



Big Rapids Area Amateur Radio Club

KC8QOI-146.74MHz

May 2017

Po Box 343 Paris MI 49338 Pres. Jon Hernden Web Page: WWW.braarc.net Editor: Phil – philldolly@power-net.net



Presidents Message

Hello all, I was able to participate in the 2017 MIQSO party on April 15 from Michigan State University. We made a total of 596 contacts, we had a couple of cw operators in mix. The bands were not the greatest for us, we did not start getting the Mi counties till about 8 o'clock that night. We worked 50 of the 83 counties and 12 dx stations. We worked 20, 40 and 80 meters.

Also this trip was the debut of my custom bencher keyer. I wanted to surprise the guy I made it for, that is why I have not put it on the internet. I can make these with any design on them. If anybody wants to know more about these please email me, jonhernden@gmail.com

Jon Hernden
KD8GGA



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Announcements:

Saturday, April 29, Breakfast at Sharon's in Rogers Heights, 9 A.M.

Thursday, May 4, Regular BRAARC meeting at Big Rapids Public Safety Bldg, 7 P.M.

Minutes From The Meeting – 6 April 2017

Bruce Werner, WB8TVD, Secretary

Here's what you missed if you were not at the meeting on 6 April 2017

Subbing for Jon, KD8GGA, Jeff, K8OE, opened the meeting at 7:03 pm with 12 members and guests in attendance.

Everyone introduced himself appropriately.

A few reminders:

The next Club Breakfast will be 29 April at 9am at Sharon's in Rogers Heights.

The next meeting will be on 4 May at 7pm at the BRDPS.

Our nets are Sunday 7:30pm on the 440 repeater and Tuesday 9pm on 2 meters.

There are no signup sheets available..

Secretary, Bruce, WB8TVD: There seems to have been a repeat miscue with the minutes from the March meeting, which were published in the April newsletter: The secretary transposed the call sign of Patricia, KD8GGD. The correct list of calls/administrators:

KB8QOI (repeater)	Patricia, KD8GGD
K8FSU (Echolink)	Mike, KD8DIB
K8MEC (Mecosta)	Jeff, K8OE
K8OSE (Osceola)	Bill, N8NJA
N8OE (club)	Jeff, KC8HJT

The secretary sincerely apologizes to Patricia for the error. (TVD: Senility is a capricious taskmaster.)

Those items will be corrected in the minutes for this meeting.

The minutes as amended were accepted by unanimous voice vote.

Treasurer: Josh, KE8EKC, handed out the treasurer's summary and pointed out several items on that summary. A full written summary is available on request, in case you did not receive one at the meeting.

The treasurer's report was accepted by voice vote.

EC Report: Jeff, K8OE: There will be a work session at the EOC in Paris on Thursday, 20 April, at 7:00 pm. He plans to inventory and test the equipment that was taken out of service at the Sheriff's former EOC. It is already at the new EOC, but needs cleaning and organizing, otherwise it seems to be in good shape.

Antennas and cabling will be left in place at the Sheriff's former EOC in case there is a need. Some of the equipment from that location will be in "go-boxes" to be used if needed at that site.

There may be a use for other pieces of the equipment at the county services building. There is some free space for a station and a tower that is not being used.

On Sunday, 30 April, at the Public Safety building, the group will work on and test the communications equipment in the trailer. Jeff hopes to have time to perform some tests on the road from the trailer at Public Safety to people travelling around the county, especially using D-Star. (TVD: Contact Jeff, K8OE, for his plan of action for that day.)

Repeater: Mike, KD8DIB: The 440 repeater has been having some receive problems and the Echolink system needs to be reset.

The 2 meter repeater has been working very well, with no bleed-through from the FM station. There are still some random “kerchunking” problems.

The IRA link repeater is working again, but has been having some odd bursts of noise. It seems to be happening on our 2 meter repeater as well.

Jeff, K8OE, gave a rundown on the Michigan State Parks On The Air (MSPOTA) to run from 2017 to 2019. Their hope is to use Ham Radio from within the parks, similar to the NPOTA operation in 2016.

The Website for MPOTA: <http://www.mspota.org/>

As a group, we could activate the Old Big Rapids Depot, which is a segment of the Fred Meijer White Pine Trail (TVD: MSPOTA designator: MSP404).

(TVD: To see more details about this – or any other – park, scroll down on the MSPOTA main page to the black bar and click on “The Parks”; Scroll down again to the drop-down box, click the down arrow and select “Fred Meijer White Pine... Mecosta, then click “Submit”; and the second line of the information box down the page will have a link to the White Pine Trail information. There is a wealth of information – including rules for activation – on the intervening pages.)

(TVD: There is also a “Leader Board” indicating that some activations have already taken place.)

The Depot is a staging area for the White Pine Trail and itself would be a good operating location. Do we want to act as a host club? Would this be a good Field Day location?

The Bulldog Bike Tour will be 10 June. The plan is to split operators into groups working from 7:00 am to Noon and Noon to 5:00 pm. The Tour had been cancelled last year, but there was enough interest to revive the event this year. More information can be had at: <http://www.bulldogbiketour.com>

Mike reminds everyone of the Skywarn training at the University Center on 29 April, from 10:00 am to Noon. A brochure is available on the BRA-ARC Website.

Josh, KE8EKC, has been appointed the new Skywarn Coordinator and Assistant EC for Mecosta County.

There was a brief discussion about access to the 2 meter repeater site and distribution of keys. It was noted that there is also a lock on the entrance gate into the site.

Before State Of Michigan will renew our incorporation as a non-profit, we must have three directors of the club, besides the elected officers. Tom, Mike and Don all were appointed

directors. Josh was filling out the form, which asked for the above information and noted we needed to have periodic board meetings. The board would be the governing body for the club, but be accountable to the general membership. Jon, as president, would periodically need to schedule a time and place for meetings of the board. Mike will continue as a director, but we need two additional, non-elected board members to fill out the board.

The Michigan QSO party is on 15 April, starting at Noon. Should we organize a club “team” at the EOC?

There will be a couple Ham Radio operations in honor of the Michigan State Police Centennial coming soon: 19 April, and 22-23 April at the state EOC in Lansing.

Bruce, WB8TVD, asked if anyone was familiar with the Adopt-A-Highway program and noted that the 2-mile segment on Northland Drive going north from 19 Mile Road had been marked “Available”. He asked if there was any cost to the “adoption” and if there was any interest. A couple people who had been involved with other organizations which had participated, briefly described what was involved. Further discussion will be tabled for now.

Jeff offered to bring refreshments to the next meeting.

There was no 50/50 drawing.

Dan, WA8AEN, provided a Tech Corner session: He showed an older DOS version of a program called Yagi Optimizer. He was able to run it under Windows 10 using the DOS emulator called “DOS Box”. The program is text-based and shows antenna gain and optimization for a variety of VHF/UHF Yagi antenna designs with a varying number of elements. It is similar to an early version of the EZNEC antenna software by W7EL.

He showed the program giving a variety of values for changing inputs.

Following the presentation, Jeff adjourned the meeting about 8:42 pm. No Hams or guests were harmed in the conduct of business. We all went home. Well, mostly.

Secretary’s Ponderings – May 2017

I’m advanced. Well, more in the realm of Ham Radio, I’m an advanced class licensee. The FCC doesn’t issue advanced licenses any more. Nor do they issue novice, tech plus, or some others, like conditional. Not that I’m a dying breed, but I was curious how many of my kind were left. I went out to the ARRL Website to see how many advanced class licenses remain.

We number 43,924, including 1,299 in Michigan. Am I or the other 43,923 of my fellow advanced class licensees going to upgrade? Who knows? Even I don’t know for sure. I was preparing and had my code speed just over 20 WPM (and going up) when family and work issues intruded, as they often do in life plans, so upgrading took a back seat for a while.

I was surprised to see that there are 9,599 novice class licenses still valid (280 in Michigan). That's amazing, since there hasn't been a novice class license issued since forever. At one time the novice was a one-year license, non-renewable. They bumped that to two years, and somewhere along the line, it became 10 years, renewable. I missed that memo.

I looked at the chart for novice and tech privileges and it seems that up to 30 MHz, they are basically the same. While techs share all privileges with other licensees above 50 MHz, the novice is only allowed limited VHF voice privileges on the 222 MHz band.

I am very glad I had the training ground of my novice license to get my feet wet, become a better operator and merge into the family of Ham Radio. It was a few months of sheer joy and wonder. It's too bad more techs don't take advantage of the HF band privileges available.

A tech can use CW with limited power on segments of 80 meters, 40 meters, 15 meters and 10 meters, alongside novice licensees. There's also a 10 meter voice allocation available just above the CW segment. Power limit for novices and techs on HF is 200 watts, but any class license may use those frequencies, and the interaction between the license classes is what fosters learning. And it's a lot of fun! I remember my first novice contact was with a Toledo Ham, but it might as well have been Nepal, I was so thrilled to make that contact!

If you can't yet swing a transmitter or transceiver, I encourage you to hunt down a used receiver or an SDR dongle to hook to your computer. Either one should run well under \$100. And remember, Cadillac is just around the corner! Listen on the bands, learn some CW and build those skills. I'll not go into learning CW at this point, since learning CW has changed significantly since my dinosaur days. I had a code cassette tape (AND an LP record!), then just turned on the receiver and copied what I could, starting with letters and numbers here and there, then call signs, then bits and pieces of words, then bit by bit, I was able to follow whole conversations. What a sense of accomplishment it was to learn code. Bob Carpenter, K8YHJ, was my Elmer, and when I asked him to administer my exam, we were both pleased and I was excited. By the way, back then, general class licensees and above could give the novice exam, including 5 WPM code.

As I said, I encourage you to get something with which to receive HF, and seek out a code-practice site on the Web. Get that one extra skill under your belt! You will be glad you did.

73

– Bruce, WB8TVD



Interesting gadgets I wish I had time for

By Dan Romanchik, KB6NU

I'm on a lot of mailing lists and participate in a bunch of amateur radio forums. As a result, I see a lot of interesting gadgets that guys are buying or are thinking about buying. Here are three of the latest that look interesting to me. I wish I had time (and money) to purchase all of these and try them out.

Android antenna analyzer

On Reddit

(https://www.reddit.com/r/amateurradio/comments/60nnp1/finally_got_my_mini60_ebay_antenna_analyzer_time/), some of the guys have been talking about the Mini60 Antenna Analyzer (<http://www.ebay.com/itm/CW-USB-Interface-Cable-WINKEYER-compatible-3-5mm-plug-/132121085623?hash=item1ec307c6b7:g:up8AAOSw241YeTei>). Its frequency range is 1 – 60MHz, but the cool thing about this device is that you can use it standalone with the built-in LCD display or with some software (http://www.jtelectronics.co.nz/information_links/MINI60/Add-Bluetooth-Module-To-MINI60-Antenna-Analyser.htm) and a tablet with a Bluetooth interface to get fancy frequency vs. SWR plots. See <http://www.kb6nu.com/wp-content/uploads/2017/03/mini60-ant-analyzer.jpg> for a photo of the Mini60 Antenna Analyzer being used with an Android tablet.

Of course, this is made in China, but how can you beat the price? It costs \$112 shipped.

Multi-functional component tester

Here's another marvel of Chinese engineering and manufacture – a smart component tester (http://www.banggood.com/3_5inch-Colorful-Display-Multi-functional-TFT-Backlight-Transistor-Tester-p-1083042.html) for only \$30, shipped. It identifies and characterizes **NPN and PNP transistors, capacitors, resistors, diodes (including Zener diodes), N-channel and P-channel MOSFET, IGBT, JFET, triacs, and batteries.**

This isn't the first smart component tester to hit the market, but the unique thing about this unit is that it has a graphical display that not only identifies the type of component that you've connected to it, but also draws the schematic symbol of the part. You can see a video of this tester in action at <https://www.youtube.com/watch?v=07FH6tjzwWg>. Make your Raspberry Pi into a desktop PC Newark/element 14 will soon start selling a kit of part that will make it easier to turn your Raspberry Pi into a desktop PC

(https://www.element14.com/community/docs/DOC-83477?CMP=e-email-SEPO-210317-e14PI&et_cid=28941683&et_rid=1231362216&cmp=). The kit includes:

- Intelligent and Safe Power Controller

- Interface to connect mSATA SSD (up to 1TB)
- Real Time Clock to keep track of time
- Heat Sink
- Enclosure

They don't list the price just yet, but this might be what I need to actually make use of the Raspberry Pi 3 I bought several months ago.

If you have one of these gadgets, or buy one in the future, please let me know how you like it. I'll put your review up on my blog, so that everyone can benefit from your experience.

When he's not drooling over electronic gadgets, Dan blogs about amateur radio at KB6NU.Com, writes the "No Nonsense" amateur radio study guides, and teaches ham classes. You can contact him by e-mailing cwgeek@kb6nu.com.

Last Month's Technical Question:

The time constant of a capacitor-resistor network is:

- a. Capacitive reactance times frequency
- b. Capacitance times resistance
- c. Capacitive reactance times resistance
- d. Capacitive reactance times temperature coefficient
- e. None of the above

Ans: b.

This Month's Technical Question:

The RMS (Root-mean-square) value of a sinusoidal wave form is:

- a. Peak value divided by the square root of 2
- b. Average value divided by the square root of 2
- c. Average value
- d. Peak value
- e. None of the above

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

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Solution to last month's puzzle

Your editor has been somewhat remiss in not introducing you to the newest officer of the club. Some time ago Josh, KE8EKC, assumed the position of treasurer, formerly held by Jens, KC8OIV.



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