

# Big Rapids Area Amateur Radio Club

January 2008

PO Box 343 Paris MI 49338 Pres. Tom Bray Web Page: [www.braarc.net](http://www.braarc.net) Editor: Phil – [phildolly@power-net.net](mailto:phildolly@power-net.net)

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## Presidents Corner:



In keeping with the season and the end of the year, the other day I received a note from AMSAT (The Radio Amateur Satellite Corporation) describing what they are working on and asking for support of their various projects.

For amateur radio satellites, the next couple of year should be very interesting. If you ever had any interest in working satellites, now is the time to start gearing up for it.

Between the US and German AMSAT organizations there are two satellites nearing completion, one may actually get launched next year. These are both going to be “High Earth Orbit” birds which means that when they are at the farthest point in their orbit, they are over 20,000 KM (12,500 miles) away from the earth. These satellites are a lot of fun to work

because they move relatively slowly across the sky and during a pass, which can last over 10 hours, it is possible to work every continent. To take full advantage of these satellites, most radio stations will need to be tweaked a bit.

Right now there are no High Earth Orbit amateur radio satellites that are functioning. The most recent one was AO-40, which suddenly went silent a few years ago. There are several Low Earth Orbit satellites currently functioning, AO-51 was launched a couple of years ago and there are also several satellites put up by other countries such as India and Saudi Arabia. The low earth satellites are relatively easy to work and only require a VHF and a UHF radio (handheld radios do just fine) and simple antennas.

The other big news is that AMSAT has been talking with IntelSat about including an amateur radio transponder on one of their geostationary satellites. This is still at the early discussion stage and no timetable has been set. If this collaboration actually happens, it will change how radio amateurs communicate. Being geostationary, the satellite would be available 24 hours a day, 7 days a week. A satellite like this would allow amateurs to talk across the US without regard for daily band conditions or lack of sunspot activity. The potential for emergency and special event

communication support borders on mind boggling.

Anyone interested in more information about this aspect of the hobby can go to the AMSAT website: [www.amsat.org](http://www.amsat.org). The BRAARC library has a book on satellite operation which is currently available. I can also answer

questions about working satellites and what it takes to be successful at it.

Tom Bray  
WB8COX



**Updated Club Announcements (from KB8TYJ - Tom)**

1. Important upcoming events:

A. Next BRAARC club breakfast Saturday: **December 29** at 8:30 a.m. at the Wild Rose Cafe in Big Rapids. Talk-in on the 146.740 2-meter repeater for anyone needing directions.

B. January BRAARC monthly club meeting Thursday: **January 3** at 7 p.m. at the Big Rapids Department Of Public Safety Building, located at 435 N. Michigan in Big Rapids.

**Steve Andre will be the quest speaker and his topic will be: Disease and Pestilence: the state of the Windows world and what to do about it.** *To all on the Board: Should we plan to have dinner and buy the speaker's dinner before the club meeting like we usually do for a guest who comes any distance? I'd say yes.*  
*Tom Behler: KB8TYJ*

C. Next Emergency Committee meeting Thursday: February 14<sup>th</sup> at 7 p.m. at the Osceola County EOC.

D. Ham-in-a-day class Saturday: march 1 at a time and location to be announced. Stay tuned to future club nets and news letters for more details.

2. Club nets:

A. 440 general net on 443.900 repeater Sunday evenings at 7:30 p.m.—to be resumed when 440 repeater is back in service.

B. 2-meter general net on 146.74 repeater Tuesday evenings at 9 p.m.

C. Local digital training/forum net on 146.74 2-meter repeater the first and third Wednesdays of the month at 8 p.m. (packet frequency to be used is 145.090).

D. Local ARES/RACES net on 146.74 2-meter repeater the second and fourth Wednesday of the month at 9 p.m.

3. If you would like to serve as net control for one or more of the BRAARC club nets, contact Tom Behler: KB8TYJ).

4. A BRAARC e-mail listserve or users group has been established for all BRAARC members to use as a forum for exchanging thoughts, ideas, questions, and any other concerns related to our club or amateur radio in general. If you'd like to join this group, please contact our club web master, Jake Spence, KI8CK. Jake will get you signed up on the list, and will give you verification that your registration has been completed and accepted.

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**Brainteaser (From WA4FRJ – Don)**

Answer to last month's brainteaser "Name four days that start with the letter "T." "  
Tuesday, Thursday, Today, Tomorrow (Please don't shoot the messenger.)

Here's a seasonal question. It's just a little tricky and, hint, the answer is higher than you might think!  
"How many presents did I receive in total during the twelve days of Christmas according to the song, "The Twelve Days of Christmas,"?"

## **December 6, 2007 BRAARC Meeting Minutes by Mike McKay, KD8DIB**

**Call to order:** 7:07 pm by Tom, WB8COX

**Guests:** none

**Secretary's report:** November 2007 minutes submitted by Mike, KD8DIB and approved. Corrections to repeater frequency made.

**Treasurer's report:** December 2007 Financial Report submitted by Sue, KC8IFP and approved.

### **Announcements:**

- Next Club Meeting Jan 3, 2007 at Big Rapids Department of Public Safety.
- We need net controls sign up with Tom, KB8TYJ
- 2 meter net on 146.74 repeater Tuesdays at 9pm
- 1<sup>st</sup> & 3<sup>rd</sup> Wednesdays – Digital Net on 2 meter repeater at 8pm
- 2<sup>nd</sup> & 4<sup>th</sup> Wednesdays – ARES / RACES Net
- Email [Jakeaspence@charter.net](mailto:Jakeaspence@charter.net) to join the Club Listserve.
- Repeater Status
  - 440 Hamtronics crystal arrived.
  - 440 repeater on and testing at WB8COX's QTH
  - 6 Meter Repeater still on track for relocation
- Osecola Co. IS 300 & 400 Training – Email Tom, KB8TYJ for more info.
- Bev, WD8PFC: Membership approved a get well soon card
- John, KC8BAR: Membership approved a get well soon card
- ARES Cards available from Tom, KB8TYJ for Mecosta County

### **Old Business:**

- Red Cross disaster assessment training – Bob WB8YPG set a date with Red Cross to conduct training Saturday, January 19, 2008. Tom, KB8TYJ to double check.
- Financial Audit to be conducted by Fritz, NI8E by January 2008

### **New Business:**

- Tom, KB8TYJ & Mike, KD8DIB Continuing to work on EOC Vanity Calls
- Technician Class – Ham in a day proposed: March 1, 2008

**Program:** Programming your HT in the field. Fun with Tom, WB8COX's Linking repeater.

**50/50 winner:** Gary, WB8WIA

**Newsletter:** Articles to Phil, KC8QOV by December 14 (phildolly@power-net.net)

**Club Breakfast:** Saturday, December 29, 2007 at Wild Rose Café restaurant at 8:30am.

**Refreshments:** Phil, KC8QOV

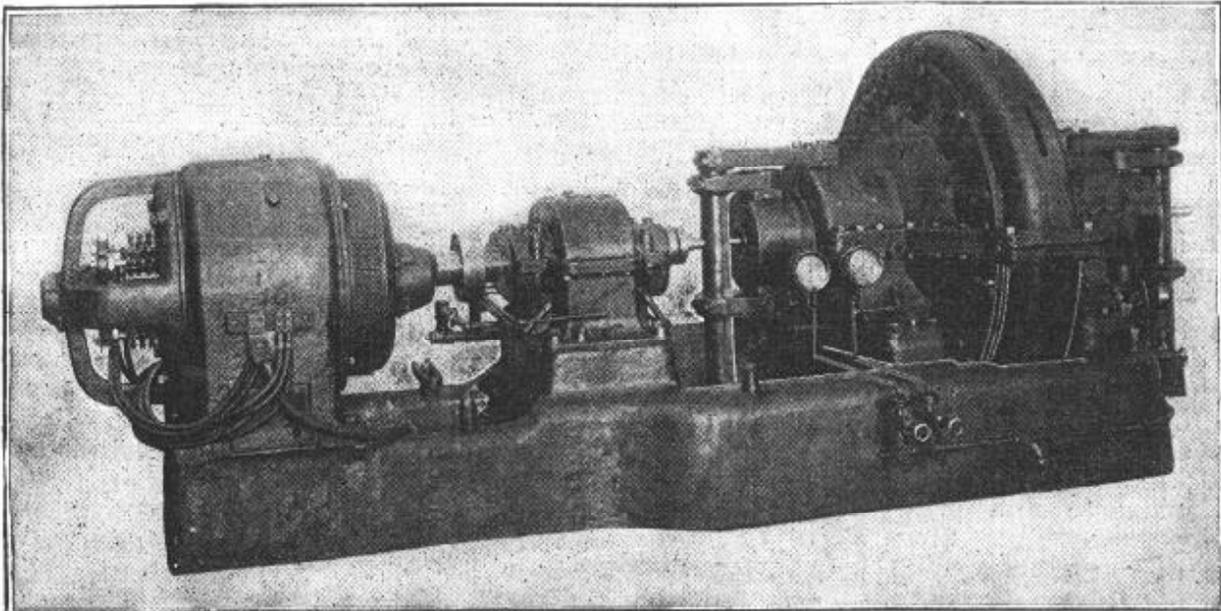
**Adjourn:** 9:00 pm

## Tech Corner

I got to thinking about linear amplifiers and how easy it is to generate high power R.F. today. A long time ago transmitters were based on spark gap technology. You may remember the monstrosity that we demonstrated at a club meeting a few years back. It probably interfered with most radio stations and might have crashed a computer or two. Spark gap transmitters were very inefficient, broadband R.F., generators but they worked. My Dad used one on a minesweeper in WW I. He said it made a terrible racket. The ship was mostly wood so grounding was a problem.

For high power but without high power vacuum tubes, designers built high frequency alternators. These were large mechanical RF generators. The one shown below is a 100kW monster that put out 50 kHz that was coupled to an antenna. For what it's worth, a half-wave antenna at 50 kHz is a handy 9843 feet long. That would make some beam.

Some time we'll talk about a mechanical R.F. detector called a "coherer." I built one and it worked but sure took a lot of signal to detect a CW signal. I guess that's why they made rigs like this one!



**Latest Radio Frequency Alternator. Electrically Driven at a Speed of 3600 R. P. M., It Produces 100 Kilowatts at a Frequency of 50,000 Cycles Per Second. It is of the G. E.-Alexanderson Type.**

WA4FRJ

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A small group enjoyed breakfast at the Main Junction on December 1. I think most people enjoyed their breakfast, with some exceptions, but the room was very cold. You didn't dare let your breakfast set or it cooled in a hurry.

Don't forget the breakfast at the **Wild Rose Café** on Maple St in Big Rapids on **December 29**. Hope to see a good crowd, maybe with some new Christmas toys you got from Santa Claus.

**Dan, KB8NU, will be contributing an article to our newsletter along with others, on a monthly basis. He is also the guy behind KB6NU's Ham Radio Blog ([www.kb6nu.com](http://www.kb6nu.com)). I will include his article each month provided there is room to do so (which I expect will happen more often than note) – editor, Phil KC8QOV**

**From Dan, KB6NU**

I often hear hams lament that their communities show little interest in amateur radio. While this may be true, hams have to realize that community involvement is a two-way street. To get communities involved in amateur radio, amateur radio needs to be involved with the community.

Let me give you an example.

In early 2006, I decided to become more involved in community service. On a road trip to the Marshall Hamfest, one of the guys in our club--Jack, WT8N--mentioned that he was a member of the Ann Arbor Rotary Club. I told him that I would be interested in joining, and he agreed to sponsor me.

I joined the club in March 2006. Shortly after I joined, the executive director of the Ann Arbor Hands-On Museum ([www.aahom.org](http://www.aahom.org)) spoke to our Rotary Club. The Ann Arbor Hands-On Museum is a science museum that gives kids (and adults, too) some real, hands-on experience with science and technology. There are, for example, exhibits that help kids learn about electricity, springs, weather, electricity, and other topics in science and technology.

As the director was speaking, the thought occurred to me that the museum would be a

great place for an amateur radio station. I discussed my idea with Jack, and he agreed to work with me on the project. We then approached the museum director, who is also a Rotary Club member, and met to discuss our idea.

As we discussed the idea, he became very enthusiastic about the possibilities. Our original idea was to set up a permanent station there, but as they were in the process of remodeling, this wasn't immediately possible. Instead, we operated a series of special events throughout the fall of 2007. These events have been very successful, and now we are discussing how and where to set up a permanent station at the museum. We expect this to happen some time in 2008.

We even have a vanity call sign for the station already--WA2HOM. A2 stands for Ann Arbor; HOM stands for Hands-On Museum. Look us up on QRZ.Com.

I'm sure that my involvement with the Rotary Club was a big part of the enthusiastic reception they gave me and amateur radio. Membership in the Rotary Club, and other community service clubs, such as Kiwanis or the Optimists, give one, if not instant credibility, at least some measure of it. So, my advice is that if you want to get your community involved in amateur radio, perhaps you should first get involved with your community, and one way to do that is to join a service club.

*Are you working on a community-service project or have questions about setting one up? Let Dan know! You can e-mail him at [kb6nu@w8pgw.org](mailto:kb6nu@w8pgw.org) or phone 734-930-6564*

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**YOU MIGHT BE A HAM IF:**

1. You ever used your ham call as a password. Yes, I've done that, in the

early days of Internet learning, before I realized it was pretty easy to guess! Oh, those innocent days.

2. You take your wife antique shopping so she will let you go to a hamfest.  
Nope. I was never lucky enough to find those two events in the same neighborhood. Good idea, though.

3. You ever put up an antenna in a snowstorm.  
Oh, yeah, more than once.  
You would think a guy would learn, but no...

4. Your neighbor ever complained to you about interfering with his TV.  
Are you kidding? I've been a ham for 40 years. Many TV viewers have suffered strange pictures in the vicinity.

5. Your wife refuses to ride in your car because of the radios.  
Thankfully, that has never happened. I wonder how many more wires and radios I can add before the tipping point is finally reached?

6. Your teenager refuses to ride in your car because of all the antennas.  
Ha, ha! My son, KC0LJL, is not afraid of antennas on the car!

7. You have your ham call on your business cards.  
Of course I do. Doesn't everyone?

8. You ever tapped out HI on your horn when passing another ham.  
Not for a long time, but I have done it.  
Makes people look at you like there's a screwloose.

9. You have installed a bigger battery in your car for all the radios.  
Nope. The car battery was always enough for me. I still don't believe in high power mobile operation, because of the potential for interference with the car's electronics.

10. Your wife complains about all that wire

you have piled in the garage.  
Yes, this happens at least once a year. I am thinking of buying a bigger camouflage tarp to cover it all up.

11. When looking for a new house the first thing you do is check the deed restrictions.  
Absolutely! I even had the law librarian in the county attorney's office double check for me.

12. You ever used you call as an email address.  
What do you think [wa0tda@arrl.net](mailto:wa0tda@arrl.net) is?

13. Ran a 220V outlet to power your linear amp.  
Not guilty! I like low power, so I've never had more than a middling-power amp like an old SB-200. They run great on 110 VAC. Even then, I haven't used it once so far this year... and it's November!

14. Your wife complains that you spend more time with your radios than her.  
I'm taking the Fifth on this one.

15. You ever received an RF burn to the lips because of a bad ground connection.  
Yes, I have, and it isn't fun. My first station, with a Knight-Kit T-60 transmitter running AM could bite if I wasn't careful. Too bad it didn't make many actual phone contacts for all that.

16. You ever planned a vacation trip route so you could "stop by" a hamfest.  
No, that is mainly a matter of timing, though. It sounds like a great idea!

So there you go. If you have anything for the mailbag, let me know. Send your ideas and stuff for the weekly e-letter to me, Pat,  
[wa0tda@arrl.net](mailto:wa0tda@arrl.net)

**DON'T MISS THE JANUARY 3 MEETING WITH SPECIAL QUEST  
SPEAKER STEVE ANDRE**

## *Time to pay your 2008 YEARLY DUES*

Your dues payment **IS DUE JANUARY 1, 2008**. If dues are not paid before March 1, 2008, your name will be dropped from active membership. Send in your dues payment right now so that your membership will not be interrupted. Thank you for your continued support of our club and the hobby of amateur radio.

Call: \_\_\_\_\_ Class: \_\_\_\_\_ Name: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ ZIP: \_\_\_\_\_

E-mail Address: \_\_\_\_\_

Dues \$25.00 for 2008. \_\_\_\_\_ Donation: \_\_\_\_\_

Dues payable by January 1, 2008. Checks should be made out to the Big Rapids Area Amateur Radio Club (BRAARC). Mail your check and this form to Sue Behler  
511 Spring Street, Big Rapids, MI 49307 or bring your dues to the next meeting.

