

# Big Rapids Area Amateur Radio Club

April 2016

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## Presidents Message

Hello,  
After  
many years  
playing with Atari  
Basic, HP Basic,  
RVK-Basic and  
then PicAxe

processors, I have recently moved to Arduino. The cost of an assembled Chinese board is less than half of the cost of U.S. parts to populate the board. It is nice to have a good-looking board with good solder joints and lots of connectors for accessing all the pins. I purchased both an Arduino Uno and an Ethernet shield board. The task then was to get familiar with C++ so that I can modify the example code to function the way I want it. The last time I played with C++ was 15 years ago. At that time I found it so cumbersome that I really struggled with coding. A lot has been forgotten in that time period and getting back up to speed is difficult. So far I have been able to connect the board to a thermistor in my barn and measure the temperature at that location. The barn and house are connected with an

Ethernet cable. By using a tablet in the house I can read the temperature in the barn. Now the creeping elegance comes in and I start thinking “What if I ....”.

At last month’s meeting we were in the back portion of the room at the Big Rapids Public Safety building. The firemen were having a training session in the front half. That is scheduled again during our April meeting time. If things go as planned we will be meeting at City Hall. That is south of the normal location and on the opposite side of Michigan Ave. I will confirm the location and details when I send out the monthly reminder of the breakfast and meeting.

We are still making plans for the Ham-In-A-Day class for April 16. So far there are three pre-registered individuals with another 4 expressing interest.

Dan (WA8AEN)

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## Announcements:

Saturday, April 2, Club breakfast at Sharon’s in Rogers Heights – 9a.m.

Thursday, April 7, Regular club meeting at Big Rapids Public Safety (or City Hall) – 7p.m.

Saturday, April 16, Ham In A Day class on Ferris State Campus. All day event. You may write the exam for Tech, General, or Extra class license in the afternoon. See more details in flier in this letter.

## Minutes From The Meeting – 3 March 2016

Bruce Werner, WB8TVD, Secretary

Here's what you missed if you were not at the meeting on 3 March 2016:

Dan, WA8AEN, opened the meeting at 7:00pm (TVD: Note that the secretary failed to count heads).

NOTE: Another group had usurped the larger portion of the meeting space, so the BRA-ARC meeting was limited to the back portion of the room. (TVD: Cozy, but.....) Note also that the overhead projector did not seem to respond to any enticement to work from several people who tried to bring it to life.

Sheets for attendance and net control were passed around

A few reminders:

Please sign up for net control of our two nets.

The next club breakfast will be 2 April, 9:00 am at Sharon's.

The next BRAARC meeting will be 7 April, 7:00 pm at BRDPS.

Secretary report: The minutes from the meeting in February were published in the March newsletter and were approved by consensus.

Dan distributed extra rosters, which had been published in the March newsletter. He noted that newsletters that went to non-members were sent without the club roster.

The secretary gave George's letter of appreciation to Mike, KD8DIB, for filing.

Treasurer report: The treasurer's report was accepted by consensus.

Jens notes the AT&T cost for our landline has gone up again.

The bank CD has been allowed to lapse and the proceeds have been moved into the General Fund. Mike ('DIB) suggested that amount be earmarked and set aside as a reserve. Jens will mark it in the club accounting records as such. The consensus was to earmark \$1500 as that reserve.

There has still been no response to the request for someone to take over as treasurer from Jens.

Delcy offered to help, working with Jens, but not (TVD: "yet?") taking over the position.

Jeff, Mecosta County EC: Is planning a work session at the Mecosta County EOC, Saturday, 5 March.

The packet station at the Red Cross building has not been working. He manually reset the equipment. After checking all components, it is now able to relay from Red Cross to EOC.

Repeaters: Mike, KD8DIB, notes the 440 repeater has been running fine, but Echolink may be having some problems.

Mike has finished wiring the 2 meter repeater. It should be ready to install when the weather breaks.

6 Meters: Dan reports that it should be ready to return to the "silo". He also notes that the current 2 meter repeater sounds like it's working well for now.

At Bruce's urging (TVD: He started to ask a question earlier), Jeff brought up the possibility of relocating the 6 meter repeater to the EOC in Paris. Some discussion ensued, with consensus that the "silo" is okay for now. (TVD: "They" tried to get Bruce to commit to going up on the silo roof to remove the antenna. He's basically height-phobic. ie: chicken.)

Old Business: Our insurance has been renewed, and so we have coverage, should we decide to hold a Ham-In-A-Day session. (TVD: See next item)

Delcy has been organizing a Ham-In-A-Day session and is arranging to have Volunteer Examiners (VE) available. The date has been set for 16 April.

New Business: Girls On The Run will be held 4 June, starting at the Middle School. However, we have not been contacted by the organizers. The "race" may be too short to worry about formal communication efforts.

Field Day: So far, interest has been low.

Jeff explained his idea for activating the North Country Trail (as part of NPOTA) at a location



channel (talk about retro!), #redditnet, have used my study guides, and apparently, I'm quite popular there.

\* Blab (blab.im). Blab is an interesting concept. It's kind of like an interactive podcast. You can record the blab sessions and then post them to YouTube or your own website. When I suggested having a regular Blab session to talk about ham radio topics to my blog readers, they weren't very enthusiastic about it. Even so, I think that I'm just going to do it. Sometimes you just gotta go with your gut, and my gut says this could be fun and eventually popular. Blab is integrated with Twitter, so if you follow me on Twitter, you'll find out when I'm blabbing.

The biggest problem with participating on these social networks, of course, is that it takes a lot of time, time that could be used for building stuff or getting on the air. Even so, I would say that, overall, using them has certainly increased my enjoyment of amateur radio and has connected me to people that I probably would not have connected with otherwise.

What do you think? What social media accounts do you have? Which do you prefer? What have they done for you?

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When he's not blabbing or tweeting, KB6NU likes to work CW, build stuff, and teach ham radio classes. He's also a prolific blogger ([www.kb6nu.com](http://www.kb6nu.com)) and the author of the "No Nonsense" amateur radio license study guides ([www.kb6nu.com/study-guides](http://www.kb6nu.com/study-guides)). If you have any comments, questions, compliments, or complaints, email him at [cwgeek@kb6nu.com](mailto:cwgeek@kb6nu.com).

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## **Why You Should Get Your Extra Class License**

By Dan Romanchik, KB6NU

The Amateur Extra Class license is the highest class of license in the United States, and perhaps the world. Many hams—even hams that live outside the U.S.—aspire to pass the test and be awarded one.

There wasn't always an Amateur Extra Class license. The Extra class license, as we know it today, was created as part of the 1951 license restructuring, that also created the Novice and Technician Class licenses. (In 1951, the Novice license was the "beginner's license." To get a Technician Class license, you had to pass the written test that General Class operators had to pass.)

Although it gave an operator no additional privileges, to get an Extra Class license, one had to:

- \* Pass a 20 wpm code test (Generals had to pass only a 13 wpm code test).
- \* Pass a longer and more difficult written examination than the General Class exam.
- \* Have at least two years of experience as a licensed radio amateur.

Today, without the code test and the experience requirement, many hams upgrade to Extra Class as soon as they can. Some even pass the Technician Class, General Class, and the Amateur Extra Class exams in a single test session.

So, what's the attraction? Why should you upgrade to Extra?

One of the reasons that you should upgrade to Extra is that you get use of the entire 80 m, 40 m, 20 m, and 15 m bands. Portions of those bands, such as 3.6 – 3.7 MHz in the 75m band and 14.150 – 14.175 Mhz in the 20m phone band, are reserved exclusively for Extra Class licensees. Extra Class operators also have exclusive privileges in the CW portions of the 80 m, 40 m, 20 m, and 15 m bands. These are the frequencies where the DX stations hang out.

Another reason to get your Extra Class license is that only Extra Class licensees can administer General Class and Extra Class license exams. General Class operators can become Volunteer Examiners (VEs), but they are only allowed to administer Technician Class exams.

Another reason you might want to get an Extra Class license is to get a fancy vanity call sign. Only Extra Class operators can apply for 1×2 or 2×1 call signs, such as W8RP or KT8K. A short, snappy call sign can help you work more DX or improve your contest scores.

Whatever your reason, studying for the Extra Class exam will open your eyes to many aspects of the hobby that you may not be familiar with. And, as you work your way through the material, you'll learn things that make you a better amateur radio operator and enable you to enjoy the hobby more. It's not easy, but in the end, an Extra Class license will help you have more fun with amateur radio.

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Dan, KB6NU is the author of the "No Nonsense" line of amateur radio license study guides, a prolific blogger ([www.kb6nu.com](http://www.kb6nu.com)), and an active CW operator in the Extra Class portion of the HF bands. If you have any comments, questions, compliments, or complaints, email him at [cwgeek@kb6nu.com](mailto:cwgeek@kb6nu.com).

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**Last Month's Technical Question:**

Shielding is used in multistage receivers to:

- a. Provide ample degree of regeneration
- b. Prevent undesired interstage coupling
- c. Induce interstage oscillation
- d. Provide high external fields
- e. Reduce skin effect

Ans: b

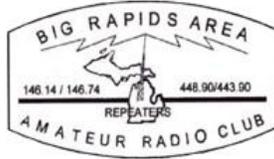


**This Month's Technical Question:**

What causes lose of power in a transformer?

- a. hysteresis
- b. eddy currents
- c. copper losses
- d. both a and b
- e. all of the above

**Think Spring**



# Ham In A Day

The Big Rapids Area Amateur Radio Club is sponsoring a **HAM IN A DAY STUDY SESSION** for individuals interested in earning a Technician Class Amateur Radio License.

**VE testing\*** will be available for license upgrades as well.

This class is an intense 6-hour structured self-study session of the test material.

No guarantee is made by BRAARC as to your testing success. \* VE Test Fee \$15

\*\*2016 Club membership awarded to successful "hams in a day".

**Date:** Saturday, April 16, 2016  
**Cost:** \$30.00 includes license exam fee\*\*  
**Location:** Ferris State University  
Room 109: West Commons Building  
1319 Cramer Circle  
Big Rapids, Michigan 49307  
(see map on reverse side)  
**Time:** Registration: 8:30 am  
Class: 9:00 am—4:00 pm  
Lunch: 12:00—12:45 pm on your own  
VE Testing registration: 4:00 pm  
Testing begins: 4:30 pm

## Questions or Registration:

Please call Dan at 796-2784

Preregistration for class required by Sunday, April 3rd.

**Bring to the exam:** photo ID (or two other forms of ID) and #2 pencil.

**For license upgrades:** bring any completed CSCEs, and a photocopy of your existing license. Coffee and treats provided. 30 days advance notice required for special testing.

Parking is available in Lot # 45 off of Cramer Circle.

The entrance to the West Commons / Department of Public Safety building is located on the south side of the building. (across from Cramer Hall)

### Study Materials

A free printed copy of The No-Nonsense Technician Class License Study Guide will be provided to those who preregister for the class. You can download a PDF version of the study guide free of charge by going to: [www.braarc.net](http://www.braarc.net) and following the link to <http://kb6nu.com/tech-manual/>

Kindle and Nook versions are available for purchase from amazon.com and barnesandnoble.com, respectively.

**We strongly encourage you to study the material and take some online practice tests (<http://www.grz.com> or <http://www.hamexam.org> ) before coming to class. There is a lot of material to cover, and studying this material will increase your ability to pass the exam.**



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

Solution to last month's puzzle

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

**April 2016**  
**PO Box 343 Paris MI 49338**

