



# The BAARCer



September 2011

For Anyone Interested in Amateur Radio

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**Club Call Sign: WØUJ**

**BAARC REPEATERS**

53.110 MHz- 123.0 Hz  
 147.225 MHz + (main rpt)  
 145.130 MHz- Echo Link  
 Node number 233515  
 443.925 MHz + 110.9 Hz  
 Packet: 145.670 MHz  
 MNBRD, BRDBBS  
 144.390 WØUJ-5 APRS  
 Crosslake 147.030 MHz+  
<http://brainerdham.org>

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**Editor:**

Fritz Bertelt WØKO



**The BAARC 2011 Fox Hunt and Picnic Group:** Shown Back Row (l-r): Doug KDØERE, Roger WØWUG, Ron KØGOP, Kathy KØTHY, John WØWY; Front Row (l-r): Dylan KDØLFE, Al WØRC, Shirley KØDCW, Charles W5CCL, Orcy WØQT, Lyle KØLR, and Terry KIØFW, who organized the hunts. **Look for more Pix by Lyle KØLFV on this event in this bulletin.**

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**— Events Calendar —**

- Sat., Sept. 3, Club Breakfast @ 9 @** Northwind Grille in Brd.
- Sat., Sept. 10, 8th Annual Tour of Cuyuna Bike Ride—WØWY,** Chair. Ops. needed. More details on the Sunday Net.
- Sat., Sept. 10 —Hamfest @** Rush City
- Sat., Sept. 17, Club Breakfast @ 9 @** Northwind Grille in Brd.
- Sat., Sept. 24, Carlton Hamfest**
- Thurs., Sept. 29, Board Mtg. @ 4 and Membership Mtg. @ 7—**both in Fire Hall.

**CHECK THE SUNDAY NIGHT NETS FOR ANY UPDATES/CORRECTIONS**

**Note:** There were no meetings in August—therefore there are no minutes here.

## Experimental Antenna-Clothing Outperforms Regular Antennas

By [Ben Coxworth](#)

In the recent past, we've seen outfits that incorporate [bio-sensors](#) and [batteries](#), and even a [bikini](#) with integrated solar cells. One of the latest innovations in smart fabrics, however, allows a person's clothing to act as multiple antennas. Developed at Ohio State University (OSU), the system could prove particularly useful to soldiers, who don't want to be encumbered by a protruding whip antenna. While [this is not the first time](#) that clothing has been used to send and receive radio signals, the OSU technology is unique in that it uses a computer control device to facilitate several antennas within one piece of fabric. The engineers have created a prototype, made by etching thin layers of brass onto commercially-available FR-4 flexible plastic film, then sewing that film onto conventional fabric. Four patches of the plastic were attached to a vest on the chest, back and both shoulders. These were wired to the controller, an inch-thick metal box slightly smaller than a credit card, which was worn on a belt. Because the body's position may result in one or more of the antennas being blocked by obstacles, or short-circuited against the wearer's skin, the controller is able to switch between antennas so that the one best able to transmit and receive is activated. In lab tests, the vest was found to be able to work in all directions, offering four times the range of a standard military whip antenna. The [OSU](#) team is now looking into printing such antennas directly onto clothing, or embroidering them into it using metallic thread. They have partnered with tech company [Applied EM](#), to commercialize the technology. It is estimated that the systems might initially cost about US\$200 each, but prices should drop as production increases. Along with the military applications, it has also been suggested that the antennas could be used in clothing for the elderly or disabled, which would allow them to communicate in emergencies without having to wear conspicuous assistive devices. The research was recently published in the journal [IEEE Antennas and Wireless Propagation Letters](#). (Info from [gizmag.com website](#).)

### **CONVERSATION — Would You Know?** (From the ARRL)

Hurricane Irene just missed the US mainland but you might never know it from the damage totals and news videos. Even downgraded to a tropical storm by the time of landfall over Long Island, NY, there was still plenty of punch. Before the roads are even cleared, however, tropical storm Katia has formed and is expected to reach Category 3 status in a few days. It promises to be a stressful hurricane season for the Caribbean, the Gulf of Mexico, and the entire eastern seaboard.

So why wait until the sound of plywood being nailed up is on the evening news? Would you know the frequencies of the [Hurricane Watch Net](#) and your state and local emergency nets? Do you know how to check in to such a net and submit or accept "traffic"? What would you do if you heard a distress call on the bands from a station in an affected area? If a person asked you to get a message into an affected area, how would you do it? That is not the time to start thinking about what to do!

Competitive radiosport exists not because the FCC thinks we should have fun on the air but because our Basis and Purpose (Part 97.1) states that we are expected to provide emergency communications, among other things. By building competition-grade stations and training competition-grade operators, so the theory goes, Amateur Radio will be a resource to the nation in time of need. It doesn't matter much that you can "run rate", though, if you don't know how to use those skills.

Certainly, your local ARES team could use your skills. If you're not sure about the ham emergency organizations in your area, contact your ARRL Section Manager and ask for his or her help in finding the appropriate sources of information and groups. They'll be glad you called and you will, too.

You can also prepare yourself by studying the material on the ARRL's [Public Service](#) website. Along with describing the operation of ARES and NTS, there are plenty of [resources](#) for you, too, all at no charge. You can also prepare by being informed about the areas likely to be affected. After all, a hurricane doesn't exactly sneak up on us - there is plenty of time for everyone to collect their wits and the necessary resources to be effective if called on.

If a pinch of prevention is worth a pound of cure, then an evening of reading, printing, and study will certainly pay off, too. With the U.S. Labor Day holiday coming up, perhaps an hour or two could be set aside. You'll be better prepared all year long, too, so that your answer when needed is "Yes!" instead of "I don't know..."

73, **Ward NØAX**

## **BAARC Fox Hunt and Picnic 2011 (Thanks to Lyle KØLFV for providing the Report and all Photos)**

On Saturday August 27<sup>th</sup> a number of Brainerd Area Amateur Radio Operators gathered to hunt the Max and Micro Electronic Foxes. Charles **W5CCL** hid the Big Fox in Memorial Park near the Baseball Stadium, and Terry **KIØFW** hid the smaller two Micro Foxes in Lum Park, where we also enjoyed our Club Picnic Lunch.

Lyle **KØLFV** got to Lum Park early and secured a picnic shelter, hung up our Club Banner, and set up a portable 2M station, which was used as the event net control station.

As in the past few years Kathy **KØTHY** and Lyle **KØLR** again set the standard on how to find the Big Fox within the first 18 minutes of the hunt. Kathy led Lyle by a few seconds in finding it first. Next came the team of Doug **KDØERE** and Dylan **KDØLFE** (20 min), Terry **KIØFW** (30 min), John **WØWY** (45 min), Orcy **WØQT**, (1hr 20 min), and Ron **KØGOP** (1hr 30 min).

Also all of the hunters who hunted the Big Fox also hunted the Micro Foxes that were well hidden in Lum Park. The Big Fox was on the ground. However, the Little Foxes were resting up in the trees, so it made it a little more difficult to find their hiding places. As a result, all participants learned to sharpen their direction finding skills, and we all talked about how we can improve our equipment for the hunt next year.

When John **WØWY** was searching for the Large Fox near the Baseball Stadium, he found a baseball which we all autographed and presented to Charles **W5CCL** for his work in finding such a creative place to hide the Big Fox. The weather was perfect for our outdoor event and everyone had a great time hunting the Foxes, eating our picnic lunch and visiting. Not everyone who attended hunted the Foxes, however. Nevertheless, they showed up to enjoy the picnic lunch and good conversation.

**Notes:** Not pictured were Lyle **KØLFV**, his **XYL Marilyn**, and Dave **KCØTGT**. All photos of the Hunt and Picnic taken by Lyle **KØLFV**. We trust no one was left out of the write-up. **(Continued on page 4)**

**Heathkit to Go Back Into the Kit-Building Business:** The former kit manufacturer is well known to all Amateur Radio operators of a certain age, and will be reentering the kit business in late August. The notice states, in part: "Heathkit will debut their new line of Do-it-Yourself kits for common around-the-house items. The first kit will be a Garage Parking Assistant (GPA). The Garage Parking Assistant kit lets you build your own system that uses ultrasonic sound waves to locate your car as it enters the garage. The system signals to the driver using LED lights mounted on the wall when the car is detected and in the perfect spot for parking. The GPA-100 kit consists of two primary assemblies -- the LED Display in kit form and the pre-assembled ultrasonic range module. The kit will include everything you need to complete the project except a soldering iron and hand tools.

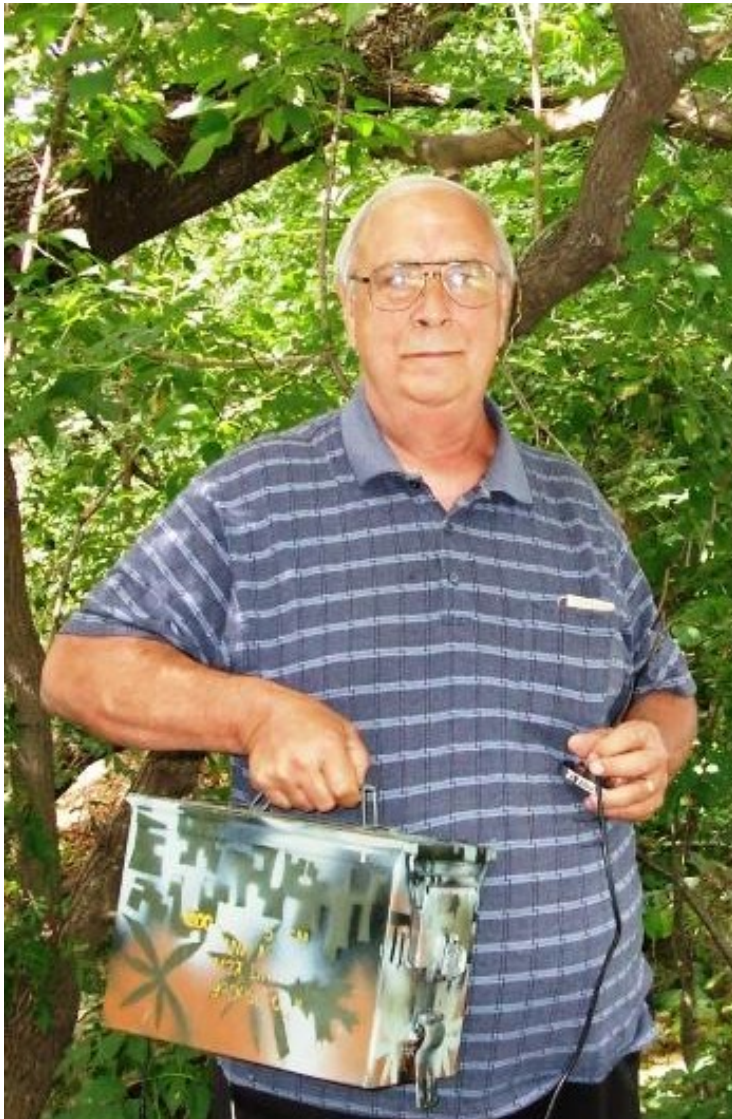
"Next on the market will be a Wireless Swimming Pool Monitor kit followed by many more. Heathkit wants to continue to bring to its customers interesting, unique Heathkit products. Heathkit is interested in learning what types of products kit builders would like to build. Kit builders can submit their suggestions through this website using the Contact Us email."

Although there's no indication that Heathkit Educational Systems is planning to reenter the Amateur Radio market, the St Joseph, Michigan-based company is actively looking for kit suggestions.

After several decades of successful kit manufacturing, Heathkit left the kit business in 1992. Heath sold Amateur Radio equipment, at first only kits and later its own line of non-kit products, from 1954 to 1992. The company has been sold a number of times since its founding back in 1912 as an aircraft company. (From the [ARRL Letter](#))

(continued from page 3 )

**Charles W5CCL (on left) hiding the Big Fox and Terry KIØFW (on right) hiding the Baby Fox**



**Scouting Jamboree Coming Up.** Jim K5ND notes that one good way to publicize ham radio is through [Scouting's Jamboree on the Air](#) held this year on **October 15 and 16**. It is the world's largest Scouting event with 2010 results coming in at over 700,000 participants from nearly 6,000 stations around the world. Please engage your local Boy Scout council to help them with a planned operation or to start one. This year JOTA stations have an opportunity to [pre-register](#) their events. Several are doing fox hunts as well. You can find lots of information online and on the [ARRL site](#). This is a great way to not only reach the public but to expose youth to Amateur Radio. (Info from the [ARRL Letter](#))

## DX and the Paper Chase

The month of August has flown by at warp speed. As I look back to the beginning of the month when the "rebirth" of my radio shack started to take place, there is a feeling of both accomplishment and contentment as my operating position evolved into a fun place to kick back and work HF radio. Sun Cycle 24 continued its fickle ways throughout the month with the SFI bouncing up and down along with the sunspots, which fluctuated mostly downward. Interestingly enough, openings into Europe late in the day and early evening on 17 meters continued to be good. This means that the European operators were at their stations both approaching and well past midnight. There was a DXpedition to Benin (TY) which is an African country that has eluded me for years—this time I wasn't going to let it get by me. I finally worked them on 17, the 3rd day of the DXpedition, and I'm in the log. Once again I'm reminded that when operating DX, patience is a virtue. I haunted the bands waiting for good propagation and was rewarded with a new country. The early mornings (very early) when I find myself unable to sleep, it's off to the shack and 40 meters. A couple of weeks ago my CQ was rewarded by an answer from Australia with a readable signal and a very enjoyable QSO. All of this is possible using a ground-mounted vertical for 40 meters and calling CQ in the wee hours of the morning—a little propagation was helpful. Our summer season is winding down, and soon we'll be preparing for fall and winter. Time has flown by, and in a way I'm looking forward to those snowy days of winter when I can operate HF and brag how cold it is. Clearly, winter is radio weather. That's the news from Huntersville for the month of August. Remember, sit down at your radio and call CQ because someone somewhere is listening for your call. So long from my QTH in the woods for now, 73 and good DX from **Bob/WØZPE**.

## Silent Key: Peter Dahl, KØBIT (SK)—from the ARRL Letter

Peter Dahl, KØBIT, of El Paso, Texas, passed away August 15 of Parkinson's disease. He was 71. In 2007 after more than 40 years, he closed his company -- the Peter W. Dahl Company -- citing health reasons. "I want to thank everyone for their business throughout the years," Dahl told the ARRL upon his retirement. "I have enjoyed making each Amateur Radio transformer." While still a student at the University of Minnesota, Dahl founded the Peter W. Dahl Company, manufacturers of a wide variety of custom transformers and reactors for Amateur Radio, as well as commercial radio and television applications. According to Dahl, many were direct replacements for original equipment components that were no longer available from the manufacturer, while others had general-purpose applications in any number of different transmitters. In 2007, he told the ARRL that his company had more than 4000 individual transformer designs on file. *QST* columnist John Dilks, K2TQN ("Vintage Radio") remembered that the closing of the Dahl Company was "sad news for those of us who restore the big iron." After retiring, Dahl sold his designs to **Harbach Electronics**.



Peter Dahl, KØBIT (SK)

### John WØWY presenting Charles W5CCL with an award.

When John WØWY was searching for the Large Fox near the Baseball Stadium, he found a baseball which all participants autographed. John presented it to Charles W5CCL for his work in finding such a creative place to hide the Big Fox. Clearly, Charles looked pleased.



**Pictured (L-R) Charles W5CCL, BAARC President, with John WØWY, BAARC Emergency Coordinator, making the presentation. Doug KDØERE, BAARC Treasurer and Charles' brother-in-law, looking on. With Rice Lake and Lum Park in the background, it certainly was a beautiful day for this annual event in our Lakes Area.**

## **How to be a Volunteer that Leaders Love** —Second Installment Edited by WØKO from an article provided by WØRC

By David Coursey, N5FDL

This month we'll touch on what it takes to be the volunteer every leader wants on his or her team. [Here are the last three tips:](#)

***Build Your Skills*** - Newcomer mistakes must be forgiven. And some people - like me - make the same silly mistakes over and over. But, we need to constantly "sharpen the saw," as the book *7 Habits of Highly Successful People* calls it. Great volunteers sharpen the saw on a regular basis. The reason we provide support for all these bike rides, community fairs, rodeos and other non-emergency events is two-fold. Sometimes these events become real emergencies. Use these events to train yourself while having fun.

***Help solve problems*** - I was really pleased at a recent event when our volunteers at a remote site solved problems that occurred at their location without help from anyone. It was an issue related to signals and geography and these were new hams - all with new call signs - who took initiative and made things better on the spot. Great volunteers give great customer service.

***Observe Lines of Authority*** - Not long ago, I came unglued (it had been a bad day) when a fairly inexperienced volunteer tried to do something that went against the goals of the organization. It was not ill-intended, just inexperience. But, it was the second or third problem. This was a hugely promising volunteer, who just needed to understand why certain things are done the way they are. Even insensitive louts sometimes have good reasons behind their logic.

Good volunteers have ideas. But, they will need to work within the rules of the organization and ask questions before just "doing."

**P.S. ARES® E-Letter Contributing Editor David Coursey, N5FDL, is an emcomm leader in San Joaquin County, California, and author of the N5FDL.com blog. Our thanks to AI WØRC for providing the complete article, and my apologies to David for having to edit his good thoughts down to fit our BAARCer in two installments. See the August issue page 7 for the first four tips—de WØKO.**

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**BAARC Mission Statement:** The Brainerd Area Amateur Radio Club is comprised of about 85 licensed Amateur Radio Operators who meet monthly to exchange ideas, improve radio skills, organize activities that are of service to the area, promote development of Amateur Radio, and join together in the mutual interest of Ham Radio. **In addition, the Club endorses and honors the Radio Amateur's Code : The radio amateur is considerate, loyal, progressive, friendly, balanced, and patriotic.** The BAARCer newsletter is provided to club members for information and entertainment as a non-profit service. The material is supplied "as is" and without warranty. Permission is granted to copy and distribute any information published here provided the source is credited. Because space is limited in the BAARCer newsletter, you will often find more photos and more details for club news stories on the BAARC website at: <http://brainerdham.org>

SUNDAY NIGHT NET OPERATORS

09/04/11	Fritz	WØKO
09/11/11	Joe	KBØVYJ
09/18/11	John	WØWY
09/25/11	Steve	WØTNT
10/02/11	Fritz	WØKO
10/09/11	Joe	KBØVYJ
10/16/11	Bob	WØZPE
10/23/11	Becky	KDØHBH
10/30/11	Jeff	KDØHBI

Can't make the schedule? Find a substitute operator. BAARC Sunday Night Net Control Coordinator is Fritz WØKO. To volunteer: w0ko "at" arrl.net

Thanks to our volunteer NCS shown above.

Remember: It's not necessary to do Simplex Net—it's all up to you.

**IT'S LABOR DAY: Congratulations and Thanks,**

**former and current Laborers!!** We honor you all for your work contributions, big and small. That is only one of many reasons we recognize all of you this Labor Day 2011. All of you have truly earned this day of respect, our **Labor Day** national holiday. May God continue to bless you and our great country!

**Steve NØCRM, our VP, is looking for program ideas.** Or can you put on a program yourself or in collaboration with another? Let Steve or any other leadership team member know.

**Fall MN Repeater Council Mtg: Sat., October 22, 2011,** Maple Grove Fire Station @ 13450 Maple Knoll Way, Maple Grove, MN. Registration @ 12 noon and mtg. @ 1 p.m. Our BAARC may not have any issues, but if you would like to attend to represent us, let Fritz know in advance. Check <<http://www.mnrepeaters.org>> Updates were sent with Fall Newsletter in late August from the MRC.

United We Stand



**FIRST CLASS MAIL**  
Address Correction Requested

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