Brainerd Area Amateur Radio Club, Inc.





January 2008

For Anyone Interested in Amateur Radio

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Club Call: WØUJ

Brainerd Repeaters: 53.110 MHz- 123.0 Hz 147.225 MHz + 145.130 MHz- Echo Link Node number 233515 443.925 MHz + 110.9 Hz Packet: 145.670 MHz BBS MNBRD, WØUJ Club DX Cluster: 147.525 MHz BRDDX 144.390 WØUJ-5 APRS Crosslake 147.030 MHz+ http://brainerdham.org

President: Lyle Amundson KØLFV

Vice President: Steven Mott KCØYTE

Secretary: Darrell Schneider ABØVP

Treasurer: John Myers W3MQD

Director At Large: John Luce WØJGY

Repeater Trustee: Fritz Bertelt WØKO

BAARCer & WWW Editor Mark Persons WØMH

Inside This

| | | crowd. More photos on the Web at <u>http://brainerdham.org</u> |
|-------------------------------------|--------|---|
| Meeting Minutes Club News | 2 3 | — Events Calendar — |
| Emergency Service | 4 | Tuesday, Jan. 1 *.* Happy New Year *.* |
| 50+ Years Hamming | 5 | Wednesday, Jan. 2 1:00 PM to 2:00 PM Monthly siren and civil emergency test. Saturday, Jan. 5 9:00 AM to 10:00 AM Informal breakfast meeting at the Northwind Grille. Sunday, Jan. 6 8:00 PM to 8:30 PM Sunday Night Net on 147.225+ MHz. |
| 50+ Years Hamming | 6 | Sunday, Jan. 13 8:00 PM to 8:30 PM Sunday Night Net on 147.225+ MHz. Saturday, Jan. 19 9:00 AM to 10:00 AM Informal breakfast meeting at the Northwind Grille. Sunday, Jan. 20 8:00 PM to 8:30 PM Sunday Night Net on 147.225+ MHz. |
| For Sale Item Member Application | 7 | Saturday, Jan. 26 Annual Fishing Extravaganza aided by the BAARC. Sunday, Jan. 27 8:00 PM to 8:30 PM Sunday Night Net on 147.225+ MHz. Thursday, Jan. 31 4:00 PM to 5:00 PM BAARC Executive Board meets. |
| Coming Meetings Sunday Night Net | 8 | Thursday, Jan. 31 10:00 AM - 2:00 PM Club Membership Meeting at 300 Quince Street. |



Darrell ABØVP read Ham Christmas poems at the December 13th membership meeting to the delight of the assembled crowd. More photos on the Web at <u>http://brainerdham.org</u> December 13, 2007, 7:00 PM - BAARC Membership Meeting Minutes – Large Meeting Room of the Marathon Snowmobile National Headquarters Campus just South of Merrifield, Minnesota.

President Lyle KØLFV opened the meeting held in the Large Meeting Room of the Marathon Snowmobile Club with more than twenty in attendance including guests.

The Minutes of the November Board and Membership Meetings as published in the <u>BAARCer</u> were approved following a motion by Jim WØYA and seconded by Curt NØCRM. The November 30th Financial Report prepared by Treasurer John W3MQD was approved following a motion by John WØJGY seconded by Jim WØYA. President Lyle KØLFV reported on matters to be considered at this shortened business meeting.

John WØJGY reported that we need several operators and a volunteer chairperson to fill in for him at the Jaycees Ice Fishing Contest on January 26th.

Al WØRC reported that the Crosslake Repeater was now working very well after important adjustments were made to the duplexer by Roger WØWUG.

A Ham's "Midwinter's Night Scene" –or- 'Twas the Flight Before Christmas" by Chuck Gysi, N2DUP, was dramatically read to the meeting attendees following the business items by Secretary and Ham Darrell ABØVP and, by popular demand, was followed by the reading of "A Ham's Night Before Christmas" written by Gary Pearce, KN4AQ.

The Business Membership meeting was adjourned at 7:40 PM, followed with a celebration of the Christmas Season with the enjoyment of many holiday treats brought by the members.

Respectfully submitted, **Darrell ABØVP**, Secretary

News Bulletin: Paula WØHA slipped and fell on Saturday, December 29th. She suffered a dislocated left elbow and had it reset at St. Joseph's Hospital in Brainerd. She is now known to some as "one-wing Paula." In an interview, she told a <u>BAARCer</u> reporter, "At least I can use my right arm for operating a radio." Get well soon, Paula.

Membership Renewal: Please pay your 2008 dues if you have not already done so. Support the BAARC and stay informed with the <u>BAARCer</u> by paying your dues right away. We also urge you to take the <u>BAARCer</u> by the Internet rather than by mail. It will save the club money. Thanks. The Management.

E-mail Addresses: If you change your e-mail address, street address, or phone number, please advise the BAARC database record keeper. He is **Jim WØIRE.** Jim will make the change in the official club roster, so we don't loose touch with you. His e-mail is: **jim** "at" **bay-tech.com** Jim also e-mails everyone when the monthly <u>BAARCer</u> newsletter is published. It is a great way to stay up on the news.







The **BAARCer**



Mission Statement: The Brainerd Area Amateur Radio Club is comprised of about 85 licensed Amateur Radio Operators who meet monthly to exchange ideas, improve radio skills, organize activities that are of service to the area, promote development of

Amateur Radio, and join together in the mutual interest in Ham Radio. The <u>BAARCer</u> newsletter is provided to club members for information and entertainment as a non-profit service. The material is supplied "as is" and without warranty. Permission is granted to copy and distribute any information published here provided the source is credited.

Because space is limited in the <u>BAARCer</u> newsletter, you will often find more photos and more details for club news stories on the BAARC website at: <u>http://brainerdham.org</u>

Report on the VEC Test Session in December: A total of 4 people were served. They included Alan Cibuzar of Brainerd who passed the Technician test to become KDØCJL. John Bowen of Brainerd became a Technician with the call sign KDØCIZ. David Winkelman of Brainerd passed his Technician test to become KDØCJA. Owen "Wynn" Roberts, KA3DQN, of Aitkin did a paper work upgrade from Technician+ to General. Each has been awarded a one-year complimentary membership to the club for 2008. Al Doree WØRC expertly led the examining team, with John WØJGY, Roger WØWUG, and Fritz WØKO assisting. Congratulations to the instructional team for the good results. Of course, a high five to those mastering the exam. Please welcome the new calls as they appear on the repeater. de **Fritz WØKO**

At breakfast on a snowy December 1st: Jim WØIRE, Fritz WØKO, Mark WØMH, and Paula WØHA. They discussed the difference between isotropic (dBi) and dipole (dBd) referenced antenna gain.

Our condolences to Jim WØJDS. His wife Amy passed away in early December. She was a pleasant lady, who always assisted Jim with the winter dinner-meetings in Nisswa. de *Fritz WØKO*.

At Breakfast on Saturday, December 15th: Jim WØIRE, Fritz WØKO, Paula WØHA, Mark WØMH, and Skee WØDCY. The group discussed a Christmas star that is atop Mark and Paula's 64-foot tower. The star is made up of a wire frame, about three feet across, with white lights. There is a 75-foot lighted streamer that goes from the star to the ground.

Hello from Texas: We have a house in Crosby, MN, on which we have placed a bid and our house here in Texas is on the market. As soon as it sells (hopefully around March!), we will be making the permanent move. Antenna party anyone? If our house doesn't sell right away, we plan on moving anyway in March or April. Tell everyone hello for us and belatedly we wish a very Merry Christmas to all. de *Charles W5CCL and Kathy KD5EGN*.

Sunday Night Net Control Stations: Thanks to all of you who have volunteered to do this. Also I appreciate those of you who fill in when you do not hear the net being started. Check the full-year's listing on the BAARC website. Every <u>BAARCer</u> has the NCS listings for the current month and for the next one. If you cannot make it on your assigned night, please find a substitute (perhaps trade a Sunday with another Club member). Questions? Call me at 829 1329 or e-mail me at finn.kraut "at" charter.net—thanks. de *Fritz WØKO*

Five years ago in the <u>BAARCer</u>: Roger WØWUG gave a fascinating talk to the club on how cellular telephones work.

A big **thanks to Al WØRC and Roger WØWUG** for repairing the Crosslake 147.03+ Repeater. It is working well according to reports.

The BAARC 8 PM Sunday Night Net now includes testing the 53.110 MHz- 6-meter Brainerd Repeater. Be sure to set your rig to transmit a 123.0 Hz tone in order to open the squelch.

Christmas Message from Irma Durose NØJFS: Irma wishes all BAARC members Happy Holidays with peace, good will, and blessings of joy. She has moved and is happy in her new co-op condo in Maplewood, MN. Also she is hoping to get on the air. Luckily there is a new Ham Radio Operator moving in soon. Apparently he is a former 3-M'er, who could provide the needed help. She also says she misses members of the club. Perhaps she should make a trip north when we have our annual BAARC Hamfest!!!! de WØKO

The 443.925MHz+ Repeater is working again as of December 17th, thanks to Al WØRC. However, please do not use it before and during the John Beargrease Sled Dog Race. We received a note from Jeff KCØMKS from the Beargrease Amateur Radio Coalitition asking that we refrain from using this repeater until the race is over. It is being used for training now and will be in use during the race starting January 27th and ending January 31st. Those wishing to follow the race may "listen only" via EchoLink (KCØMKS-R, 23944).

BAARC Emergency Service Registration Form

| Name: | | | Call: | |
|------------------------|--|---------------------------|-------|---------|
| Address:_ | | City | | |
| | | Work Phone: | | |
| Cell Phon | e/Pager: | E-Mail Address: | | |
| - | | License Class: | | |
| | _ | | | |
| List bands | s and modes you can op | perate | | |
| - | | on without commercial pov | • • | s ()No |
| - | nterested in being on the | e planning committee? (| , , , |)No |
| John Luce 28045 Sur | int the form, fill it out, ar WØJGY uset Valley Road Ikes, MN 56472 | nd mail it to: | | |



50+ Years in Amateur Radio by Eldon Reeves, WØMQO, 1946 to 2007

Meeting my high school friend Charles' cousin Gordon WØNBW (Nuts, Bolts and Washers) from Minneapolis in my hometown of Windom, Minnesota, at a local drive-in is what got me started into becoming a ham. Charles became WØMDF and is now KE7SK. We met and went to the local drive-in to eat. Gordon turned on his mobile rig and started to have a QSO with a ham in California on 10 meters. Of course, the waitresses came over to the car, as it was something not experienced in our small town. However, at my age I was much more interested in the radio than I was in the girls! Listening and getting to talk to someone in California via radio was unbelievable. It created the desire to become a ham.

I ordered catalogs from Allied Radio in Chicago and from World Radio Labs in Council Bluffs. I bought a Hallicrafter's S-38 from World Radio Labs because of my limited funds. It was less expensive by a couple of dollars (big money in 1946) with a faster delivery date. After delivery I put up a long-wire antenna via my bedroom window to our garage, so I could listen in on the bands and W1AW to learn the code.

In the interim Popular Electronics had schematics of an AM transmitter using two 6L6's in the final and modulated with a 6L6 using a carbon mike, a converter and power supply to enable one to transmit and receive AM phone over the power lines at a frequency below 500 KC. Charles, another friend Dean, and I built and used these to talk to each other. A local plumber made me the aluminum chassis for free.

I soon realized that the S-38 was not a good receiver and I traded it in on a Hammarlund HQ-129-X. I needed to install a better antenna in order to copy W1AW better in learning the Morse code. In the winter I put up a 300-ohm 40-meter folded dipole, which, of course, I could use if I got a ham license. I listened almost every night and at that time felt comfortable at their 20-WPM and believed I could pass the 13-WPM requirement for a license.

In July 1948 my father and I drove to St. Paul where I had to go to take the test. We had a room at the Hotel St. Paul. As I was quite nervous, Dad decided we should take a walk to calm me down. My dad was a letter carrier and it was not a short walk. Neither of us had been in downtown St. Paul before, nor did we have a map. Before long it become obvious to both of us we did not know how to get back to the hotel. Consequently, we asked someone on the street for the hotel location. Would you believe the hotel was right around the corner?! The next day I took the test and we drove home back to Windom. Every day I looked for a letter from the FCC to see if I failed or passed the test. Of course, the days went by with no mail from the FCC. Ahead of myself but to be prepared in case I passed the test, I purchased and modified a surplus BC-459 for 40-meter CW utilizing the power supply that I used for the power-line rig.

On September 7, 1948, I came home for lunch from the first day of school and my Dad said I had a letter from the FCC. With fear I opened it. But much to my surprise it did contain a Class B license with the call letters WØMQO. I went on the air without lunch and worked a ham in Hallock, MN, with the BC-459 running about 10 watts using a straight key. Later a retired Navy communication person, who ran a local shoe store, gave me a Vibro-Plex keyer he used in the service, which I still have, but now I use my Bencher keyer.

To get on phone at that time meant 11 or 10 meters with a Class B license. George WØDR in a neighboring town was moving back to New York. He had a Hallicrafters HT-9, which ran about 100 watts on AM phone and weighed about 100 pounds! George was a cigar smoker and to tune the HT-9's driving system you had to open the lid and hold down the safety switch. He usually had his cigar in hand so some ashes would drop inside. Even after I removed what ashes I could as long as I owned the HT-9, one could smell cigar odor when the rig was warm and you opened the lid for tuning. Fortunately, he smoked expensive cigars and the odor was not bad although my mother did not agree. Now I needed to get a beam for ten meters. A local welder worked with me to make a 5-element, close-spaced beam from ½" EMT tubing for the elements and 1" tubing for the mast with rubber water hose material for the insulator for the driven element using a "T" match and 300-ohm feed line. To rotate it my dad said that we could use the wheel lift worm drive from a grain binder (of course, you know what that is!!). So on Thanksgiving Day it was snowing, but we mounted the beam on 20 feet of water pipe attached to our house anyway. Dad made about a 1" hole through the tile of our basement wall for the worm-drive handle. We had the welder put material between two of the teeth on the gear to prevent me from rotating the beam more than about 350 degrees. Without a direction indicator I had to count the number of turns to put the beam in the proper direction. To make my life somewhat simple we had put a large wood sewing spool on one of the four spokes of the turning wheel as the wood part of the wheel was gone. Thus I could count the necessary number of turns. Of course, I still had to remember in what direction the beam was pointed before I changed its direction for the next QSO or go outside and look at the beam. Needless to say, a Minnesota winter helps in developing your memory. (continued on Page 6)

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(continued from Page 5) In December 1950 during a college break I took and passed the test for a Class A license so I could operate phone on 75 and 20. I bought a surplus BC-696 and modified it to work as a VFO for the HT-9 on 80 CW and 75 AM. To get on SSB while still in college (besides getting married), I traded in the HT-9 for a Central Electronics CE-20A SSB kit. I used it on 40 and 20 from a second-floor apartment in North Mankato.

Upon graduation from college I went to work for Collins Radio Company in Cedar Rapids, IA. Of course, I had to trade the HQ-129-X which was not designed for SSB for a Collins 75A-3A. Collins evolved this receiver into the 75A-4. According to the engineers it was a better receiver, but too expensive to manufacture. Very few of the 75A-3A's were put on the market. I also built a 450-watt grounded-grid amplifier using four 1625's and its power supply using Collins surplus parts and driven by the CE-20A--all mounted in a 3-foot cabinet. There was one large benefit being employed by Collins and that was the ability to get inexpensive parts. I used vacuum tube rectifiers instead of mercury vapor rectifiers to eliminate noise level in the receiver. Mercury rectifiers were beautiful when turned on but created receiving interference. The supply was capable of handling a 3-KW AM transmitter and its modulator. Thanks to my wife I also started taking flying lessons and got my private pilot's license in March 1960.

We left Cedar Rapids and bought a house in Bloomington in June 1960. I still had most of the parts from my 10-meter beam, modified it to use RG-8 as a feed line and mounted it on our detached garage. For beam direction I used 24-volt-ac, 400 cycle surplus servos and used the old binder lifter worm drive for rotating the beam but with an electric motor. It took umpteen wires for the 100-foot or so distance from the operating position, but the system worked and I didn't have to go outside to see where the beam was pointed. About 5 years later I bought a Heathkit SB-101 SSB kit (and in the early 70's a 21" color TV kit). That meant retirement for the grounded -rid amplifier, as the SB-101 was too powerful to use as a driver. My 5-yea- old son, Craig helped in soldering the power supply, under supervision of course. This task must have stayed with him as he is now an electronic and Electrical Technician and is KCØUPS. Upon completion of the SB-101, the 75A-3A and CE-20A were put into storage.

In the 1969 we built a new house in Bloomington--time to upgrade again. I bought a 48-foot tower and installed a threeband three element cubical quad by Cubex. It was the best beam I have ever had until it got iced-up twice and collapsed. I then installed a three-element Hy-Gain trap beam for 20, 15 and 10. When the tower was blown down by a storm, the bottom 8-foot section was completely bent 90 degrees but the beam was hardly damaged thanks to the small bank in our back yard. I had a new tower attachment base built, which resulted in a 40-foot tower. Another upgrade during this time was to trade the in-storage 75A3A and CE-20A for a Kenwood TS-930. I put the SB-101 into retirement and I still have it. For 2 meters I bought a Yaesu FT-208 handheld, which I still use.

Shortly before retirement in 1994, I sold the Kenwood TS-930, the tower and beam. I replaced it with a Yaesu FT-890 and a Spider antenna for use in our 5th wheel trailer. Upon retirement we moved to our remodeled cabin on Crooked Lake south of Deerwood. I purchased a Tri-Ex 70-foot retractable tower and a Mosley Pro 57B beam that covers 20, 17, 15, 12 and 10 meters. Because the 15, 12 and 10 meter bands have become less active, I decided to go on 20 and added an Ameritron AL-80B amplifier. This past summer I traded the FT-890 for an Icom IC-7000. The only problem with the IC-7000 is the operator's manual is a lot larger than the transceiver itself! I will have to live to be a 100 before I will know how to completely operate the IC-7000.

Tidbits: While living at home the telephone company office in Windom put in a phone patch for me because of an impending snowstorm, so they could contact Mankato in an emergency – it did not occur. But I used the patch to have some missionaries who were hams in several South American countries talk to their Minnesota relatives. That was back in the "good old days" when 10 meters was wide open. Back then on 10 meters, DX stations normally operated below 28,500 and we had to operate above 28,500. Buried in my old logbooks are QSO's with Sherm Booen (WØRHT), Ar-thur Godfrey and Ronnie Lee Milsap (everybody remembers them). Over the years I have worked all continents except Antarctica. In fact I have never heard a station from there. I have been licensed and operated in New Zealand and Australia. I have worked all the states, but not from one location so no WAS. I have been to ARRL headquarters and operated W1AW and spent more time filling out the required QSL cards than operating the station. I have operated aeronautical mobile in my own airplane and rented airplanes. In addition to CW, AM, and SSB, I have operated SSTV and PSK-31. I am also a life member of ARRL since the early 60's.

One of the pleasures of operating ham radio is the interesting conversation with the people all over the world. Another great pleasure that I have is the weekly QSO with Fred, N3CIK, a high school and college friend who lives in Maryland. We got together via ham radio in the 70's after loosing contact with each other for almost 20 years. In conclusion, it is my belief that amateur radio is one of the greatest hobbies in which one can participate (right along with flying). de *Eldon WØMQO*

The BAARCer

Sunspot Cycle and DX: We are just now coming out of the bottom of the cycle. More sunspots are appearing which translates to more and better DX opportunities. For instance, on the low end of the 80 meter-band even early in the evening you can hear Europeans now. I worked a Slovenian on CW without too much effort. Africa and the Orient can be worked again at their normal times on 20 SSB. Give it a try! Just to show you how weird the band can be--I was working a stateside station on 20 CW. When I finished I had a Japanese station call me. He had a great signal. Then a few minutes later, the band appeared dead---except for KT9T, whom I heard working the same JG station. Upon finishing I called him. He was from Eden Prairie, MN. After we chatted for a while, I moved my quad north and his signal came up even more!!!! Yes, it's strange propagation sometimes. de *Fritz WØKO*

For Sale: A Yaesu FT-990 HF Transceiver. Has a built in Power Supply, 500 Hz CW Filter, antenna tuner. It covers all HF Ham Bands and has a general-coverage receiver. Good condition. Best Offer. If interested, call Lyle KØLFV 218.765.3100.

Brainerd Area Amateur Radio Club MEMBERSHIP APPLICATION FORM

Dues Year January 1, 2008, to December 31, 2008

| Name (First, MI, Last) | Call Sign: | | | | | |
|--|--|--|--|--|--|--|
| Street Address: | License Class: | | | | | |
| City: | State: ZIP: | | | | | |
| Phone: () Additional/Cell Ph | none: () | | | | | |
| Date of application: Check one | : New application: Renewal: | | | | | |
| E-mail address: | Member_ARRL? | | | | | |
| I would like to receive the <u>BAARC'er</u> newsletter via the Internet via the US mail | | | | | | |
| Check one: \$20 Full Membership \$10 Additional Family Member \$10 Student Member | | | | | | |
| Are you interested in being called to do emergency communications? Yes No | | | | | | |
| Membership Dues: \$ | Mail to: | | | | | |
| Voluntary Contribution: \$ | Brainerd Area Amateur Radio Club Treasurer - John Myers W3MQD | | | | | |
| Total Enclosed: \$ | 34570 Beaver Trail Pequot Lakes, MN 56472 | | | | | |
| Make checks payable to BAARC Contributions are tax deductible. The club is a 501C3 non-profit organization. | | | | | | |

bsoA IliH snendA 78181 c/o M. Fritz Bertelt WØKO Brainerd Area Amateur Radio Club

Brainerd, MN 56401

BAARC, Inc. New Year's Resolution: "I will give my call sign slowly and Ham Radio at its best in the Lakes Area distinctly so others can easily hear it and they won't have to ask for a repeat."

Address Correction Requested

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More information on club activities is available on the BAARC Web site at: http://brainerdham.org

The BAARC January Membership Meeting will be in Room 800 of the Brainerd High School South Campus building. The address is 300 Quince Street. Everyone is invited and

The BAARC will be involved in the new year providing communications for the Annual Jaycees \$150,000 Fishing Extravaganza on Gull Lake. The event is scheduled for Saturday, January 26th. As many as 12 volunteer Hams will be needed to help at this fun activity. Sign up with John

Sunday Night Net Control Operators on the 147.225 MHz+ Repeater at 8 PM:

| 1/06/08 | Fritz | wøкo |
|---------|---------|-------|
| 1/13/08 | Darrell | ABØVP |
| 1/20/08 | John | W3MQD |
| 1/27/08 | Shirley | KØDCW |
| 2/03/08 | Al | WØRC |
| 2/10/08 | Jim | WØIRE |
| 2/17/08 | Bob | WØZPE |
| 2/24/08 | Marcia | WØZMC |

Can't make the schedule? Find a substitute operator. BAARC Sunday Night Net Control Coordinator is Fritz WØKO. Contact him to volunteer.

Affiliated with the ARRL

Find us on the Web: http://www.brainerdham.org

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The BAARCer

January 2008