



# The BAARCer



September 2007

For Anyone Interested in Amateur Radio

Page 1 of 8

**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:**

Jim Talbott WØYA

**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



## Annual Fox Hunt August 18th



The Annual BAARC Fox Hunt and Picnic was a great success. Details on Page 4 in this [BAARCer](#).

**Inside This**

Meeting Minutes	2
Club News	3
Fox Hunt	4
Baxter Triathlon	5
Tower Fencing	6
Storm Damage	7
Coming Meetings	8
Sunday Night Net	

**Events Calendar**

- Saturday, Sept. 1** 9:00 AM to 10:00 AM Informal breakfast meeting at the Northwind Grille
- Sunday, Sept. 2** 8:00 PM to 8:30 PM Sunday Night Net on 147.225+MHz
- Wednesday, Sept. 5** 1:00 PM to 2:00 PM Monthly siren and civil emergency test
- Saturday, Sept. 8** **Crosby Bike Tour** aided by the BAARC
- Saturday, Sept. 8** 9:00 AM to Noon **Rush City Radio Rendezvous/Hamfest** in Rush City
- Sunday, Sept. 9** 8:00 PM to 8:30 PM Sunday Night Net on 147.225+MHz
- Saturday, Sept. 15** 9:00 AM to 10:00 AM Informal breakfast meeting at the Northwind Grille
- Sunday, Sept. 16** 8:00 PM to 8:30 PM Sunday Night Net on 147.225+MHz
- Sunday, Sept. 23** 9:00 AM to 1:00 PM **Fall-Fest Hamfest** in Carlton, MN
- Sunday, Sept. 23** 8:00 PM to 8:30 PM Sunday Night Net on 147.225+ MHz
- Thursday, Sept. 27** 4:00 PM to 5:00 PM BAARC Executive Board meets
- Thursday, Sept. 27** 7:00 PM to 9:00 PM **Club Membership Meeting**
- Saturday, Oct. 6** 9:00 AM to 10:00 AM Informal breakfast meeting at the Northwind Grille

**August 18, 2007, 1:27 PM - BAARC Combined Board & Membership Meeting Minutes at the Persons' Galactic Residence, Gilbert Lake, Minnesota.**



The meeting was opened by President Lyle KØLFV while in attendance were Lyle KØLFV's wife Marilyn, Treasurer John W3MQD with Vi, Mark WØMH, Paula WØHA, Terry KIØFW, John WØJGY with Terri, Jim WØIRE, Skee WØDCY, Greg NØLJY with Brenda, Lyle KØLR, Kathie KØTHY, Roger WØWUG, Mike WAØLVG, Secretary Darrell ABØVP, and special guest--aspiring future ham Newel Hirst.

The Report of the July Board of Directors and the General Membership Meetings, as published in the BAARCer, were accepted as written following a motion by John WØJGY, seconded by Skee WØDCY.

Treasurer John W3MQD presented the July 31st report to the Board. Paula WØHA moved approval of the financial report, which after a second by Skee WØDCY, was unanimously approved.

BAARC's focus for September will be on Hams with more than 50 years of hamming. Many thanks to Terry KIØFW for his skillful hiding of the fox (call sign not applicable).

Following a tumultuous applause of appreciation for the Persons that echoed throughout the magnificent Lake Gilbert Basin, the meeting was adjourned on a motion by Mike WAØLVG that was seconded by Kathie KØTHY.

Respectfully submitted, **Darrell ABØVP**, Secretary

Another photo from the August 18th BAARC Fox Hunt. Paula WØHA and Newel Hirst show their technique on how they were the third team to find the fox transmitter along Riverside Drive. Newel recently checked out a number of Ham Radio books from the Brainerd Public Library in an attempt to learn more about our fascinating hobby.

**Editor's note:** It is important to mention that we need to bring more young people into the hobby of Ham Radio or it may die along with the Hams who currently use it. We should all be recruiters for the hobby to keep it alive for future generations.



The BAARCer newsletter is available as a **Web page** in addition to the standard Adobe Acrobat .pdf document format. When you go the BAARC Web site at: <http://brainerdham.org> and then go to the "Club Newsletter" link, you will see links to view each of the eight newsletter pages, one at a time. To get from page 1 to page 2, click the "back" button on your Internet browser to return to the main newsletter page. Then, click on the page 2 link.

If you are in need of any 4CX250B tubes, contact Mark WØMH at 218-829-1326. He has four reasonably good tubes to give away to anyone who might find a use for them.



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

**At Breakfast on Saturday, August 4th:** Lyle KØLFV, Lyle's wife Marilyn, Fritz WØKO, Jim WØIRE, Paula WØHA, Mark WØMH, George KCØBH, Ben KØBLR (Ben Loves Radio) from St. Cloud, Ben's wife Amanda, and friend Joe Roggenkamp from Cloquet, MN.

**The 443.925 MHz+ Gull Lake UHF Repeater is now back on the air** as of August 9th. Pat KBØQYC brought up the link from his vacation location at Longville so LSAC is also on the air. Curt Martin could not find anything wrong, so after being bench tested for awhile, we decided to put it back in service. The original problem was found to be the controller at Coleraine, MN, but is now fixed. Please key it up and check your S meter for signal strength. If you notice any significant changes, let me know. 73, **AI WØRC**

**Jim KØTXT and Sharon KBØSQX** were in this area for a week in August from their winter home in Hot Springs Village, Arkansas. Jim told the story about a golf ball with an eyelet on the end of a fishing line. Used with a fly-fishing rod, the contraption is good for putting wire antennas into trees with great success.

**At Breakfast on Saturday, August 18th:** Lyle KØLFV, Jim WØIRE, Skee WØDCY, Greg NØLJY, Greg's wife Brenda, Darrell ABØVP, Terry KIØFW, Lyle KØLR, Kathy KØTHY, John WØJGY, John's wife Terri, Paula WØHA, Mark WØMH, and 11-year-old Newel Hirst. Newel has developed an interest in Ham Radio and had a great time at the Fox Hunt that day.

**The BAARC Web site is now ten years old.** It was one of the first Ham Radio presences on the Internet. The site started out with four pages and is now 1018 pages with 55 megabytes of in-depth content.

**A metal tablespoon** was accidentally left at the residence of Mark WØMH and Paula WØHA at the Annual BAARC Picnic on August 18th. To claim it, call Mark or Paula at 218-829-1326.

According to the Brainerd Daily Dispatch of 8-5-07, Wayne A. Fankhauser, 76-year-old resident of Little Falls passed away on August 2 at St. Joseph's Medical Center in Brainerd. On QRZ.COM Wayne had stated that he was formerly licensed as W3LITN and operated from various locations from 1956-1971. In addition he also held a German call DL5IP and operated from Oberweis and Bitburg AFB in Germany. After those years he did not operate and let licenses expire. Then he renewed in February 2004. He became a member of the BAARC and would check into the BAARC Sunday Night Net on occasion. Although he was not an active member of the Club and stayed in the background, he was a friendly ham. Needless to say, he will be missed in the ham radio community. de WØKO. Editor's Note: The Club sent a card with its sincerest condolences to his family and received a thank-you note.



(Continued from Page 1 of this [BAARCer](#)) And the winner is Lyle KØLR, on the right, being congratulated by BAARC Fox Hunt Chairman Terry KIØFW. Times of the fox hunters who found the hidden transmitter:

Lyle KØLR, 63 minutes

Kathy KØTHY, 65 minutes

Paula WØHA and Newel Hirst, 67 minutes

John WØJGY, 69 minutes

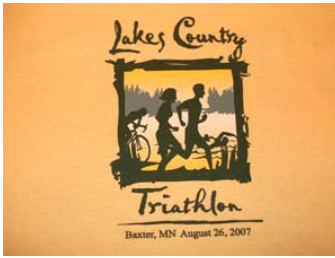
Lyle KØLFV, 75 minutes

### Winning the 2007 BAARC Fox Hunt by Lyle KØLR

My hunting companion Kathie KØTHY and I, along with several other fox hunters, decided to start from the parking lot across the street from the Northwind Grille. We turned on our radios at 10:15 AM, and almost immediately Kathie picked up a signal, using a 3-element tape-measure beam that she built several years ago from plans at [http://home.att.net/~jleggio/projects/rdf/tape\\_bm.htm](http://home.att.net/~jleggio/projects/rdf/tape_bm.htm). I thought at first that the radio was just hearing industrial noise from downtown Brainerd, but then Kathie heard the CW identifier and we were good to go. The peak direction was a little east of north, so we decided to head for the East Brainerd Mall to get to Highway 3 (formerly Highway 25). While in the car, we plugged Kathie's beam into an IC-706 transceiver. The IC-706 has a fairly good signal-strength meter and a built-in attenuator, both of which are useful for fox hunting. At the East Brainerd Mall, Kathie re-confirmed the north heading and we started up Highway 3. Things were looking good until we crossed the river, at which point Kathie said the signal was coming from behind us. We headed back south to Mills Field, where the signal was strongest, parked the car near the grandstand, and started out on foot.

While on foot, Kathie continued to use her beam with a handi-talkie and an offset attenuator. I used another handi-talkie and offset attenuator in combination with a little diamond-shaped loop antenna of my own design. What's an "offset attenuator?" For a good example, including plans to build your own, see <http://members.aol.com/joek0ov/offatten.html>. My homebrew loop antenna has a nice sharp null in one direction, which allows fairly good direction readings, but the gain is very low and it is only usable with strong signals. I was getting a reading from almost straight west, and started walking in that direction. But, I soon ran into a chain-link fence, beyond which was a railroad track and the river. I started to wonder if Terry really meant it at breakfast when he talked about needing a wet suit to hide the transmitter! Since we were in a part of Brainerd that was totally unfamiliar to us, it was time to walk back to the car and study the map. Unfortunately, when I got back to the car, Kathie was nowhere to be seen. Turns out that she stopped and waited in the area where she had last seen me, while I was waiting in the car. We needed to carry another set of radios so we could communicate! Eventually I saw Lyle KØLFV and Mark WØMH in another part of the ballpark and also caught sight of Kathie by the highway.

Once we determined how to get across the river and had headed south on Highway 20, things started falling into place. The signal strength increased rapidly and peaked where we saw Paula WØHA and John WØJGY in a parking area next to the highway. We weren't sure how the heck they had gotten into that parking area, but soon found the entrance road. I got out of the car and started to walk back across Highway 20 toward the river. However, before getting to the road, I reached a point where there was no null in the signal no matter which way the antenna was pointed. Looking right behind me, I saw the fox almost completely hidden under a little pine tree. Kathie was heading in the same direction, but her radio was showing a full-scale signal in all directions, even with the offset attenuator cranked all the way in. She finally had to disconnect the antenna completely and use the handi-talkie alone as a "sniffer." For some of the hunters, the signal was too strong even with no antenna, and it was necessary to tune off frequency by 5 or 10 kHz. Maybe we need to add a piece of aluminum foil for emergency shielding to the fox-hunting receiver. Thanks to the BAARC and Terry KIØFW for putting on the hunt and providing us with an interesting challenge! de **Lyle KØLR**



The BAARC provided communications for the Annual Baxter Triathlon on Sunday, August 26th. (l-r) Terry KIØFW, Mark WØMH, Paula WØHA and Lyle KØLFV.

The race began with a ½-mile swim in Whipple Lake, then switched to a 17-mile bike ride through the rolling hills surrounding the Baxter-



Brainerd Lakes Area. It ended with a 3.7-mile run through a nearby residential area. This was a fun event for the radio operators. Lunch and T-shirts were provided.

Each contestant wore an RFID (Radio Frequency Identification) tag on his or her ankle as shown on the right.

Additional event information can be found at: <http://www.picklevents.com/events/lctri>



**Take QST to Lunch:** When I am traveling and don't have anyone to enjoy lunch with, I reach into the car and get a recent, but not necessarily current, issue of QST. What a great time to read stories about our fascinating hobby. You could do that too and maybe read an issue of the BAARCer while on the road. On several occasions, nearby people have struck up a conversation with me based on their seeing a QST in front of me. *Mark WØMH*

When your e-mail address changes, please notify Jim WØIRE [barryjr@bay-tech.com](mailto:barryjr@bay-tech.com) If you are not sure you remembered to pass on a change from a while ago, just e-mail him with the latest. Jim sends out meeting reminders and announcements that let members know when the BAARCer newsletter is available. Thanks for your work, Jim!

**There is more bad news for Prince Charles.** A recent medical study showed that the older you get, the larger your ears get.



**Hams have the right, under Federal Communications Commission ruling PRB-1,** to have antennas. Usually that means a tower. With that right comes an obligation to keep the antenna or tower safe for the rest of the world. First, it means RF radiation safety. I will not cover that in this article. Second, if it involves a tower, it means probably building a fence to keep unauthorized people from climbing that tower.

What you do not want is some “idiot” to climb your tower, fall off, and then live to sue you for negligence.

I have installed anti-climbing panels on self-supporting towers to prevent anyone from getting a hold of anything below 8 feet of height. That works, but requires a ladder to get above 8 feet to start climbing. My commercial radio broadcast clients usually use chain-link fencing with barbed wire across the top to keep people away from their towers.

My home is within the city limits of Brainerd. That higher density of population increases the likelihood of some “joker” trying to climb my tower in the middle of the night while he is three-sheets to the wind. Believe it or not, a trespasser has rights in this country.

So, I undertook a project to put a fence around my 68-foot self-supporting tower. I purchased 6-foot high by 8-foot wide cedar-fence panels with a nice dog-ear design at the top. To hold them in place, I used 4-inch by 4-inch by 8-foot posts. The fence is 12 feet by 12 feet. You might think that is huge, but it is big enough so my 80-meter unipole and coupling network, along with a cable junction box, fit inside with just enough room to work. The tower’s concrete base is 4 feet by 4 feet. To get 12 feet of fence length, I cut two of the 8-foot long panels into 4-foot pieces. Those, added to other 8-foot panels, gave 12 feet. In total, it took six 8-foot fence panels and twelve posts, spaced at 4-foot intervals, to make the fence stand properly.



There was a fair amount of measuring to get the fence square and level. A hinged 4-foot panel is used for the door. It has a hasp and lock to keep “late-night visitors” out. Before building the fence, I leveled the ground. Then, I used one of the 4x4 posts, laid on the ground, to space the panels above the ground during the original construction. I then filled in some dirt to reduce that distance to about 2 inches. A post-hole digger was used to make 30-inch deep holes for the posts. Stainless steel screws, with a square #2 bit in an electric drill, were used to hold the panels to the posts. While putting cedar stain on the fence, my nose started itching. You should have heard Paula’s laugh when she noticed I had a “brown” nose. All in all it was a fifteen-hour summer project, with Paula’s assistance. Now I can sleep better and night. **Mark WOMH**

**One of Crosby Minnesota’s claims to fame is based on an event that took place on August 19, 1957.** On that day, a manned balloon was launched from the bottom of the 425-foot deep Portsmouth open-pit iron mine just north of Crosby. This was part of an Air Force project called Project Manhigh. Its purpose was to gather data on the behavior of a balloon in an environment above 99 percent of the earth’s atmosphere and to investigate cosmic rays and their effects on man. The pressurized capsule was launched under a gigantic polyethylene balloon that expanded to a diameter of 200 feet and contained more than 3,000,000 million cubic feet of helium. The pilot, Major David Simons, flew the balloon to an altitude of 101,516 feet in 2 hours and 18 minutes. The BAARC held a special event April 24, 2004, to commemorate the event. There was a reunion of the year 1957 participants in Crosby on August 18th this year.

**Does a Lightningbolt Quad hold up in MN WX?** Well, Fritz thinks so--in spite of the fact that in the past he has had a few--some minor--incidents with the tower, Yagis, and an HF quad on a fold-over tower. This time it happened on Monday, August 13. Most people in the Brainerd area experienced wind damage. WØKO again was no exception. With 80-mph winds whipping across Ahrens Hill, one of four reflector elements snapped off at the hub. In addition, the power was out for about 6.5 hours at the Bertelt household---that was a new experience for their grand-kids.

But, the repair was relatively easy. Actually the driven element could still be used while the repair was being made. He folded over the tower and removed the reflector hub and had Brian of Brian's Welding repair and reinforce it. Interestingly, Brian thought another previous construction weld (all aluminum) appeared to have a "cold " weld, so he re-did it at the same time. After \$27.50 was paid and some two hours later, only the reassembly remained. Now the quad works better than ever. Yes, Fritz still likes the quad over a Yagi. Fortunately, he bought a nearly new LB quad to have in reserve. So far he has not had to use it.

### — A Practical Ham Joke —

When I was in Colorado, I had a ne'er-do-well neighbor behind me. This guy had been a bit of a \*#! in many different ways and he once came over to my place with some "muscle" in tow to tell me how much trouble I was causing. I happily showed him and his muscle the station, handed them an FCC RFI booklet, and sent them away somewhat confused.

Then, he got a touch lamp in his second-floor living room, which was easily visible from my operating position. That touch lamp was a pretty sensitive receiver and even at 100W: it went completely nuts on 20 meters. I used CW almost exclusively at the time, but SSB did it in, too. For a long time, he couldn't figure it out, but one day I saw him out on his balcony looking carefully over at my house. I ducked down out of sight and programmed my keyer to send "RFI TEST DE N5OP" continuously at 20 second intervals. I then went out and mowed my lawn. He watched me mowing my lawn while his touch lamp went nuts and finally went back inside and unplugged it. He certainly couldn't accuse me of the problem! I was mowing the lawn!

But that's not the end. I had a good friend who had just passed his Technician test. When he was at my place, I saw my antagonist in his living room watching his TV, with his touch-lamp on.

We grabbed some binoculars and I said, "Watch this." Keeping all lights off, I programmed my keyer with "RFI TEST DE N5OP" and fired up my TS-930S. As if by magic, his touch lamp began its routine. He got out of his chair and looked at my house—dark as a tomb. He readjusted the lamp and just as he sat down, it started again. He did this trick several times and every time, as if on cue, it went nuts again when he sat down. By this time my friend was almost unable to breathe due to his laughter. But, then came the piece de resistance. The lamp started its routine again and this time the guy leaped out of his chair, grabbed the lamp, and shaking it as if he were choking it. He ripped it out of the wall socket and \*threw\* it down a hallway. Needless to say, that put the poor touch lamp out of its misery.

My friend complained for some days afterward that his sides hurt from so much laughing. Mine did, too. **Kimberly Elmore, N5OP** (Past-President of the Boulder Amateur Radio Club and past member of the Longmont Amateur Radio Club. (printed with permission of the author)

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

9/2/07	John	WØJGY
9/9/07	John	W3MQD
9/16/07	Terry	KIØFW
9/23/07	Dave	KCØTGT
9/30/07	Jim	WØYA
10/7/07	John	KCØWCG
10/14/07	Steve	WØTNT
10/21/07	John	W3MQD
10/28/07	Fritz	WØKO

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



**BAARC, Inc.**

Ham Radio at its best in the Lakes Area  
Affiliated with the ARRL

Find us on the Web:

<http://www.brainerdham.org>

**- - - Upcoming Membership Meetings - - -**

The Brainerd Area Amateur Radio Club will handle communications at the **Cuyuna Bike Tour on September 8th**. Contact Terry KIØFW at [ki0fw@crosslake.net](mailto:ki0fw@crosslake.net) or Lyle KØLFV at [amundson@brainerd.net](mailto:amundson@brainerd.net) or call 218-756-3100 to participate as an operator.

**The September 27th Membership Meeting** will be honoring those who have been Hams for 50 years or more. Stories will be told and cake will be served. Here is your chance to hear about Hamming from the "old days." The exact location has yet to be determined for this fun meeting. An e-mail will be sent to all members. Also watch for details on the BAARC Web site <http://brainerdham.org>

**The Annual Goblin Watch** will be held on Wednesday evening, October 31st. This is a fun and rewarding activity for all participants. Stay tuned for details.

The BAARC is looking for a new VE Coordinator to replace Jim WØIRE who is retiring from the job after about five years of faithful service. Contact Lyle KØLFV to volunteer for the position.

**United We Stand**



**FIRST CLASS MAIL**  
Address Correction Requested

Brainerd Area Amateur Radio Club  
c/o M. Fritz Bertelt WØKO  
16167 Ahrens Hill Road  
Brainerd, MN 56401