

Big Rapids Area Amateur Radio Club

December 2014

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Presidents Message

November Club Member Activities

Jeff Sell is using WSPR and making some astonishing connections

halfway around the world with less than one watt. This and other member postings can be seen on Facebook – Big Rapids Area Amateur Radio Club.

I have had several conversations with other members that are into the DX side of things. Not really working for an award but just seeing what rare contacts they can come up with.

On November 15-16 I worked ARRL's November Sweeps (phone). I'm not a dedicated contester but during a total of two and one half hours (spread over the 24 hour contest) I worked 61 stations. This included 29 different states. Of the 61 contacts, 21 have verified the contact on Logbook Of The World (LoTW). This is a free service of ARRL but it charges for certificates issued such as WAS and DXCC. It is interesting that the security involved in posting to LoTW is higher than any other activity I use.

According to Mike McKay (KD8DIB) the echolink is up and running on the 440 repeater.

December Activities

Don't forget the November club breakfast at Sharon's Café in Rogers Heights at 9:00 on the 29th. The club meeting will begin at 6:00 pm December 4 in the Big Rapids Public Safety building.

This meeting is for the annual Christmas potluck dinner. Sliced ham will be provided. Also we will have the W8PUG food drive and one of our most important moneymakers the White Elephant/Silent Auction. Please remember to attend this meeting and if possible bring an auction item or items, packaged items for the food drive, and table service.

Don't forget:

Sunday night nets at 7:30 pm on 443.9 MHz
Tuesday night nets at 9:00 pm on 146.74 MHz

Due to the Holidays, the January club meeting has been moved to January 8th. The breakfast will then be the preceding Saturday January 3rd at Sharon's Cafe.

Happy Holidays,

Dan
WA8AEN

In This Issue:

Pg 1 – President's Message

Pg 2 – Nov. Meeting Min.

Pg 3 - Announcements

Pg 3 – "Frequency"

Pg 4 – Project Starburst

Pg 5,6 – KB6NU articles

Pg 7 – membership form

Minutes From The Meeting – 6 November 2014

Bruce Werner, WB8TVD, Temporary Secretary

Here's what you missed if you were not at the meeting on 6 November, 2014:

Don, WA8AEN, opened the meeting and noted that the club still does not have a permanent secretary and asked if someone would take the minutes. Completely losing my head, I offered to take the minutes for this one meeting. After finding out the next meeting would be our annual pot luck dinner, I offered to take the minutes for that meeting, too.

We had 19 in attendance, including 3 visitors who are interested in learning and earning licenses. In our desire for food, we talked about the pot luck on 4 December at 6:00 pm at our usual club hangout at the Big Rapids Public Safety meeting room. Note the earlier time! There will be a ham as main meat (how appropriate!), so bring a dish to pass, your own place setting and non-alcoholic beverage.

One more thing: Bring along a canned or other non-perishable food item to be donated to Starburst, a local food pantry AND bring a white elephant gift for the silent auction. As in the past, it may be unwrapped, or wrapped in secret.

The usual committee reports were otherwise short circuited:

The treasurer was not in attendance, but he left a summary of our financial status, which was briefly discussed.

Repeater committees did not have any new information:

Bruce, WB8TVD, did not have updates on the 6 meter repeater, but will be contacting Jeff, WD8DLK, to set up a time to go check out the equipment and status. [Someone offered to go along, but it escapes me who. Dan, WA8AEN?] Mike, KD8DIB, had no updates on the 2 meter or 440 machines, except that he had been up on the mountain to inspect the 2 meter equipment. He cleaned it up and it all looked in good working order.

The two nets – 2 meters and 440 – have seen declining numbers of check-ins and it is getting harder to find people to act as net control operators. As an ARRL Public Service Club, the nets are important to our mission. Each net has a certain point count, as does each check-in. We report our net activity along with other public service events to ARRL as proof we are actually training for emergencies and performing public service. Please offer to be a net control on either or both of the nets, but most of all, check in and offer topics for discussion.

Tom, KB8TYJ, was not there to give his details about the CROP Walk in October, but it was noted that Ham turnout was good and we lost neither walkers nor Hams in spite of the wind and cold!!

Jeff, K8OE, held a VE session in October and there are now 5 new hams. Several of them are CERT members in Osceola County. Jeff would like to know if there is interest in another VE session, or a Ham-In-A-Day, or both, sometime in March or April. Jeff reminded all of us to think about membership recruiting. Are there Hams who have never joined, have drifted away or may not be interested in joining the club, but might be excellent ARES members? Tell them about the club and ARES! Invite them to a club meeting or introduce them to Jeff, our ARRL Emergency Coordinator.

There were several reminders:

The next club breakfast will be 9:00 am on 29 November [as a warm-up for our pot luck] at Sharon's in Rogers Heights.

Our next meeting will be the annual Christmas potluck/white elephant auction/food drive on 4 December at 6:00 pm.

In January, our normal meeting date would have been 1 January. We will postpone the January meeting until 8 January – one week later. (Again, the January meeting will be at the DPS meeting room at 7:00 pm, 8 January)

The January breakfast will be on Saturday, 3 January at 9:00 am at Sharon's in Rogers Heights.

Dan, WA8AEN, wrapped up the meeting with an interesting presentation of his old employer, Sparton Electronics (no, I did not spell that wrong), which started in 1900, before the advent of radio. They eventually did move into radio and the company now makes advanced electronic devices, including Sonobuoys.

At the conclusion of the meeting, Bruce, WB8TVD [that would be me], won the 50/50 drawing, and, not wanting to be greedy after having won the pot in October, returned it as a donation to the club's general fund.

[Note: We still need a permanent secretary. I will cover the December meeting, so we need a volunteer for January.]

[AND: Would someone volunteer to bring refreshments to the 8 January meeting?]

Bruce, WB8TVD
Temporary Secretary

Announcements:

Saturday, November 29, Next club breakfast at Sharon's in Rogers Heights, 9A.M.

Thursday, December 4, Next regular club meeting will be our Christmas Potluck with white elephant auction and non-perishable items for the Jim Orlovski food pantry donation.

"Frequency" TV Series Would Reprise Amateur Radio-Themed Movie

Mike Baxter, KA0XTT -- Tim Allen's character in the "Last Man Standing" TV show on ABC -- may be getting some competition on the ham bands, as NBC appears poised to launch a television series based on the 2000 movie Frequency, in which ham radio -- aided by some spectacular solar phenomena -- plays a central role in the sci-fi thriller.

According to a November 13 article in The Hollywood Reporter, NBC has already committed to the series. Jeremy Carver is writing the script for Warner Brothers Television and will be the series' executive producer. Toby Emmerich, who wrote the movie, will be a co-producer.

Are knobs and buttons toast?

By Dan Romanchik, KB6NU

In a recent column on EETimes (http://www.eetimes.com/author.asp?doc_id=1324283), an old colleague of mine, Martin Rowe, says, "Knobs and buttons are slowly on their way out. Get used to it." He's referring to the controls on oscilloscopes, but if he were a ham, he might just as well be talking about amateur radio transceivers, too.

We already see this happening in amateur radio. FlexRadio, and a couple of other companies, already make transceivers with no front panel controls. You must have a computer to use them.

Might we even start to see this with handheld and portable equipment? For example, how much cheaper could they make a Baofeng if to use it, you had to also have an Android or iPhone app to act as the human interface?

To be honest, I haven't really thought about this much myself. I'm enough of a dinosaur to still prefer buttons and knobs, but having to use on-screen controls certainly doesn't turn me off. Rowe claims, however, that "as the old-timers retire (or in our case as older hams become SKs), younger engineers (or young hams) will expect every user interface to function like a phone or tablet. Don't believe me? Just wait."

I got several interesting replies to this idea on my blog. Bill, AD8BC says, "What would be fun would be an open-source mobile radio. I picture an RF deck with a Raspberry Pi and touch screen for control, the Pi would simply tell the RF deck where to tune and handle the interface and scanning functions, it would ship with a stock app, but you could make your own. Built in support for SDR stuff, packet, APRS, remote operation...."

Most commenters, however, even the younger guys, still seem to prefer analog controls. Lucien, DH7LM, says, "I'm a newly licensed ham and I like both – experimenting with advanced computer stuff like SDRs and the great feeling a real radio provides!" Grant, KJ6ZZD, says, "Knobs perform some tasks better than a screen can. Knobs provide some tactile feedback that a screen just can't."

So, what do you think? Are knobs and buttons toast, or do you think there's still some life left in analog controls?

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When not twiddling the knobs on his HF transceiver or relatively ancient Tek 2213 analog oscilloscope, you'll find KB6NU working on updates to his "No Nonsense" study guides or blogging about amateur radio at www.kb6nu.com.

Free Stuff!

By Dan Romanchik, KB6NU

I'm a sucker for free stuff. Below, you'll find links to a free transistor amplifier design program, a free printed circuit board design program, and a free tutorial on antennas. All of these look to be worth a look.

TransistorAmp 1.1

This is free software for designing bipolar transistor amplifiers. I found the link to this software (<http://en.transistoramp.de/>) on the AMRAD mailing list. Phil, M1GWZ, who posted the link, says, "A transistor circuit that I'm developing needed a 5x voltage gain stage. I could have thrown in a single op amp with split power rails and all that DIL8 real estate, but a single transistor stage would suffice. Trouble is, I'm an EE by inclination, not training, and all those calculations - working out those capacitor reactance values - well, I don't do them often enough for them to be easy. And I want voltage gain, not current. And then I found Transistor Amp 1.1."

"It's a nice piece of software," says Phil, "It installs easily and did the job for me quickly and easily. Oh, and when I built the circuit for real - voltage gain of 5x!"

[[NOTE: A screen shot of the software that you can use for the article can be found at <http://www.kb6nu.com/wp-content/uploads/2014/11/specify-common-base-circuit.png.....Dan>]]

Altium CircuitMaker

CircuitMaker (<http://www.circuitmaker.com>) is a free printed circuit board design tool for hobbyists, people like you and me. Maxfield Parrish of EETimes says, "one key aspect of CircuitMaker is its intuitive and easy-to-use interface -- all of the important "stuff" is presented in an easily accessible manner in a ribbon at the top of the display. Another major consideration is that Altium has decided to make CircuitMaker all about "Community," so users can easily share ideas and designs, comment on designs and offer suggestions for improvement, and generally help each other along the way."

Free antenna tutorial

For a limited time, Rohde & Schwartz and the IEEE Communications Society are offering a free tutorial on Antenna Basics (<http://www.comsoc.org/form/tutorial-registration-antenna-basics>). This tutorial explains the basic functionality of an antenna, starting with Hertz's antenna model. It also includes a short introduction to the fundamentals of wave propagation, the important general characteristics of an antenna and parameters, such as antenna gain, radiation pattern, bandwidth or VSWR. A more detailed explanation of the functionality of some selected antenna types (e.g. dipole or monopole) is also given.

Maik Reckeweg, Product Manager Antennas, Rohde & Schwarz GmbH, Munich, Germany, who is responsible for all the company's monitoring, measurement and communications antennas is the tutorial's.

The video is kind of dry, but I think Reckeweg does a pretty good job of discussing antenna basics. The video is also accompanied by a white paper that delves into these topics a little more completely. Overall, there's a bit more math than in most amateur radio discussions of antennas, but this makes the discussion a little more comprehensive.

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When not scouring the Internet for free stuff, you'll find KB6NU working on updates to his "No Nonsense" study guides, working CW on 40m, or blogging about amateur radio at www.kb6nu.com

BRAARC Membership

Applicant Information

Name:			
Call:	Class:	Phone:	
address:			
City:	State:	ZIP:	Email:
ARRL Member: <input type="checkbox"/> Yes <input type="checkbox"/> No		Newsletter: <input type="checkbox"/> US Mail <input type="checkbox"/> Website – minimizes postage and printing costs	

Spouse Information if joint membership

Name:		
Call:	Class:	Email:

Licensed Children

Name:	Call:	Class:

DUES / Donation

<input type="checkbox"/> Member (\$25) <input type="checkbox"/> College Student(\$12.50) <input type="checkbox"/> Youth(free if oldest licensed family member<18 yrs)	\$
<input type="checkbox"/> Club Patch _____ X \$5 each - The club patch supports the repeater systems operated by the club.	\$
<input type="checkbox"/> Donation – General Fund <input type="checkbox"/> Repeater Committee Donation <input type="checkbox"/> Emergency Committee Donation	\$
Total:	\$

Membership runs from January 1 to December 31 each year. Please submit dues by the regular February club meeting to prevent accidental removal from club roster. Mail to: **BRAARC, PO Box 343, Paris, Mi 49338**

Last Month's Technical Question:

The wavelength of a 500 MHz RF wave is approximately:

- a. 500 meters
- b. 0.6 meters
- c. 0.5 meters
- d. 1.0 meters
- e. 10 meters

(Most of you should be able to do this in your head. Hint: think about 2M and frequency.)

Ans: b. 0.6 meters

This Month's Technical Question:

A bleeder resistor is across a filter condenser rated at 8 mfd. Resistor is carrying 25ma at 450 volts. It dissipates approximately:

- a. 18 watts
- b. 4.5 watts
- c. 11 watts
- d. 2 watts
- e. 33 watts

8	4	2	1	7	3	6	9	5
6	5	1	4	9	2	7	8	3
7	9	3	5	8	6	1	4	2
9	1	7	2	3	4	8	5	6
2	8	5	6	1	7	9	3	4
3	6	4	8	5	9	2	1	7
5	2	8	7	4	1	3	6	9
4	3	6	9	2	8	5	7	1
1	7	9	3	6	5	4	2	8

8		5	9		6			7
	9	3				5		6
	4						2	
				4				5
	3	8		9		7		
7		9			1	3		
				1	9			8
		4			7			
5	1	6			2	4		

Solution to last month's puzzle

December 2014
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