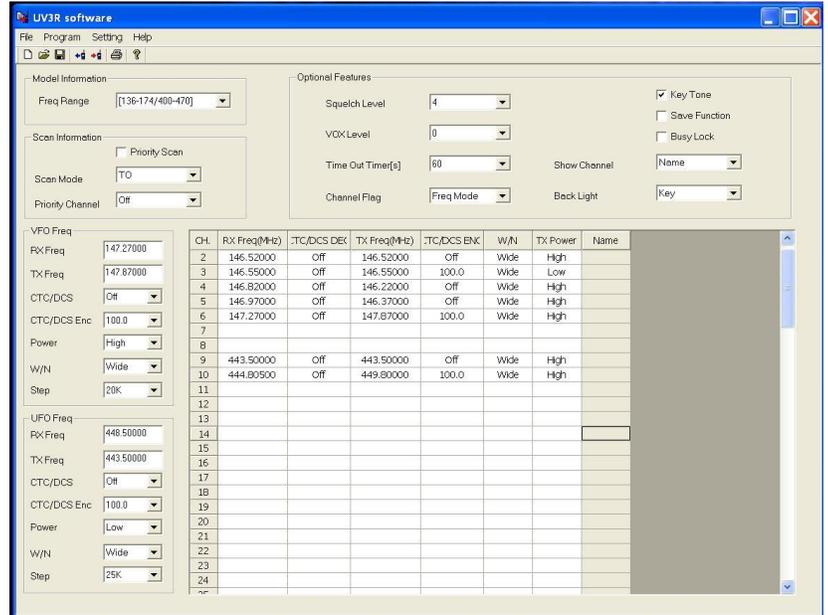
The Transmitter

The transmitter produces 2 Watts on high-power and ½ Watt on low-power. The power level is set through a menu option (POWER, option 9 in the menu). With the supplied dual-band antenna, I can hit most repeaters in my area, even while walking about the yard. Due to its small size, I expected the UV-X4 to get hot while transmitting on high power, and it does get warm. I programmed the time-out timer in the menu to limit my transmission time-length, as a reminder to myself not to get too carried away with my ragchew. The audio sounds great and I have received good reports from those with whom I have spoken. The PTT button, on the left-side of the radio, is easy to operate (I owned a Yaesu VX-2R once, and I didn't like the PTT on that radio, because it was necessary to squeeze the radio tightly to make it operate). While transmitting, the LED in the upper-right corner switches to red as an indication.

The Program

I purchased the optional USB programming cable for the UV-X4. This cable is a USB-to-Serial adapter with an 1/8-inch, 4-conductor plug on the opposite end for plugging into the microphone jack (which doubles as a programming jack) on the UV-X4 handheld. As all USB-to-serial adapters, a driver must be installed on the computer to allow the cable to function properly. The driver software and the programming software is supplied on a small CD with the cable, or the software can be downloaded from the Internet for **FREE(!)**. I am glad that I purchased the cable, because the software sure makes it easy to program the UV-X4 radio.

I discovered that the UV-X4 programming software is labeled for the UV-3R MK II, the older model (another indication to me that the UV-X4 is similar to the newer UV-3R model, which is sold as the UV-3R MK II). I accidentally downloaded the UV-3R program (the older model with the single-frequency display), and there certainly is a difference in programs. So, when you search for the programming software for the UV-X4, make sure you grab the correct program-- the program for the UV-3RMkII and the UV-X4 has two VFO's over to the left-side of the GUI.



Looking at the program, one will quickly notice that there is a column to the right for "Name", and an option just above that to select "Show Channel" as a "Frequency" or "Name". This doesn't work! A alpha-character name cannot be entered into this column because it is grayed-out. I wish that the display could be changed to display alpha-characters as an option, especially if the radio will be used on business frequencies. Perhaps this is an indication that the manufacturer is considering this option in the future. Apart from this, I found the program to be basic, easy to use, and a great asset for making programming a snap-- *I highly recommend the purchase of the programming cable.* And-- perhaps somebody could email me the answer-- maybe this programming cable will work with the Yaesu VX-2R/3R/4R/5R/7R series radios?? I wonder.

Pro Et Contra



PRO

- Inexpensive; a great bang for the buck!
- Small in size; light as a feather.
- Good sounding audio, both in transmit and receive.
- Hot little receiver; receives weak signals very well.
- 2 Watts output; great for repeater work.
- Field programmable (without software)—good for amateur radio.
- Few buttons and small menu—easy to learn.
- USB chargeable—really convenient nowadays.



CON

- Can't lock out channels; this could be a problem while in scan mode.

- No DTMF; can't control Echolink connections over the repeater.
- Audio level is menu driven and incremental; no fine adjustment.
- Field programmable—not good if using for business application.
- No alpha-tags for memory identification (would be handy in a business application).

More Information on the Web

For more information on the Baofeng UV-X4 dualband handheld transceiver, or to order one for yourself, please visit the websites, below.

- Main Trading Company (MTC), <http://www.maintradingcompany.com>
- KB0p's radio review, <http://www.kb0p.com>
- The UV-X4 Brochure, <http://www.fleetwooddp.com/files/Brochures/UV-3RMK2.pdf>

Amateur Radio Technician Class

Rich N8GBA hopes to have a Technician class starting on Monday, January 9, 2012. If you know someone that might be interested please have them contact Rich. Also, please pass the word to your friends, talk up ham radio, and try to get a few more to attend.

On The Bands

Ten meters has been open more and more recently so get on the band and enjoy some DX. Even Technician class has a band segment for them. You have the privileges so why not use them.

PR.....Happenings

Our PR committee needs input from each of us if we expect them to do their part in getting the word out about our organization and amateur radio. Please contact a committee member well in advance of a happening. PR committee member is: Lane WD8PAJ laned@chartermi.net or 486-8697.

Volunteering your time Counts!

Each month many members volunteer their time for club activities some of which might include repeater maintenance, ARES, EOC operations, Life Tracker, newsletter, PR, club business, etc. All these volunteered hours and mileage can be credited to HARA and amateur radio but only if you report them. AEC Dave Thomas KD8DRF reports these numbers monthly. So at the end of each month please contact Dave with services rendered, hours and mileage. Contact Dave at dlthomas@chartermi.net

HARA membership? New member or need to renew your membership? Dues can be mailed to the: Hiawatha Amateur Radio Association, P.O. Box 1183, Marquette, MI 49855. Dues annual rate structure: Single \$15.00, Family \$20.00, Associate \$10.00, Family associate \$15.00, Student \$7.50. More information and an application form is available at <http://www.qsl.net/k8lod/membership.html>

And that's a wrap for another month. Please if you have an article or something which you may think will be of interest to the club membership get it to me. Also if you have any comments or suggestions please get a hold of me. 73 until next month, Greg KI8AF@arrl.net



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