

December 2009



## 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](mailto:ki8af@arrl.net) Club info, membership, dues, etc can be found on our website at [www.qsl.net/k8lod](http://www.qsl.net/k8lod)

### MONTHLY MEETING:

#### *Christmas Potluck Dinner Party*

Date: Dec 3, 2009

Time: 7:30 PM

### CLUB OFFICERS, 2010

Pres. Lou Gembolis KG8NK

VP: Lane Dawson WD8PAJ

Sec. Jim Jackson W8QQE

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

K8LOD-3.144.390 APRS Digi Mqt

### WHAT'S NEXT FOR US

#### **Skywarn Recognition Day:**

Dec. 4<sup>th</sup> 1900 thru Dec. 5<sup>th</sup> 1900 at the local NWS Office Negaunee Township.

## Annual Christmas Potluck Dinner Party

Our annual Christmas dinner is close at hand, in fact it is very close at hand and all are welcome. If you haven't had time to contact Lane WD8PAJ yet that isn't a reason for not showing up. The more the merrier. I believe everyone that attended last year can attest to the fact that a good time was had by all. So bring a dish to pass and show up. Also remember that if you wish to be included in the drawing for the grand prize (a new 2m HT) you must be a paid up HARA member for 2010.

Date: December 3, 2009

Time: doors open at 5:30pm, start serving at 6:30pm

Location: Trinity Lutheran Church

414 E. Ridge St.

Ishpeming, MI

Remember to bring a dish to pass, your table settings, and special drink you may prefer. Also please bring a can good or two for the church's pantry.



**V.E. TESTING:** *(please note that I don't currently have available the 2010 examination schedule)*

01/?? **Iron River:** 9:00am central time, at the Beef-A-Roo Restaurant in Iron River. NOTE: Pre-registration is required, contact Dan Waters, AA9GJ at 906 265-4240 or e-mail: [dmwaters@ironriver.tv](mailto:dmwaters@ironriver.tv)

12/12 **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](mailto:n8gba@chartermi.net)

01/?? **Houghton:** 8:30am eastern time, V.E. Exams at Michigan Tech. University in Houghton, MI will be held in the ballroom of DHH (Douglass Houghton Hall at Michigan Tech). Free Parking in Lot #14, front of DHH, across from Wadsworth Residence Hall. Use door #9 on the South-East side of DHH. Contact Glenn Ekdahl, WA8QNF at (906) 482-7743 if you have questions

02/?? **Iron Mountain:** 9:00am central time, (arrive by 8:30am) Dickinson County Library (conference room), contact Mark J. Lewis N8UKD, 412 Fairmount St. Kingsford, Mi 49802

01/?? **Gladstone:** Delta County Amateur Radio Society Time: 10:00AM (Walk-ins welcome) Contact: Howard St. John (906) 428-9476 Email: [hsj99@charter.net](mailto:hsj99@charter.net) 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 December go to: first off belated November birthday wishes to Howard K8OV. December birthday wishes go to: Susan KB8THA, Fred KC8BAK, Pat AB8RE, Gary KI8DJ, Betty N8HVS, Mike KC8QWO, Dave KD8DRF, Kurt KD8IVK, John KG8JW and Pam KD8KMN.

## **On The Bands**

### **EMCOMM and You!**

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 members are: Lee KD8BJC [leerowe@charter.net](mailto:leerowe@charter.net) or 346-9278, Lane WD8PAJ [laned@chartermi.net](mailto:laned@chartermi.net) or 486-8697.

The ARRL Experimental Methods in RF Design (Revised First Edition – 2009) book is available at the Peter White Public Library at Marquette, Michigan.



**Authors:** Wes Hayward, W7ZOI, Rick Campbell, KK7B, Bob Larkin, W7PUA

**PWPL Catalog Number:** 621.384 HA

**Description:**

This book brings professional RF design experience to the radio amateur. It is written for anyone with a driving curiosity about state-of-the-art equipment. The book explores wide dynamic range, low distortion radio equipment, the use of direct conversion and phasing methods as a serious communications architecture, and a hands-on embracing of digital signal processing. The amateur bands up to 2 meters are considered, and are illustrated with CW and SSB gear.

The book is new reference material at the Peter White Public Library and it at this time is shelved with each of the other new reference materials at the new non-fiction section of the library (first floor).

*From Mark KF8RV*

**Vintage radio station & 160m antenna arrays come alive**

*By B Peter Treml, K8PT*

Quarterly, a couple of U.P. DXer's have been meeting for lunch and visiting each others shacks, checking out antennas with the focus on Topband (160 meters) antennas and especially receiving antennas. Yes, on topband most serious DXer's use separate receive, low noise antennas.

Yesterday we met at UP North Restaurant in Gwinn for lunch (after all you can't do serious work without fuel). Greg, KI8AF, Rich, W8VY, Brian, K8BHZ and Pete, K8PT pulled into the parking lot about the same time. This was our small hungry research group. Well, to our surprise there was another car in the parking lot with "Ham" plates. Bruce, KG8YT and his xyl Pat, AB8RE were having lunch while out geocaching on this beautiful November day.

After lunch Bruce and Pat headed for Escanaba and we headed for Brian's house about 5 miles down the road. Brian has a wonderful DX location. He is right at the end of the power line with no neighbors ( low noise and no RFI complaints). Brian's home sits on six acres surrounded by State land in front of a beautiful small lake.



First, we jumped out of our cars and walked over to an antenna that I have only seen pictures of in old QST's. It was a Marconi T antenna with a horizontal wire up about 50 feet with a cage on each end to bring down the capacitance and a vertical wire (this is what radiates) and all his radials were soldered and buried underground ( I was starting to get jealous) then Brian told us that this antenna was phased to his inverted L antenna about 100 feet away. We walked over to the inverted L and again the soldered radials were all buried underground. What a nice job. Interestingly to me was that the radials are all 48 feet long. These are primarily transmitting only antennas. Nice!

Off we went to look at the receiving array down near the lake. There we saw a 6 element phased array arranged in a 100 foot circle. Each element is 21 feet tall and has two 24 foot tophat wires. Each element has three 8 foot ground rods, one at the base and the other two are 24 feet away. The buried ground rods are connected by 24 foot wires, which are also buried. The ground rod connecting wires are directly below the tophat wires, resulting in a very clean pattern. The beam width is 78 degrees. This array is all in front of their picture window. (Brian you must be a real sweet talker to get the XYL OK).





The controller for the array is located in a small garbage can at the center & uses reed relays for switching. Standard 8 conductor rotor cable is used to connect to the shack, some 300' away. All cables are buried, so the array looks as neat as possible. The array has been up for six years with almost no maintenance. The antenna is described in "Low Band DX-ing", 4th edition.

I forgot to mention that Brian is a retired electronic engineer and what is so neat about this is that he has the expertise to put this together and he does it on a small budget....but that's another story. After we googled the receive array we went inside to see Brian's collection of old radio parts from the 20's and 30's. N8RSE would have drooled over the shelves and shelves of beautiful meters and parts.

Next we entered in inner sanctum...the radio room. As we opened the door we saw Brian's typical ham station but our eyes were drawn to the side of the room where Brian has built the most beautiful looking 1920's regen receiver and transmitter. These radio's are not only beautiful but are functional.

The homebrew receiver is built from the December 1927 "QST", and uses all original parts. It uses 4 tubes: a UX222 rf amp, UX201A regenerative detector, and 2X UX201A audio stages. A vintage cabinet is used, and is lined with copper sheet metal. The CW filter is an L/C affair using a Model T Ford spark coil secondary. Batteries are used for all voltages. The receiver is featured in the January 2009 "QST".



The transmitter uses a combination of circuits from early ARRL Handbooks, and uses only parts that were available by 1929. A pair of "50 watters" are used to put out around 150 watts on 160 meters.

The 1920's station has been put together to try to re-create some of the excitement of the early Transatlantic tests. To date, 12 European countries have been worked, all on 160 meters. Hopefully, a future article will appear in QST to describe in detail this work of art.

Thank you Brian for the education and tour back in history.

Well, I can't wait to for our next adventure.....If you have something interesting you would like to show off contact us and we will report on it in a future issue.



***HARA'S* annual Swap'n'Shop is coming fast.**

Mark your calendar, **February 6, 2010** so you won't miss the annual Swap'n'Shop at the Negaunee Township Hall. Tables always sell out so if you want a table or two please get a hold of Greg KI8AF and reserve yours. Tables are still on \$6.00 each. Greg's contact info: 906 225-1594 or [ki8af@arrl.net](mailto:ki8af@arrl.net).

**HIAWATHA AMATEUR  
RADIO ASSOCIATION  
November 5<sup>th</sup> 2009  
Meeting Minutes**

Meeting was called to order at 7:39 by Lou KG8NK.

**Officers present:** President Lou KG8NK, Vice President Lane WD8PAJ, Secretary Jim W8QQE, Treasurer Fred KD8JIP.

Roll was called with introductions.

The Secretaries report was approved Jim W8QQE the new secretary now taking over duties.

**The treasurer's report** was presented by Fred KD8JIP. Property Insurance was paid, \$257 was due December 1<sup>st</sup>. Greg has a new list of club equipment and will be updating the inventory list for our insurance policy. Paul KB0P will be assisting. Paul was also reimbursed for his out of pocket expenses. Rich N8GBA made a motion to accept, second by Norm W8NWD, The motion passed.

**Correspondence Mail:** Greg had one E-Mail in reference to ARES time and activities working at repeater sites from Dave KD8DRF Greg will have a note in the news letter pertaining to these activities.

Lou KG8NK reported that the club has received surplus radio equipment from the State Police. A storage unit was leased to store the equipment, the first six months free of charge. Greg is working on a list, disposition has yet to be decided. Several complete repeaters are some of the equipment acquired. Paul KB0P reported that they could be easily be adapted to the 2 meter band. The disposition is up to the discretion of the club.

Rich N8GBA Reported that a Michigan bill to allows up to a 90 foot tower for licensed radio operators. Federal bill under consideration are Hr2160 and senate bill1755.

**APRS** Paul reports that he has the WX receiver install on the 27 machine. New chips were installed so that the firmware has been updated. The 64 machine is yet to be updated. Paul states that the 41 also needs to be updated to keep APRS running.

**ARES RACES** nothing new

**PR** announcements for radio classes cost will be \$45, contact Rich N8GBA by January 4<sup>th</sup> classes will start January 11<sup>th</sup>. Mondays and Thursdays.

**Tech Committee,** nothing new

**Old Business** No meeting next month, we will be having Christmas Party. Party will be at Trinity Lutheran church December 4<sup>th</sup>. Lane will be the contact for people to bring dishes to the party. Party will start at 6:30. Greg made a motion to spend \$5 per child for a gift, second by KC8EWD, Motion passed.

\$50 deposit paid to the township hall for field day.

**Swap and Shop** Greg received an E-Mail from Bob N8PKN will not be able to do the tables this year, so we will need someone else to take over. Greg will contact QST, CQ etc to get the information published. Rich N8GBA announced that of this date the raffle license has not been received. Bruce WB8NJP said the \$50 deposit is on, hand but someone should check the date to make sure everything is set, Lou KD8EDS said he would check to confirm the reservation.

**Sky Warn** Sky warn will be the day after the Christmas Party. 24 hours starting from 7pm Friday night to 7pm Saturday night. Three hour shifts 8 shifts are open. 121 contacts last year with 34 Weather Stations.

**Dog Sled Race** Weather was quite bad last year race officials we absent at several sites the Ham's made every station. It's unknown who will be in charge with the death of Beth who has been doing it in the past. Expiations are for a full slate this year, good news.

**Ski Race** Rich N8GBA is in charge and things are starting to fall in place.

Don N8HDT requested his dues be paid for the year in consideration for the 6 months free storage. Don had sent a check for dues. He needs to be contacted to see if he wants the check destroyed, or if he wants it applied to next year. It will be his choice.

**50 50 drawing** was won by Mark KF8RV.

Motion to adjourn was made by bill KC8EWD, second by Norm W8NWD, motion passed, adjourned at 8:12 pm.

Respectfully Submitted  
Jim W8QQE  
Secretary

### **For Sale Kenwood TS-940SAT**



Kenwood TS-940SAT. Includes MC-60 desk microphone. This rig was just gone over and aligned by AES in Milwaukee and is in excellent condition. It covers 160 to 10 meters and has a general coverage receiver. Operates USB, LSB, CW, FM, and FSK. Features include SSB slope tuning, CW VBT (variable bandwidth tuning), IF Notch, Audio Filter, Dual Mode NB, All-mode Squelch, RF Attenuator, Switchable AGC (Off/Fast/Slow), Full QSK, Speech Processor, Dual digital VFOs, 40 memories, Scan, Keyboard Frequency entry and voice-synthesized frequency readout. It has a built-in automatic antenna tuner that covers the amateur bands 160 through 10 meters and a built-in power supply. \$700 If interested contact Bruce, KG8YT, at 906 226-1124.





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### **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](mailto: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



*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](mailto:ki8af@arrl.net) Club info, membership, dues, etc can be found on our website at [www.qsl.net/k8lod](http://www.qsl.net/k8lod). Annual membership dues can be sent to the above address directly.*