



# THE CHERRY JUICE

cherryland amateur radio club      traverse city, mi

April 2011

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



ARRL Affiliated Club  
#1082

## Coming Club Events

### March 22<sup>nd</sup> Club Meeting

This month, Chris **KD8MKX** will be presenting "Packet 101". Packet's popularity is returning with the emphasis on emergency communications. Chris will fill you in on what it takes to get up and running. As always Don N8QX will bring us up to date on club activities. Where: The lower level cafeteria in the Governmental Center on Boardman near the intersection of Boardman and Eighth. 7 p.m. Cookies and coffee available.

### 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 4<sup>th</sup> Tuesday of the month which is reserved for the regular club meeting.

## Forward Waves

### VE EXAMS:

**Cadillac, MI.** Saturday, May 7, 2011.  
Wexauke ARC Hamfest. Cadillac Jr.  
High. 500 Chestnut St. 10:30 am. Limited  
Spaces. No Walk-In Contact: Alan 231  
829-3433

**Traverse City, MI.** Saturday, May 7, 2011.  
Cherryland ARC. 1 pm. Walk-ins OK.  
Salvation Army Building 1239 Barlow St  
(Corner of Barlow and Boone). Contact  
Hope AA8SN: aa8sn@juno.com

### HAMFESTS:

**Saturday, May 7, 2011.** Cadillac, MI.  
Wexauke ARC Hamfest. Cadillac Jr.  
High School. 8 am til noon. TI: 146.980.  
Contact: Alton NU8L. 231 876-1485 or  
[nu8l@yahoo.com](mailto:nu8l@yahoo.com).

**Saturday, June 4, 2011** Good Old Days  
W8IRA/r Hamfest. Hudsonville  
Fairgrounds. Hudsonville, MI. 8 am til 2  
pm. VE exams, camping, Friday night  
dinner. TI: 147.160 (94.8 PL) Contact: Don  
at 616 532-7769 after 4 pm. Web: [ira-hamfest@w8ira.org](http://ira-hamfest@w8ira.org)

## Reflected Waves

### March 1991

Robert N. Williams **N3IFY** received the  
1<sup>st</sup> US no-code Amateur radio license in  
mid-March. Field Day co-chairs for this  
year are Rob **N8LDQ** and Ron **N8NEV**.  
The site will be the NW Michigan  
Fairgrounds on Blair Townhall road. The  
Board has authorized the sale of the Bus.  
The asking price is \$1000.00.

### April 2001

The April meeting consisted of  
equipment and techniques of "Fox  
Hunting", better known as Radio Direction  
Finding (RDF). The club held a raffle for a  
Radio Shack HT donated by Tom Stoner,  
son of Marion and Beverley Stoner. At the  
April Board meeting, Roger **N8KV**  
volunteered to chair the Lighthouse Special  
Event station at the Northport Lighthouse.  
This event will be August 18 and 19.

## TBAREG: THE ABEL REPORT

We have several important emergency communications events coming up in the next few months. Please mark these on your calendars and let me know if you can participate. Participation is VERY important because we be using new radio equipment and new technologies that you might want to learn about.. Now is the time to get your feet wet as these events are exercises, not the real thing!

Here's what's on our agenda:

**April 30<sup>th</sup>:** Hospital communications drill...can you hear me now! We will be testing a variety of communications methods including HF, packet, Dstar, Jnos. We will be cooperating with the BARF group and our neighbors up North. This will be a good opportunity to learn about the new digital modes. We will do all our operations from Munson Hospital. This drill is important because we really want to succeed on the April 18th exercise. Lets make this one work!

**May 17<sup>th</sup>:** Nation level exercise, the New Madras fault slips causing a massive earthquake in the Eastern US. Our role will likely be to assist with refugees. Our task will be to communicate with the SEOC (State EOC) via HF and packet radio. More info to follow as we get details of the drill.

**May 18<sup>th</sup>:** This one is important: Munson Hospital has asked us to participate in a region wide hospital communications drill. Munson has been very generous with us and we need to put on a good effort for them. We may need many operators to staff the EOC, Munson and the Barge. Mark this one in red ink!

It would be very helpful if you could email me and let me know if you can participate in any or all of these exercise...otherwise we'll be calling you to ask for your participation!

73, and thanks for your help, really!

Ernie, **K8RCT**

**GT EC**

### TBAREG CONTINUED

On Sunday (April 17th), a large contingent of the TBAREG members gathered at the garage site for the BARGE and began removing panels (inside) and drilling holes to route the cabling and wiring for the 3 new radios. For HF, the van will have a brand new Yaesu 450 installed and for packet, a new Alinco VHF rig with a built-in TNC will be carrying the load. In addition, there is a brand new Icom 880 D-star radio going in. The radios are part of a HSA grant and only the installation remains.



**Photo:** Mike W8VPC programming the Icom 880

If you are not up to speed on the D-star system, take a look at John **KF8KK**'s website: [kf8kk.com](http://kf8kk.com). He has posted some very interesting and easily read articles on D-star. Click on Dstar on the menu on the left side of the home page.

Also, there was an excellent article on Operating D-star in the September 2007 issue of QST by Gary Pierce **KN4AQ**. You can get his article from the ARRL Web site as a PDF. Go to [arrrl.org](http://arrrl.org), click on QST on the home page. Click on Archives on the QST page and then type D-star and 2007 in the appropriate search boxes: Gary's article will be number 2: Operating D-star.

## DAYTON HAMVENTION

Don't know about you, but I am already getting really geeked for Dayton 2011. Winter is nearly kaput and I need a really big dose of Amateur Radio and Dayton is what it is all about. I was talking with Joe Novak **W8TVT** and he suggested I put the Flea Market Space numbers of CARC members and friends--so I don't have many at this point but I'm hoping you all will call in and let me know where you will be hanging out during the high holy days!! Here's what I have so far:

Most likely the largest CARC contingent will be a 12 person group consisting of Joe **W8TVT**, Ken **W8QKP**, Norm **N8STS**, Joe **KB8WZK**, Art **N8HKQ**, Tom **KE8KX**, John **WD8MQN**, Brian **KC8MJI** and friends. They will be occupying Flea Market Spaces Number **FE** 2662, 2663 and 2664. Dave **N8CN** and son Joe **N8OUZ** can be found in space number **FE** 2614. Look for the IOOK flag (light blue) and you'll likely find Dave **W8TVC**, John **KF8KK**, Mike **N7LMJ**, Keith **WA8ZWJ** and several other IOOK members. Their spaces are **FW** 3347, 3348 and 3349. Oh, in case you are wondering, the **FE** prefix is Flea Market East and the **FW** prefix is just as you have already guessed, Flea Market East. Hopefully, I'll have some more sites next month.

## POISE AND COUNTERPOISE

If the radial system below your vertical antenna is a counterpoise, then the vertical section of your antenna must be the poise. Which means that this summer, I plan to put up a couple of poises. Want to join me?

The use of the word radial makes more sense to me, when describing a vertical or random wire antenna system where wires are laid on the ground. The word "radial" is described as spokes, or as something that comes from the center and moves out like a starfish, made in a circle fashion. Yep! I like the word radial.

Some of my antenna textbooks go way back . I can't find the word "counterpoise" used as a way to described a vertical antenna when wires are placed on the ground to be used as a radial system until more recently. No doubt, it's likely that someone has it in a textbook, at some point, since we use this word so often as a way to described the "other side" of the antenna. But I take exception to whoever used it first. It gives a poor impression as to what's happening and has confused many of us. Using the word "counterpoise" makes it sound as if we need to counter some mysterious force that is out of control. Shall we fight to counter the poises!?

When we think in terms of weight measurement, we use counterpoise to balance an amount of weight. With that, I assume that the intention of the first use of the word was to show that you need to balance the antenna. I suppose that the idea was to teach someone, at some time, that we need something on the other end of our monopole in order to counter the thing that's happening with the monopole. We seem to believe that we need a counterpoise to help tune the vertical antenna and that's its purpose. But as I stated last month, it's much more about efficiency.

Keep in mind that a 3 foot ground rod isn't a radial system, nor is it a very good ground. Go big or go home! If you're trying to improve the grounding of your station, make the ground rod very long, perhaps more than 6 feet, especially in the sands of northern Michigan. Concurrently, an 8 foot ground rod isn't an effective radial system. It's a ground rod. Be sure to read up on the local regulations regarding grounding rods, as well.

A counterpoise is often described by hams as a single wire, and this is why I mostly take issue with it. Remember my comments about a dipole being two poles? Doesn't that mean that when we're talking about a counterpoise we're being redundant? It's the other side of the dipole antenna. If the counterpoise is on the ground, it's a horrible radial system and if it's in the air, it's the other half of the dipole. If we're trying to describe a random wire antenna, instead of describing a vertical, then a counterpoise single wire isn't very effective at all. You need to lay down many wires to accomplish your goal and hence, you're on your way to creating a radial system. Stop thinking in terms of a counterpoise. If your counterpoise is on the other end of your random wire, and in the air or off the ground, are you not simply then creating a de-tuned dipole? Seems to me that you'd either call it a dipole (two halves of a monopole antenna), or you'd call that counterpoise a radial system. Calling it a radial system helps to better describe what you really need to accomplish.

A "counterpoise" shouldn't be a simple ground rod either and neither is it an effective radial system, especially when it's in the ground, since it's not a radial (circle pattern to create capacitance). And since it's not a radial system, it cannot develop that much needed capacitance. A radial system has a specific purpose and it's mostly to improve the efficiency of your antenna. One wire on the ground (counterpoise) isn't very effective at this at all. I guess one wire is better than zero wires, but you could also say that a 10 foot vertical is better than a 9 foot vertical on 40 meters. In reality, it's not much better. Hams have discovered, through trial and error, that they seem to get a better SAR and less RF in the shack when they drop a long wire on the ground side of their tuner or antenna feedpoint. If that's your definition of an effective antenna, then feel free to stop there. But as I said last month, a good SAR is not a good indication as to whether you have a good antenna system. Remember, we can get a good SAR from a dummy load and a vertical with lots of radials has a higher SAR than a vertical with zero radials! But a vertical (or random wire, if you must) is more efficient with lots of radials. It's efficiency that we want! We want more signal sent to the guy on the other end.

The counterpoise of an antenna should be described as a radial system, since this description helps we hams to better understand the purpose of those radials. If we continue to use the word counterpoise, then we'll continue to think in terms of one wire, for the purpose of getting a good SAR. If that counterpoise (Man, I hate using that word!), is in the air, and not on the ground, then it's simply the other half of your dipole or better yet, it's simply part of your antenna system.

For me, the word "counterpoise" is worse than swearing or cussing. I cringe when I hear it and for now on, I'm going to be really obnoxious and start asking people how many poises they have in their antenna farm!

Let's put up a poise this summer and make sure we counter it, so that it doesn't get out of control!

-73 de Sean Doran **W8OKN**

## A FEW SHORT ITEMS

### HAM RADIO TO CELEBRATE ROYAL WEDDING

Amateur Radio in the UK will be a part of the upcoming royal wedding. This with word that the Radio Society of Great Britain has made an agreement with UK telecommunications regulator for all UK Radio Amateurs to use special call signs for a period of **eleven days** beginning on the date of the marriage of Prince William and Catherine Middleton on April 29th. If you are into DX you might look for some of these special call signs.

### **SPECTRUM ATTACKS NOT UNIQUE TO US**

Some restructuring news out of the Ukraine that's bad news for ham radio operators in that nation. The Ukrainian government has affirmed new rules for amateur radio operations that have resulted in spectrum losses on the High Frequency, UHF and microwave bands.

According to an e-mail from Alexander Doshchich, **UY0LL**, the spectrum withdrawn from access by Ukrainian hams includes 10.100 to 10.150 and 14.250 to 14.350 MHz on the HF bands. On UHF and above the losses include 1240 to 1300 MHz, 2300 to 2450 MHz, 5670 to 5850 MHz and numerous other spectrum slots right on up to 248 to 250 GHz. (UY0LL)

### **SOUTHERN CALIFORNIA HAMS BACKUP LOCAL HOSPITAL COMMUNICATIONS**

A group pager alert at 10:28 AM on April 5 brought members of the Hospital Disaster Support Communications System (HDSCS) to Saddleback Hospital in Laguna Hills after a digital equipment failure caused the inbound and outbound trunk lines to become inoperative. The phone number of HDSCS net control was given to Orange County Communications agency so that ambulance companies and other hospitals could contact Saddleback Hospital via ham radio. The outage lasted until 6 PM that day.

Of the 115 times that HDSCS has been activated for communications problems in Orange County hospitals, this was the 85th time that it was due to switchgear or cable failure. Does it seem to you that Orange County has an unusual number of hospital phone failures? Well, not really. HDSCS leader April Moell, WA6OPS, talks to a lot of hospital employees and disaster planners around the country who tell her that they have their share of phone outages too. The causes range from accidentally cut cables to computer failures and power surges. She says that the difference is that most ham emergency groups around the country don't prepare and plan to help in these single-hospital incidents. They don't set up 24-hour alerting plans for the hospitals to use to contact them quickly when phones go down, so they never get the call. Often they don't have portable stations so they can go into the individual hospital units such as the Emergency Department, Pharmacy and so forth to provide unit-to-unit communications.

When a nurse on a hospital unit has an urgent need to contact a patient's physician at his office or home, but the phones are down because switchgear has failed or backhoe has dug up the cables, that's just as severe an emergency as it would be after a hurricane or tornado. So HDSCS plans to help hospitals whenever they need it, not just when all else fails in a big natural disaster.

Orange County hospitals appreciate HDSCS because hams come when they call and they can connect their staff members to the outside, no matter the cause of the communications outage. WA6OPS thinks that other ARES groups around the country should adopt this hospital support model, which includes robust alerting plans for each hospital, regular meetings with the hospital disaster planners, and ready-to-respond members who are trained in the special terminology and communications needs of medical facilities.

More information about HDSCS and its secrets of success are at the Web site of the Hospital Disaster Support Communications System, or HDSCS.ORG.

### **FCC CONSIDERING NEW TOWER RULES**

The radio towers-are-killing-migratory-birds debate has moved to a new stage at the FCC. Conservation groups and other federal agencies have prodded the Commission into considering changes that will make its approval process for towers more complex. Not just new towers are affected. David Oxenford an attorney with firm of Davis Wright Tremaine says that the new requirements proposed by the FCC would affect modifications to existing structures if there would be a substantial increase in size or even changes in lighting.

Two major rule changes are up for public comment. The first is a requirement to give local public notice of the construction of a tower and the second is a possible requirement for an Environmental Assessment. Oxenford notes that an Environmental Assessment is a document that must be carefully prepared and not something that an applicant can dash off on their own. What affect if any the passage of these proposed requirements might have on small towers used by ham radio operators on private property is unknown.

### **BARF BREAKFAST**

The Benzie Amateur Radio Friends will be meeting for breakfast at the Hungry Tummy in downtown Beulah, this coming Saturday, April 23<sup>rd</sup>. 9 am. Usually the breakfast is the last Saturday of the month. All are welcome.

### **CARC BREAKFAST**

The CARC will be having a breakfast meeting at the Hard Luck Café in Traverse City, on the first Saturday of every month. Next gathering is May, 7<sup>th</sup>.

### **MI QSO PARTY**

Hope **AA8SN** requests that everyone who worked the MI QP on April 16 bring their log summary to the Club Meeting on April 26. This will give us an idea of how many people were in the contest and what our Club score looks like.

**<SK>**