

October 2010



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

MONTHLY MEETING: Marquette County Health Department Bldg., Lower Level, Negaunee Township.
Date: **October 7, 2010**
Time: 7:30 PM

CLUB OFFICERS, 2010

Pres. Lou Gembolis KG8NK
VP: Lane Dawson WD8PAJ
Sec. Jim Jacobson 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 with 100 Hz PL-tone
K8LOD-3.144.390 APRS Digi Mqt

WHAT'S NEXT FOR US

**Christmas Party, Thursday
December 2nd, 2010
Mark your calendar now.**

MARQUETTE REPEATER ASSOCIATION ECHOLINK ON 146.97 or 444.800+ REPEATERS

Star key- To check status

C key – To connect to node number (Example C123456)

D key– To disconnect

A or B keys - Shortcuts (B1, B2, B3 etc)

1. Use star key to check connect status. If you hear that it is connected just ID and ask if it is being used. If there is no responds then go ahead and make the connect you want, either by using the C and node number you want if you know it or by using A or B and number for one of the shortcuts I have put in.

2. To disconnect when you are done just use the D key. This will just disconnect the last connected station. If there was another connected before that you just use D key again and it will disconnect that one. D will disconnect by last repeater connected.

3. Remember when you connect to wait a few seconds and then ID or make a call for someone like you would normally do on any repeater. Also you will have to learn to leave a pause to let repeaters drop between transmissions.

4. Here are the shortcuts I put in. Feel free to use them.

B1- KC8QZG-R NEWBERRY REPEATER

B2- K9MLD-R IRONWOOD REPEATER

B3- W8YY-R MTU REPEATER

B4- KB0P-L ISHPEMING REPEATER 443.500 PL 100.0

B5- KD8JAM-R CALUMET REPEATER (147.315)

B6- W9RIC-R APPLETON, WI AREA

B7- ZLISLO-L NEW ZEALAND (FRANC) (Franc and Andy)

B8- ZL2ADR-L NEW ZEALAND (ANDY) (both like to chat)

B9- GB3KE-R GLASGOW, SCOTLAND

B10- GB3KA-R KILMARNOCK, SCOTLAND

B11- GM4DTJ EDINBURGH, SCOTLAND (BOB-ROUNDTABLE)

B12- GB3IR-R NORTH YORKSHIRE, ENGLAND

B13- GB3HE-R HASTINGS, ENGLAND

B14- WD0BCF HOUSTON, TX AREA LARRY ROGERS (member HARA & MRA)

AA – RANDOM USERS

BB - RANDOM REPEATERS OR LINKS (BASICLY THIS ARE THE SAME)

When you use these random codes you do not need to know any node numbers to have fun. You will not know where in the world you will be connected too. Treat it like a repeater when you connect and put your call out.

V.E. TESTING:

- 12/11 **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
- 10/09 **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
- 11/06 **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
- 10/09 **Gladstone:** Delta County Amateur Radio Society Time: 10:00AM (Walk-ins welcome) Contact: Howard St. John (906) 428-9476 Email: 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

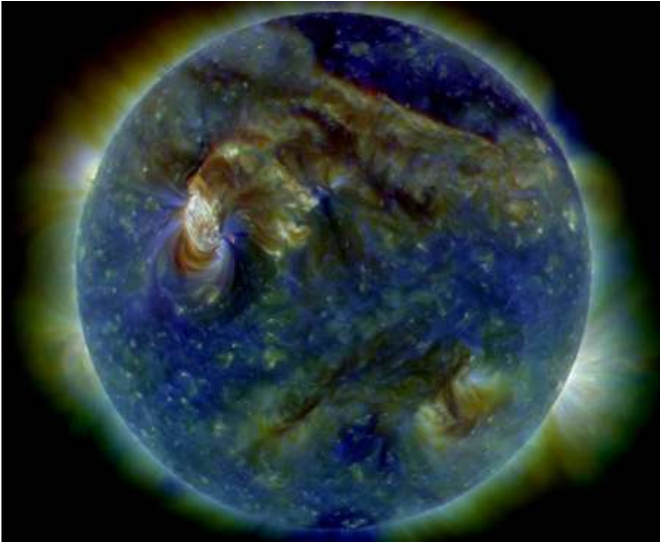
The "Birthday Wishes" column is now back by request. If you notice an error or your birthday is missed please advise the editor. Birthday Wishes for the month of October go to: Wendy KB8VEQ, Gerald W8SAX, Jim AB8NF, Michael KD8BPB, Dale KC8STM and Mike KA8ZGW.

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 or 346-9278, Lane WD8PAJ laned@chartermi.net or 486-8697.

Sun storm to hit with 'force of 100m bombs'

- By Peter Farquhar, Technology Editor
- From:news.com.au
- August 25, 2010 3:40PM



The first solar storm of this cycle hit the Earth early this month, causing it to light up spectacularly / NASA

- Sun ramping up for Solar Max
- First Max event since mid-80s
- US studies effects of 'digital bomb'
- ISS search for dark matter, anti-universe

AFTER 10 years of comparative slumber, the sun is waking up - and it's got astronomers on full alert.

This week several US media outlets reported that NASA was warning the massive flare that caused spectacular light shows on Earth earlier this month was just a precursor to a massive solar storm building that had the potential to wipe out the entire planet's power grid.

NASA has since rebutted those reports, saying it could come "100 years away or just 100 days", but an Australian astronomer says the space community is betting on the sooner scenario rather than the latter. Despite its rebuttal, NASA's been watching out for this storm since 2006 and reports from the US this week claim the storms could hit on that most Hollywood of disaster dates - 2012. Similar storms back in 1859 and 1921 caused worldwide chaos, wiping out telegraph wires on a massive scale.

The 2012 storm has the potential to be even more disruptive.

"The general consensus among general astronomers (and certainly solar astronomers) is that this coming Solar maximum (2012 but possibly later into 2013) will be the most violent in 100 years," astronomy lecturer and columnist Dave Reneke said.

"A bold statement and one taken seriously by those it will affect most, namely airline companies, communications companies and anyone working with modern GPS systems." They can even trip circuit breakers and knock out orbiting satellites, as has already been done this year." Regardless, the point astronomers are making is it doesn't

matter if the next Solar Max isn't the worst in history, or even as bad as the 1859 storms. It's the fact that there hasn't been one since the mid-80s. Commodore had just launched the Amiga and the only digital storm making the news was Tetris.

No one really knows what effect the 2012-2013 Solar Max will have on today's digital-reliant society. Dr Richard Fisher, director of NASA's Heliophysics division, told Mr Reneke the super storm would hit like "a bolt of lightning", causing catastrophic consequences for the world's health, emergency services and national security unless precautions are taken. US government officials earlier this year took part in a "tabletop exercise" in Boulder, Colorado, to map out what might happen if the Earth was hit with a storm as intense as the 1859 and 1921 storms.

The 1859 storm was of a similar size to that predicted by NASA to hit within the next three years – one of decreased activity, but more powerful eruptions.

NASA said that a recent report by the National Academy of Sciences found that if a similar storm occurred today, it could cause "\$1 to 2 trillion in damages to society's high-tech infrastructure and require four to 10 years for complete recovery". Staff at the Space Weather Prediction Center in Colorado, which hosted the exercise, said with our reliance on satellite technology, such an event could hit the Earth with the magnitude of a global hurricane or earthquake. The reason for the concern comes as the sun enters a phase known as Solar Cycle 24. All the alarming news building around the event is being fuelled by two things.

The first is a book by disaster expert Lawrence E. Joseph, *Guilty of Apocalypse: The Case Against 2012*, in which he claims the "Hurricane Katrina for the Earth" may cause unprecedented planet wide upheaval. The second is a theory that claims sunspots travel through the sun on a "conveyor belt" similar to the Great Ocean Conveyor Belt which controls weather on Earth. The belt carries magnetic fields through the sun. When they hit the surface, they explode as sunspots. Weakened, they then travel back through the sun's core to recharge. It all happens on a rough 40-50-year cycle, according to solar physicist David Hathaway of the National Space Science and Technology Center in the US. He says when the belt speeds up, lots of magnetic fields are collected, which points to more intense future activity. "The belt was turning fast in 1986-1996," Prof Hathaway said. "Old magnetic fields swept up then should reappear as big sunspots in 2010-2011."

Most experts agree, although those who put the date of Solar Max in 2012 are getting the most press. They claim satellites will be aged by 50 years, rendering GPS even more useless than ever, and the blast will have the equivalent energy of 100 million hydrogen bombs. "We know it is coming but we don't know how bad it is going to be," Dr Fisher told Mr Reneke in the most recent issue of Australasian Science. "Systems will just not work. The flares change the magnetic field on the Earth and it's rapid, just like a lightning bolt.

"That's the solar effect."

Christmas Party/Dinner

No I'm not rushing Christmas, winter and snow shoveling. But I do want to let you know that our annual Christmas Dinner/Party is scheduled for Thursday evening December 2, 2010. So now is the time to set that evening aside so you and your family can attend. More info will be forth coming in the November issue of the *Standing Wave*. There will be a few door prizes including the grand prize of a new HT radio. You must be a current (2011) paid up member to be eligible for a chance at winning the HT.

My QRP Adventures

by Bruce Anderson, KG8YT

In 1997 I was introduced first-hand to the power of QRP operation, when the Norcal QRP club made available a \$25 dollar, 30-meter transceiver kit. Several of us, including Bill, N8NRG, and Greg, KI8AF, built these little wonders, modified them so that they would put out the “full QRP gallon” of 5 watts, and then engaged in a spirited contest to see who could first work all states with them. I hadn’t had so much fun with ham radio since the days I was first licensed as a novice! The seed had been sown. Since that time I have built several QRP rigs from kits and made hundreds of QSO’s, all of them with 5 watts of power or less, and most of them with only 2 watts or less. I know, I know . . . I can’t tell you how many times I have heard detractors say that “Life is too short for QRP,” but the fact that it is the fastest-growing facet of amateur radio today says something about its appeal. QRP enthusiasts aren’t into punishment. Rather, they are minimalists who love the challenge of building and operating equipment that can communicate successfully in spite of putting out only a small fraction of the power most hams use routinely. If it didn’t work or it weren’t fun, I wouldn’t do it.

My collection of QRP rigs culminated a few years ago with the purchase of an Elecraft KX1, an amazing little trail radio that operates on 20, 30, and 40 meters with an output of up to 4 watts. This little radio has a host of features, including a built-in memory keyer, automatic antenna tuner, and digital display. It has virtually everything that a cw QRP enthusiast could ask for. Of course, it also costs a lot more than the twenty-five-dollar rig that got all of this started. Having built the rig, figured out its complexities, and made QSO’s with it from my home shack, the logical next step was to use it in the way it was specifically designed: as a trail radio.



The first real outing for this radio happened in late April, when my wife Pat, AB8RE, and I ventured out to Indian Lake State Park, near Manistique, to take part in a QRP event called QRP to the Field. Participants were encouraged to operate from a site that had been built by the CCC in 1930’s, and the shelters at this state park filled the bill. Poor band conditions, overcast skies, and a biting wind limited our success, and we packed up after an hour of operation, having logged only a few stations.

Undaunted, we next set up at Kingston Lake State Forest Campground for Field Day. We arrived there at noon and set up my St. Louis Express vertical, a home-made variation of the famous St. Louis Vertical, based on a 20-foot fiberglass fishing pole. Results were better this time, if not spectacular. In four hours of operation I made 21 contacts, which covered 18 states, including both coasts. The weather was beautiful, though, and just sitting at the picnic table overlooking Kingston Lake was a pleasure. On the next day I decided see how many Field Day stations I could work from home, using only a 24-foot wire tossed into the trees, with a 16-foot counterpoise lying on the ground. This is a configuration recommended by Elecraft and specifically designed to tune up on all three bands with the KX1’s built-in tuner. This time, sitting in a folding canvas chair under a tree in my front yard, I

worked more than 20 contacts in only an hour and a half. The higher elevation of my home QTH, not the antenna, was probably responsible for the better performance.



At the end of July I had planned to walk from my house to the top of nearby Marquette Mountain to work the annual Flight of the Bumblebees QRP contest, which encourages participants to journey under their own power to a relatively remote operating spot and operate as a “Bumblebee,” with whom contacts earn a special point multiplier. At the last moment, though, I decided to once again just park myself under a maple tree in front of the house and operate as a non-Bumblebee from the folding chair, this time using my St. Louis Express antenna. I made 21 contacts with stations all over the country, all of them with fellow QRPers. A pile-up of tiny QRP signals hovering around 14.060 MHz may not pin the S-meter, but that doesn’t diminish the excitement.

Having tested my portable QRP set-up in a variety of situations, it was now time to actually stuff it all into a day pack, hit the trail, and hike to an interesting operating site. For some time I had been aware of the challenge put forth by The Adventure Radio Society, a free-membership club website that promotes outdoor radio operation and QRP in general. At its website is a

section called Top of the World, a listing of the highest points in each state, along with the call signs of those who have made radio contacts from each. Mt. Arvon, the official highest point in Michigan, has had no call signs listed, and I decided that the blank should be filled by an amateur who lives in the U.P., rather than a down-stater or out-of-stater. As a U.P. resident myself (I would say Yooper, but I am not sure that I meet the myriad and stringent requirements to so qualify in the eyes of the native-born), I decided that I would be the one to first put my callsign next to the Mt. Arvon listing. When I mentioned this to my son Eric, KA8DNA, who had never visited Michigan’s highest point, he quickly suggested the following weekend. And so it happened.

On the last Saturday in August, Pat, Eric, our grandson Aidan, and I headed west for Mt. Arvon. The weather was gorgeous, but a bit on the hot side. After a quick lunch in L’Anse (our talking GPS pronounced it “Lance”), we set out for our destination. On our previous visits there, first out of curiosity and next to find a geocache, we had encountered poorly-marked, badly-rutted roads as we approached the summit. This time it was obvious that road crews had been at work recently, and blue signs along the much-improved road led us to the spot without fail. Once there, we parked at the parking lot, loaded up our gear and supplies, and started up the half-mile-long gentle climb to the top. A brisk breeze helped to counter the upper-eighties heat, but our lack of conditioning kept us seniors lagging a bit behind the younger members of the party.



The top of Mt. Arvon, or “summit,” gives little sensation of height since, for the most part, the view of the surrounding terrain is obscured by a dense growth of large trees. Since the last time we were there, however, a small swath has been opened up to afford a view to the west, which gives a better idea of how high 1979 feet of elevation really is. It is no Rocky Mountains peak, but it isn’t Nebraska, either. Eric and I quickly unpacked the gear, set up the vertical, laid out the twelve radials, and connected the KX1. Within seconds of turning on the rig and tuning to the QRP calling frequency on 20 meters, I heard a CQ, called him, and got an answer. I had snagged a good one! KT5X was working from Enota Peak in New Mexico, at an altitude of 9000 feet. We had established communication from the highest point in Michigan to one of the highest spots in New Mexico, QRP at both ends. I was pumped! We were off to a great start. Unfortunately, from that point on it was all downhill (no pun intended). The bands were in poor shape; my external power cord developed an open connection, reducing my power output to one watt, supplied by the internal AA batteries; and the remaining four contacts, one of which was made with my reduced power, were with minimum-exchange contesters working the the Kansas and Ohio QSO Parties. Better band conditions would have made for more contacts, but the solar cycle wasn’t cooperating. Nevertheless, I had accomplished what I had set out to do, and for me, at least, it was an enjoyable couple of hours of operating.



QRP is not for everyone. Operating low power certainly won’t always hold its own with the big guns, but bearing in mind that a 5-watt cw signal has about the same signal density as a 100-watt side-band signal and is only two S-units down from a 100-watt cw signal, you can see that it is not the handicap that some make it out to be. The only way to know for sure, though, is to try it out for yourself. You, too, may find QRP operating to be an adventure.



H.A.R.A.

Meeting Minutes September, 2010

Call to order, agenda Lou KG8NK called meeting to order and made opening remarks. Introduction of members.

Additions to agenda, New business, Extension Cords needed – Motion to buy from Rich made - motion approved.

Treasures report reported by Fred approved

Correspondence – NONE.

Committee Reports:

Greg talked about repeaters and getting Serial Numbers from Paul.

Rich – Talked about Aries Races

PR: Nothing but Paper and Radio information.

Testing next testing session will be on September 11, 2010

Membership given FREE to person selling most tickets Proposed by Rich – Seconded by Bill

Officer elections discussed – Need some new Officers will discuss more at next Meeting and make choices.

The club needs the vests to be returned, only two left. If you have one please return it. We may have to purchase new ones.

We need people to put on programs at our club meetings, get involved!

50 /50 was won by Zack....

Meeting Ends – proposed by Zack – Second by Bill - 8:00 Pm

Update on Echolink Codes

Hope you read the info one page one of the *Standing Wave* from the MARQUETTE REPEATER ASSOCIATION. Here is a bit more info.

Update on Echolink on the 440 and the 97 repeaters. Last week Paul KB0P put a tone board on both of the repeaters so now the Id's and courtesy beeps will not be heard by anyone connecting to these repeaters via Echolink. As there has been light use of the 440 repeater I am going to give Echolink a try for awhile on 97. After it has been on for awhile you can let me know what you think.

I have had several people ask again for a copy of the codes for using Echolink that is open for anyone to use. So I am attaching an updated code list and how to use Echolink. And if you hear someone coming into the repeater via Echolink answers them as you will never know who you will meet. The main thing is to have fun with it.

Mike
KE8IL
Trustee of the MRA

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>

October is Election Month

At our October meeting we will be electing club officers for the upcoming year. Nominations will be taken from the floor so there is time for you to step up and be part of this organization. It would be nice to have more than one candidate for each position. Also let's hope we have a good turn out when the votes are taken.

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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