



THE CHERRY JUICE

cherryland amateur radio club traverse city, mi

October 2011

Coming Club Events

October 25th Club Meeting

This month we will show the second half of the video demonstrating the phenomenon of Standing Waves. Where: The Governmental Center Lower Level Cafeteria located at Boardman and Eighth Street. 7 pm. Coffee and cookies and plenty of time for socializing after the video.

Tuesday Project Nights

Where: At the club station in the lower level of the Salvation Army Building located at the NE corner of Barlow and Boone. 7 p.m. Every Tuesday except the 4th Tuesday of the month which is reserved for the regular club meeting.

- Club Officers
- President
Don N8QX
- Vice President
Hope AA8SN
- Recording Secy
Russ K8RUS
- Corresponding Secy
Dave K8WPE
- Treasurer
Ward N8WK
- Directors
- Ann KA8YJ
- Chuck W8SGR
- Mike W8VPC
- Cherry Juice Editor
Dave N8CN
- CLUB NETS
- MESH NET
8 pm Monday
146.86 MHZ
- SMASH NET
9 am Sunday
3.935 MHZ
- TBARG EmComm Net
9 pm Monday
146.86



ARRL Affiliated Club
#1082

Forward Waves

VE EXAMS:

Traverse City, MI. Saturday, Nov 5th, 2011. Cherryland ARC. 1 pm. Salvation Army Bldg. 1239 Barlow St (Corner of Boone and Barlow). Walk-ins OK. Contact: Hope AA8SN 231 941-7262 or hopeaa8sn@juno.com

Muskegon, Saturday, December 3, 2011 Muskegon Area Amateur Radio Council. 9 a.m. Walk-ins OK. American Red Cross Bldg. 313 Webster Ave. Contact: Bob 231 799-3634

HAMFESTS:

Saturday, November 5, 2011. Petoskey, MI. NMARES Swap. Emmanuel Evangelical Church, 620 Emmet St. 8 am til Noon. Admission \$5.00, tables \$10.00. Info: Dirk **KG8JK**.

Sunday, December 4, 2011. L'Anse Creuse ARC Hamfest. L'Anse Creuse HS. 38495 L'Anse Creuse St. Harrison Twp, MI 48045 TI: 147.08 (PL 100) Info: Greg N8GEO 586-477-0364

Reflected Waves

October 1991

The ins & outs of repeaters was the topic for the October CARC meeting. Brook **N8OCX** reported to the club on the installation of new filters on the 86 repeater. Next month the club will be offering classes for the novice and no-code Technician license. Harry **W8CLF** praised the young club members for their efforts in public service activities such as the bike races and Cherry Festival Events. John N(AMC) was appointed EC for Grand Traverse County.

October 2001

The October program was a presentation by Ward **N8WK** of his choral excursion to Italy, the Vatican and Austria. The Board voted to continue funding a plaque award for the Michigan QSO Party. Hope **AA8SN** will be taking the ARRL On-line Emergency Operations Class. Several club members participated in the FISTS CW event on October 13th.

OCTOBER CLUB NOTES

As this is the next to the last Cherry Juice for 2011 there are a few items we need bring to your attention. Once again, it is time to be thinking about paying your CARC dues. Thanks to a successful swap (revenue enhancement) and budget cutting (eliminating the snail mail Cherry Juice) our dues remain unchanged and the greatest bargain in NW Michigan at \$12.00 per year. Additional family members are only \$2.00. We no longer require a \$12.00 autopatch fee but encourage a repeater fund donation to pay for future equipment repairs and tower climbs.

The Christmas party will be December 13th at the Elks Club in Traverse City. Details will be available in the November Cherry Juice.

Several projects centered around fox hunting will be coming up this winter at the Tuesday night project sessions. Direction finding antennas and step attenuators will likely be the first projects.

The Club trailer is for sale. If you are interested call Don **N8QX** at 231 632-4075. Also, if you are in possession of any Club equipment, please notify President Don **N8QX** and he will tell you whether you need to turn it in or retain possession.

PETOSKEY SWAP

Ok, it is official now. We are going to have a swap and foxhunt on **November 5th**. The swap will be in Petoskey at Emmanuel Evangelical church 620 Emmet St. (corner of Emmet and Grove). The swap will run from 8 am to 12 pm. Entry will be \$5 and tables will be \$10 (includes entry ticket).

The foxhunt will start at 1:00 and go until 3:00. The foxhunt is free for all to enjoy and certificates will be awarded to all participants.

Our last repeater repair drained our funds quite a bit, so it would be nice if we could get a little extra in our account for any future repairs. So, here is what you can do to help: 1) Spread the word - the more people we can get to the swap the more fun we can have. 2) Participate - come to the swap, or for just \$5 more you can have a table and sell a few things (ok to split one with a buddy if you don't have too much stuff), join in the foxhunt - you can work alone or tag along with another group.

Please contact me with any questions or to reserve a table.

-73 Dirk **KG8JK**

HAM NATION 700,000 STRONG

As the third quarter of 2011 came to a close, ARRL VEC Manager Maria Somma, **AB1FM**, began calculating the number of licensed Amateur Radio operators in the US, as well as the number of new licensees. "At the end of September, I saw that the number of hams in the US was high," she said. "When I started comparing that number with other years, I found that it was an all-time high." For the first time, there are more than 700,000 radio amateurs in the US.

"When looking at the three current license classes -- Technician, General and Amateur Extra -- these numbers are impressive," Somma explained. "The number of Technicians peaked in March 2011 at 342,572, while in September 2011, we saw both Generals and Extras peak at 159,861 and 125,661, respectively. As new Technicians earn their Amateur Radio licenses, and current Technician licensees move on to General and Generals upgrade to Extra, this can cause up-and-down fluctuations for these totals."

Somma said these high numbers mean that hams are upgrading and renewing in larger numbers and staying interested in hobby: "These are compelling statistics and I am thrilled to see the highest number of amateur radio licensees ever! When I began working at the ARRL back in the mid 1980s, there were approximately 450,000 amateurs in the US. Our VEC program conducted an average of 55 sessions a week. Today, we administer approximately 150 exam sessions each week, and our total number of licensees across all three license classes continues to grow each year."

In the past 40 years, the number of Amateur Radio operators in the US has grown at a remarkable rate:

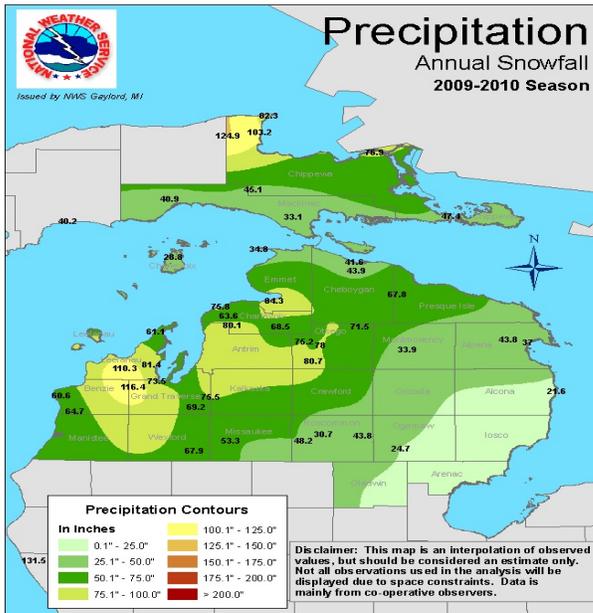
December 1971: 285,000
 December 1981: 433,000
 December 1991: 494,000
 December 2001: 683,000
 September 2011: 700,221

-tnx to *The ARRL Letter*

ULTRASONIC BATTERY CHARGING?

The day when we don't have to plug in our consumer electronics is getting close. This according to a claim a from new startup firm named uBeam that has developed what it terms as a safe way of beaming power to charge your battery operated devices. Rather than using inductive charging, which has a very short effective range and usually requires that the charger and device be in close proximity to each other, uBeam uses an ultrasonic transducer to convert power from your wall socket into inaudible sound energy. On the device side, there's a battery adapter that converts the sound energy back into power to charge your batteries. The ultrasonic frequency used is well above the range that can be heard by humans or dogs. More is on-line at www.ubeam.com

National Weather Service Winter Presentations



With one of the most active winter weather seasons in the United States, residents of Northern Michigan have to be prepared for changeable and sometimes severe winter weather. Michigan is one of the few states in the country which experience lake effect snow. Lake effect snow occurs when cold air crosses the still relatively warm waters of the Great Lakes. With the lakes unfrozen for much of the winter, the lake effect snow machine creates staggering snowfall totals of more than 15 feet in some locations. Northern Michigan is a unique and challenging location for winter weather, for both residents and weather forecasters.

If you are interested in learning more about winter weather and snow reporting, you are encouraged to attend an upcoming winter talk by the National Weather Service. These classes are **FREE**, open to the public and last approximately 90 minutes. Attendees will also receive a laminated snowfall tips measuring card, as well as winter weather safety information. In addition, those in attendance will be eligible to put their name in a drawing for an official NWS rain gauge, snow measuring stick and snow measurement board.

Topics on the agenda this year include:

1. Relationship between water temperatures and lake effect snow
2. Making an accurate snow measurement
3. NWS products – trying to understand them all
4. Will La Nina return again this winter and how much snow will we get?

For more information and details on winter seminar dates and locations, please visit the National Weather Service Gaylord website at www.weather.gov/gaylord. You may also call the NWS office with any questions at 989-731-3384.

METAMATERIAL ANTENNAS

Fractal Antenna Systems, Inc. today disclosed a patent filing for a novel approach to better wireless antennas. Called '*fractal plasmonic surfaces*' (FPS), the new antenna technology promises to provide wideband ability at low cost along with other unique features. The technology exploits the use of fractals, intricate geometric figures made from scaling and applying a simple pattern. The fractals are placed closely making a doily-like surface layer in a unique antenna method. This system is a 'metamaterial' with electromagnetic attributes unattainable by other means.

Before the FPS invention, antennas were considered devices that were super sensitive to their environment and placement—and isolated to a specific location. With FPS, antenna placement and tuning are minor issues. In addition the gain of the FPS antenna depends solely on the area, and not how separate antennas are attached and 'phased'. The FPS approach also boasts that it is contactless and componentless.

Notes inventor Nathan Cohen: "The FPS essentially is one tiny antenna that makes copies of itself across a layer using surface waves that physicists call 'plasmons'. There's no direct connection or feed. Each of these little antennas add up to make the antenna analogy of a fly's eye. Covering one has no effect on the others. The problem of hand-smothering the antenna on smartphones, tablets, and other devices now becomes a thing of the past: the antenna has 'self configured'.

In addition, the FPS has wideband ability so one FPS does the work of several separate antennas. Adds Cohen: "We have to start looking at surfaces such as the back of a smartphone, wallpaper, a wallet, a printer, a washing machine, or a pill bottle, as a great place to embed an FPS and make the wireless internet of things a reality. The antenna is now no longer a compromising issue. There is a freedom of placement and use that is unprecedented in new applications. Put simply, whenever you see a surface, you can now think 'antenna'".

HAM KILLED IN SEAL BEACH CA SHOOTING

The ARRL reports that David Caouette, N6DAC, was killed in a shooting incident in Seal Beach, California. On October 12th, Scott Evans Dekraai, apparently enraged over a custody dispute with his ex-wife, walked into a hair salon in Seal Beach, California and opened fire in the salon, killing eight people, including his ex-wife. David Caouette, **N6DAC** -- who was waiting outside the salon in his car -- was killed in the rampage. He was 64. Read the full ARRL story at <http://www.arrl.org/news/california-ham-killed-in-shooting-spree>

LET'S GET THIS PARTY STARTED!

So I ask myself, "Just how many 'antenna parties' really take place?" In the 34 plus years that I've been a ham radio operator, I can only recall one time when I was asked to help with the installation of an antenna, and it was down at the **W8UM** amateur radio club station in the early '80s. We were on top of the Michigan Union looking across and down over the U of M campus while installing and repairing antennas. I remember that one somewhat well, I think. Mark, **WD8DPA**, and I spent sometime up there, and I recall it had more to do with checking out the repeater antennas than it did the HF station antennas. But I do remember it. But since this time, I don't believe I've ever been asked again to help anyone.

Now my point in this isn't to get you to ask me for help with your antennas, although I would. And my point isn't to criticize everyone reading this to do a better job, since I can't figure out what that better job is. And I am not interrupting this newsletter chain to put a CQ to all stations to say that I need help, although I could use it. We all do.

No, I believe my point is this. Let's build more antennas together. Let's help each other and have some fun in the process. Call it a social thing. Call it part of the hobby. Call it fun. In fact, I couldn't care less what you call it, really. But let's just do it. Let's have an antenna party.

For some, it is a social event. We meet other people who share the same interest. Back in the day, QST had a campaign where they encouraged the public to get their licenses because you get to meet new friends. For some reason, I always thought that campaign was a little too much. But, there is truth in it. I have met a lot of wonderful people in this hobby and have friends that go way back because of it.

As part of the hobby, we can learn from each other as the antennas are going up and as the whole group is all standing around, looking into the sky, watching one person do all the work. Seriously, though, we can learn from each other and that's a good thing. I enjoy the debates and the discussions on the air about some of the technical aspects of antenna design. I therefore know that we can always learn together, as we meet in person. It's part of the fun.

But here's why I really think it would be a really good reason to get together more to help each other. You see, I believe most people don't like to ask for help. For whatever their reason, they just don't. Some are too quiet. Some don't want to impose. Others simply want to do the work themselves, unless they are asked if they need help. I even know of some who never want to owe anyone else a favor, so if they receive help, they feel that they have to help others at some point in the future.

But let's get past that. Shall we? Instead, let's make the offer. Let's make the offer to help other hams, and see what may come from it. And in order to do so, some one needs to make the first offer. I see two possible ways to do this.

First, I offer this suggestion. We all know the hams in the club. Theoretically, there's a list out there, in the clouds, where the list of all those in the club are kept. I suggest we start at the top and make our way down the list. As we go down that list, perhaps every two weeks, we offer to see if the club can assist that particular ham with any projects he or she may have around their station. If the answer is no, then we move down the list to the next ham. If the answer is yes, then we send out an offer over email and invite any who may be able to help. Those who can, will. Those who can't, may help next time.

Or, we could use the ole shot gun approach and ask anyone and everyone, I suppose, via email. When the responses come in, a new list is generated and we keep tabs, in order received, as to who needs help. We then work our way down the list, helping our fellow hams out who need assistance.

Over time, when either list is near completion, which ever way we choose to move forward, we would then simply start over and work down the list again.

So, I put it out there for thought. I'm certain that someone may have a better idea, but being the pragmatist that I am, I say we try *something*.

Who would run the list? Who would take charge? Well, perhaps we shall see. Let's see if someone will come forward. What if no one comes forward? Well, let's just wait and see. I'm an eternal optimist.

If you're interested in an antenna party, I say, "Bring it on!" Drop us all an email (or at least drop me one).

-73 de Sean **W8OKN** w8okn1977@gmail.com

NEW ON-LINE ELECTRONICS COURSE

This course, a collaboration between Mike Tooley and Matrix Multimedia, was first published by on CD ROM in around 1996. Over a period of 15 years several thousand copies of the CD ROM were sold all over the world – to hobbyists, schools and other educational institutions. With the advent of the internet the sales of the content have declined and so Mike Tooley and Matrix have decided to make the content free for all to access via Matrix's web site. The course and all content remains the copyright of Matrix and Mike Tooley © 1996-2011.

Of course nothing is totally free: in the process of using this course we will expose you to adverts for our products in the hope that you will like what you see and buy them. Please forgive us for wasting just a little of your time in this way – but we hope that you agree that the trade-off of your time for the value of this course is a fair deal.

At the time of publishing (September 2011) this is something of an experiment in online publishing with just two titles released for free use by everyone: Electronic circuits and components, and Introduction to microcontroller programming. If customers find this resource useful then we will consider expanding the range of material on offer.