

# Big Rapids Area Amateur Radio Club

May 2012

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## PRESIDENT'S MESSAGE

This will be a very short president's message for this month's

newsletter. I am holding up publication of the newsletter because I am late in getting this to our editor, Phil.

This year is flying by so fast! Work is piling up with lots of activities right now, and the semester is coming to a close this Friday. My youngest daughter will complete her first year at Ferris after her final exams next week.

My youngest son, Gregory, and I will attend the Dayton Hamvention on May 19<sup>th</sup> and 20<sup>th</sup>. We have attended 5 times since being here in Michigan for the past 10 years. We are looking forward to Gregory's first Hamvention attendance as a ham radio operator.

Field Day is coming up fast and we will need a lot of participation to make it successful.

I Hope to see you at the next club meeting on Thursday, May 3<sup>rd</sup> at the Big Rapids Department of Public Safety.

73s,

Jim Woolen  
K4UIH

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(April Meeting Minutes unavailable)





## Free Circuit Design Tools for Ham Radio

By Dan Romanchik, KB6NU

About a week ago, I started looking for a schematic capture program so that I could easily generate some simple schematics for my upcoming Extra Class study guide. Since I use a Mac as my main computer, I first asked on the Ham-Mac mailing list if anyone knew of a good one. I got several recommendations, including:

- Diptrace (<http://www.diptrace.com/>),
- Eagle (<http://www.cadsoftusa.com/downloads/freeware/?language=en>), and
- McCad (<http://mccad.com/>)

Eagle looked like a good choice, although several people mentioned that the user interface “left much to be desired.”

Then, I remembered that I had OmniGraffle, which is a general-purpose diagramming tool. Googling around, I found several sets of electronic symbol libraries that could be used with OmniGraffle. I installed them, and generated a couple of figures for the study guide section that discusses T-network and pi-network filters. It was a reasonably good solution to my problem.

### A Web solution

A couple of days ago, though, someone on the local Maker mailing list, pointed me towards CircuitLab (<https://www.circuitlab.com/>), an online schematic capture tool and circuit simulator. I haven't tried the circuit simulation yet, but the schematic capture tool is really easy to use. It's much easier to use for drawing circuit diagrams than OmniGraffle.

Another benefit is that it doesn't matter what computer you're using. Because it runs in a Web browser, it doesn't matter whether that browser is running on a Mac or a PC or even a Linux box.

If you set up an account, you can save circuits to your "workbench." To get you started, there are some sample circuits, such as the 555 timer circuit shown in Figure 1. There's also some decent documentation and a forum where you can discuss circuits and get some help.

Finally, the price is right, too. It looks like using CircuitLab is completely free. I couldn't find any pages that required payment.

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When not searching the Web for circuit design tools, you'll find KB6NU working 30m CW and twittering away about his contacts. His Twitter id is @kb6nu. He would love for you to follow him there. If you don't tweet, you can still read his blog at [www.kb6nu.com](http://www.kb6nu.com).

## **Fox Hunting Fun is Radio Direction Finding**

Can't go to Dayton Hamvention this year? Don't sit at home moping in self-pity or sulky unhappiness, join us for the annual "I'm Not a Dayton Fox Hunt." Can you find the hidden transmitter?

This year we will again attempt to use the famous "Montreal Fox" automatic transmitter. Look for us on 146.565 at 11:00 AM on Saturday, May 19, 2012. The general area for the hunt will be the Big Rapids Community Pool. The pre-hunt briefing will be at 10:45AM in the pool parking lot with the hunt starting at 11:00AM.

New this year will be a Fox hunting 101 session that will take place at 10AM. We will be discussing techniques for transmitter hunting and reviewing equipment. Please don't feel you need extensive equipment. The team finding the transmitter for the past two years was just using a HT without an antenna.

Not up to the hunt, then join us at the Big Rapids pool shelter for a picnic lunch at noon and hear all of the hunting tales. Please bring a dish to pass.

Check the website for a map if needed.

I hope to see you there! Horse and bugle not required.

Happy Hamming!  
Mike, KD8DIB

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## **Getting Ready for ARRL Field Day**

So you're thinking about organizing ARRL Field Day for your club this year. I'd like to offer a few tips to help you get a jump start on setting up a great Field Day. In the spring the activities of the Big Rapids Area Amateur Radio Club ([www.braarc.net](http://www.braarc.net)) turn to Field Day preparations. This article will describe the steps the BRAARC members take for a successful event.

### **Select Band Captains**

Divide and conquer is a key element of a fun time for all. All of the planning and work can not be left to one or two people. This is not a lot of fun for the few and can cause some difficulty. A useful strategy that can be used is the Incident Command System, after all Field Day is a type of emergency exercise.

A Field Day Coordinator is designated to help with over all coordination of the planning and the event. To assist the coordinator, Band Captains are assigned to spearhead operation on a particular band or activity. This group is designated to plan and conduct preparations for the event. Ask your members to contribute in the areas they are interested in.

## **Establish a Budget**

A part of the planning process is establishing a budget and securing funding. There are many ways to accomplish this but it is a vital activity to the planning of your event. As you begin to develop your budget there are many questions that will be asked and answered. This defines the activities that your group will undertake. Are you going to open your Field Day to the public and what level of services can you offer to your guests. Additional budget items to consider include the following: fuel, food, facilities, equipment, maintenance, awards, incentives, and promotion are just some examples of budget items to consider.

## **Secure a Location**

The location can make or break your Field Day event. Does the location support the activities you'd like to accomplish? Field Day is a 24 hour event and that means the first criteria is... WHERE IS THE RESTROOM?!?

Consider what will your participants need and expect from a Field Day site. RV parking is becoming more important for BRAARC to encourage participation. We need a communal area for meals and we want to be close to restaurants that have takeout. We've given up trying to prepare meals on site. We are there to operate radios not cook.

## **Equipment and Supplies**

What equipment and supplies does your club have available? Is that equipment useable or in need of maintenance? This is when the club Quartermaster can provide some helpful input both for the budget and planning. A club generator needs periodic oil changes and prior to Field Day is a great time to conduct this maintenance. Club antenna kits need inspections and repairs as required.

All Band Captains must communicate with the Quartermaster to eliminate any confusion in the assignment of club equipment. You do not want two different Band Captains assuming that they are using the one club radio. Work these details out as part of your planning sessions.

## **Site and Participant Safety**

There are some recent Field Day tragedies that we all want to avoid. Creating a safety plan for your event and establishing a Safety Officer can be useful in preventing injury and damage. The Safety Officer's role is to monitor the activities and assess compliance with the event safety plan. They must also have authority to stop an activity and call for a review by the event coordinator and band captains to determine the safe way to proceed.

The first step in creating a safety plan is to survey your Field Day location and look for hazards. We want to know up front what the hazards are at the site so we can implement countermeasures to eliminate the hazards. Look for overhead and underground utilities, assess the walking and working surfaces, consider expected weather conditions and determine traffic flow as a starting point. Involve all your Band Captains in this preplanning.

### Site Set-up

Once on site, the work begins. A pre-work briefing should be held to discuss the event safety plan and set-up activities. Because you've pre-planned your Field Day event, the location of operating stations, antenna farm, and other services are established. Executing your plan becomes the mission. Assign work crews as necessary to begin the work. Provide them with instructions, equipment and a leader.

Occasionally, this is the point where someone wants to jump in as a last minute participant or even Band Captain. This can be disruptive but this energy should be redirected and the person encouraged to "join in" with the work at hand. Field Day is a cooperative activity and a lot of fun that we want to share with everyone. Your plan should include and accommodate these last minute participant / Band Captains. However, it can't be expected that all last minute changes can be accommodated. Encourage participation in the pre-planning to make Field Day run smooth.

### Operation

Band Captains should determine an operating schedule and recruit operators to fill their schedule. BRAARC attempts to maximize the amount of operators and operation time by encouraging operation of multiple stations. Typically we operate three to four contest stations, a GOTA (Get on the Air) station, and VHF/UHF stations when possible. This is a 24 hour contest and requires many operators to keep these stations on the air the entire length of the event.

### Teardown

The work doesn't end with that final contact. The tear down of the operating locations, accounting for club equipment, disassembling the antenna farm, and restoring the site to original condition requires planning also. Hopefully, you are as lucky as BRAARC when it comes to tear down. Many club members, even if they did not operate, return to assist with teardown. It's nice to have fresh help in this phase of the event as it can be hazardous. Be sure to include tear down as part of your plan to minimize these hazards. A successful event includes being ready, for both people and equipment, to deploy again soon after the event.

### Debriefing

Holding a short meeting to discuss any problems, concerns, improvements, and of course successes is extremely important. Document these comments for implementation next year or by the next group. Also, by reporting back to your organization this creates a continuous cycle of improvement.

Happy Hamming!



**April showers bring May flowers  
BUT, where are the spring showers?**

**It's been a crazy year with early warm  
weather and now very dry weather.**



## W8ZNH Estate Sale

As you know, life member and great club friend, Bill W8ZNH passed away January 8, 2012. Tom and I are working with his widow Mary to arrange for the sale of Bill's amateur radio equipment. This sale will be a tremendous help to her. Please share the news of this sale. This sale includes HF and VHF/UHF rigs, keys, books, station accessories, and a linear amplifier.

Bill maintained his equipment in excellent condition. As part of the pre-sale preparations, I am testing and inspecting the equipment to allow for the best descriptions possible. Bill's documentation of his equipment is also being reviewed to assist in these descriptions. The Estate Sale will be on-line utilizing [www.ebay.com](http://www.ebay.com).

I encourage you to visit the BRAARC Swap Shop site at: <http://forum.braarc.net/index.php?board=3.0> and check out the W8ZNH Estate Sale link for the current items up for auction. If you have questions about particular pieces of equipment please use the "ask seller question" link in the associated ebay auction. Links to the auctions and photographs will be posted at the above link. Local pick up is available to minimize shipping costs.

All sales are final and no sales outside ebay are allowed.

Happy Hamming!  
KD8DIB



# BREAKFAST

Saturday April 28, 2012  
Sharon's Restaurant  
Rogers Heights  
9:00AM



7	2			8	3			
5					6			8
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9	1		3	2				
			6	7		1		9
	7	2					3	5
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2			9				5	
	8						1	

This is classified as 'easy'.

Solution next month.

**PO Box 343 Paris MI 49338**  
**May 2012**

