



The BAARCeR



January 2010

For Anyone Interested in Amateur Radio

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Club Call: WØUJ

BAARC 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
 144.390 WØUJ-5 APRS
 Crosslake 147.030 MHz+
<http://brainerdham.org>

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Director-At-Large:

Roger Williams **WØWUG**

Trustee + BAARCeR

Editor:

Fritz Bertelt **WØKO**



TOWER WORK

AT GULL LAKE

Roger, Al, and Kevin admiring the Tower workers' effort. On the bottom left is Kevin from the tower crew checking the antenna assembly.

Bottom right shows Roger WØWUG With cap and Dave KBØVYI

These Photos by WØWY.



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— Events Calendar —

- Jan. 2 (Sat.) Club Breakfast at Northwind Grille in Brainerd @ 9.**
 - Jan. 16 (Sat.) Club Breakfast at Northwind Grille in Brainerd @ 9.**
 - Jan. 23 (Sat) Brd. Ice Fishing Extravaganza—details later on Sun. Net.**
 - Jan. 28 (Thurs.) Board Meeting at Brd. Fire Hall @ 6 p.m.—note New Time**
 - Jan. 28 (Thurs.) Reg. Membership Mtg. at the Brd. Fire Hall @ 7 p.m.**
 - Feb. 2 (Sat.) Club Breakfast at Northwind Grille in Brainerd @ 9.**
 - Feb. 13 (Sat.) Mid-MN Sled-Dog Race (Outing)-details later/invite hams.**
 - April 17 (Sat.) MN Repeater Council (Outstate) Meeting at the Fire Hall—Details Later—Mark your Calendar**
- ACTIVITY UPDATES ON THE SUNDAY EVENING NETS**
BAARC 10th Annual Hamfest (Sat.) July 24, 2010

From the ARRL---Kon-Tiki and Ham Radio (LA3KY)---redacted by WØKO

Knut Magne Haugland, LA3KY, of Norway, passed away on December 25. He was 92. Haugland was one of six men, who with Thor Heyerdahl in 1947, successfully crossed the Pacific Ocean in a 45-foot raft made of balsa wood and bamboo -- named *Kon-Tiki* -- to prove that people from South America could have settled Polynesia in pre-Columbian times.

Called the "most unusual expedition ever to place reliance on Amateur Radio for communication" in the [December 1947 issue of QST](#), *Kon-Tiki* departed Peru for Polynesia on April 28, 1947. "It was the theory of Thor Heyerdahl, Norwegian ethnologist and leader of the venture, that the settlement of the Pacific Islands resulted from a migration of American peoples who had sailed there many of years ago, rather than a trek from Asia as claimed by other scientists," the article explained. ...The December 1947 *QST* article stated that "the conditions under which the radio equipment aboard the raft was to operate presented many unusual problems. Operation was required on maritime and amateur frequencies. Both phone and c.w. were specified. The transmitters were to be tuned, closed up and remain watertight unless something went wrong. It must be possible to load them up on antennas of whatever length could be erected on available supports. With these requirements in mind, [C. F. Haddock] W1CTW and [H. A. Gardner] W1EHT of the National [Radio] Company's engineering staff designed and constructed the needed rigs. One transmitter was built to operate on 7 and 14 Mc., another for 28 Mc. and a third for 50 Mc."

For the first 22 days following their departure from Peru, the only radio contact *Kon-Tiki* had was with OBE, the station of the Peruvian Naval School. LI2B kept to its schedule, trying to contact key amateur stations on specified frequencies without success. Finally, on May 20 at 9:44 PST, Harold Kempel, W6EVM, heard and worked LI2B on 14.142 kHz, providing the raft with its first North American contact. By mid-June, LI2B had worked numerous amateur stations.

As the trip progressed, a long-haul network of amateur stations developed. Stations in North America, the Canal Zone and Norway cooperated in handling the *Kon-Tiki*'s traffic. [Gene Melton] W3FNG, in Washington, DC, relayed messages to and from the Norwegian Embassy. "On at least two occasions, urgent traffic was exchanged between the Embassy and the raft via this circuit," the *QST* article explained. "In one instance, a message was relayed from the raft to W3FNG, delivered by telephone to the Embassy, an answer procured and relayed in the reverse direction to *Kon-Tiki*!"

Kon-Tiki's mission ended on August 7, 1947 -- just 101 days after departure from Peru -- when waves deposited the raft on a reef off Raiora Island. "But the safety of the courageous crew which had made the venture a success was still at stake," the *QST* article said. "Half an hour after being stranded, LI2B was fortunate in making contact with [G. W. Hitch] ZK1AB on Raratonga, who was asked to stand a listening watch and communicate with the Norwegian Embassy in Washington if LI2B was not heard at the end of a 36-hour period. Just before the specified period ended, contact was established with [P. Fuller], WØMNU, and word of the landing passed along, thus avoiding the necessity of sending out any rescue parties."

In his book *Kon-Tiki*, Heyerdahl described the rush to make contact after landing on the reef, including the crew's despair as the NC-173 slowly dried after getting soaked in a shipwreck, gradually receiving at higher and higher frequencies until eventually settling on the 13.990 MHz frequency needed to make contact: "Coils and radio parts lay drying in the tropical sun on slabs of coral. The whole day passed, and the atmosphere grew more and more hectic...Not a sign of life in the transmitter, but the receiver, an NC-173, began to liven up somewhere at the bottom of the scale and we heard faint music. But not on the amateur wavelength. It was eating its way up, however; perhaps it was a wet coil which was drying inward from one end. The transmitter was still stone-dead short circuits and sparks everywhere...All the batteries were completely ruined, and we got power by cranking a tiny hand generator. It was heavy, and we four who were laymen in radio matters took turns all day long sitting and turning the infernal thing...Soon afterward we picked up the following fragment of a message sent out from Rarotonga: '...no plane this side of Samoa. I am quite sure...' The tension was unbearable... Power began slowly to come into the transmitter's aerial, and Torstein pointed ecstatically to an arrow which swung slowly up over a scale when he held the Morse key down. Now it was coming!...We turned the handle madly while Torstein called Rarotonga. No one heard us. Once more. Now the receiver was working again, but Rarotonga did not hear us. We called Hal and Frank at Los Angeles and the Naval School at Lima, but no one heard us. Then Torstein sent out a CQ message.. Then the slow voice out in the ether said 'My name is Paul. I live in Colorado. What is your name and where do you live?...This was a radio amateur. Torstein seized the key, while we turned the handle, and replied, 'This is the *Kon-Tiki*. We are stranded on a desert island in the Pacific.' Paul did not believe the message. He thought it was a radio amateur in the next street pulling his leg, and he did not come on the air again. We tore our hair in desperation. Here were we, sitting under the palm tops on a starry night on a desert island, and no one even believed what we said...Torstein did not give up; he was at the key again sending 'All well, all well, all well' unceasingly. We must at all costs stop all this rescue machinery from starting out across the Pacific. Then we heard, rather faintly, in the receiver, 'If all's well, why worry?' Then all was quiet in the ether. That was all. We could have leaped into the air and shaken down all the coconuts for sheer desperation, and heaven knows what we should have done if both Rarotonga and good old Hal had not suddenly heard us. Hal wept for delight, he said, at hearing LI2B again. All the tension stopped immediately; we were once more alone and undisturbed on our South Sea island and turned in, worn out, on our beds of palm leaves."

After *Kon-Tiki* Haugland married librarian Ingeborg Prestholdt. He participated in the Independent Norwegian Brigade Group in Germany from 1948-1949, continued in the Forsvarsstaben until 1952, when he was transferred to the Royal Norwegian Air Force and headed the intelligence service.

Editor's note: The December Meeting Minutes will be published in the next **BAARCer**.

WE WISH ALL OF OUR BAARC MEMBERS, FAR AND WIDE, A PROSPEROUS AND HEALTHFUL 2010.



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 of Ham Radio. **In addition, the Club endorses and honors the Radio Amateur's Code : The radio amateur is considerate, loyal, progressive, friendly, balanced, and patriotic.** 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>

DX and the Paper Chase

Life. Connected with technology. A very profound statement of today's world of hand-held wireless Blackberry's and peripherals that we never dreamed possible. Wait up there...wireless technology? The Amateur community has been connected before the advent of computers. On December 12, 1921, Guillermo Marconi received a short-wave transmission dit, dit, dit from 2200 miles away, and the rest (as they say) is history. It could be said that a bunch of rank Amateurs, not even considered to be scientists, made an indelible mark on short-wave radio transmissions 88 years ago. Our technological expertise and our ability to communicate predated computers and those annoying peripherals, such as cell phones, by almost three quarters of a century. This past month has seen a lot of sunspot activity, enough to take us places 10,000 miles away. What a marvelous and wonderful technology Marconi brought us almost a century ago and guess what? He and his colleagues didn't have computers and computer models to do their work for them...thanks Mr. Marconi. This is a column about DX, but there is another dimension of this hobby we have a tendency to overlook and that's ragchewing around the good old U.S.A. Even when there is good DX to be worked, think about working into Washington State, West Virginia or any of our great states for a good old-fashioned exchange of ideas and greetings. I spent hours and hours this month working ragchews with both old and new friends around this nation, and they all ended their transmissions with 73, Merry Christmas and a very Happy New Year—how refreshing it is to hear Merry Christmas rather than Happy Holidays. I wanted to mention that my QSL card from Glorioso Island (FT5) was in the mailbox yesterday, another notch in my DXCC 300 endorsement quest. In closing, Merry Christmas and a Happy (and healthy) New Year to all of you and your families. Remember, sit down in front of your station and call CQ because someone somewhere is listening for your call...don't disappoint them. So long from Huntersville, 73 and good DX from **Bob/WØZPE**.

HAPPY NEW YEAR, BAARC MEMBERS

As newly elected President, I want to take this opportunity to thank the previous team for its excellent service of volunteerism to the Club and for community events. Special appreciation is extended to Al RC, Steve YTE (who agreed to serve another term), Darrell VP, and John MQD. You officers make it hard for us in the new team to follow in your footsteps to even match your accomplishments. Lyle LFV, your up-front and behind-the-scenes work help this Club function well. Also, a big thanks to Fritz KO for the BAARCer work. John WY, you are already well known in the area and we hams benefit from your interaction with the public in the new roles. Then, we cannot forget all the technical work done for the Club by you, Al—of course, there are always lots of technical assistants helping, like Roger WUG, John WY, Lyle LFV, and Steve YTE (with programs, Web, etc). Hope I did not leave anyone out. What is really important is that it is really a team effort making this Club one of the best. "TEAM" says it best. It is not just a team of ONE—it is one team of many. In this coming year I look forward to the "team-effort" cooperation—each member doing what he/she can to make this another successful and fun year for our Club. I know Doug ERE, Ron GOP, Steve YTE, and I look forward to this new year in the BAARC.

—Sincerely, Charles Lane, W5CCL, President—

UPDATED REPORT ON THE GULL LAKE SITE by AI WØRC. There have been several questions about the new antenna installation and the future of the .225 repeater. I would like to bring everyone up to date.

The antenna installation took place on December 1, 2009, on the Gull Lake site on the 400-foot tower. The antenna is a DB products VHF model DB224E base-station antenna. It is mounted on the tower at about the 270-foot level. The antenna is fed with an Andrews Co. 1 1/4-inch hardline. It is side mounted with all the elements on one side pointing to the south. **John WØWY, Roger WØWUG, Dave KBØVYI, and AI WØRC** were there to assist the Dietz Bros. antenna crew. The antenna crew got there about 3 PM, and it was a little after dark when the job got finished. Roger checked the VSWR after the installation was complete and it showed a very LOW VSWR--so everything looks good. That location was chosen so that gear could be installed and serviced in the future without the need to shut down or reduce the power output of the WJJY station. The radio station has been very kind to the BAARC, so we need to respect its need to stay on the air to serve the community. A GE MASTR II repeater has been donated to the BAARC. This repeater is in great shape but needs to be converted to our frequency. Our existing repeater is operating on two separate antennas, so there is no need for a duplexer at that site. Because the Gull Lake site has only one antenna, there is a need for a duplexer. As some may remember, the Club bought a new duplexer on EBAY last year, so as of now we have the equipment needed for the Gull Lake site. **Roger WØWUG** tuned this duplexer to the 147.225/.825 frequency pair--so it is all ready. What remains to be done is to have a pair of channel elements with new crystals tuned to the 147.225 frequency pair. Roger is working on this. The donated repeater needs to be checked out to confirm that it is still working properly before converting it to our frequency. The old controller and voting system needs to be removed, and the new controller installed and programmed. This work may take a little time as Roger and I will be doing most of the work when time is available for us. We plan to move the repeater, controller, and duplexer to the Club station so that we can work on it when time permits and we both have access to it.

The bottom line—the repeater may not be done until late spring or early summer.



These photos provided by WØRC.

OUR 2010 TEAM OF OFFICERS AND APPOINTEES:

WØWUG, Roger Williams, (Extra Class) was first licensed as a Novice Class in 1954, and has been a Club member since the early 1980's. Roger is retired from teaching at Willmar Technical College (Ridgewater College now) where he taught electronics, two-way radio troubleshooting & systems, and cellular & paging system maintenance and repair. He has helped build and modify some of the Club repeaters and is now serving in the BAARC as Director-at-Large. He enjoys working many of the special events the Club is involved in. Since living full time at the old family lake place, he has only an Alpha-Delta dipole antenna, but his HDBX tower is nested neatly together on the ground. Maybe next spring will see it upright. Roger listens around the bands a lot, rarely transmits unless he's got something to add to the QSO. He does operate 2M and 440 MHz, APRS, plus HF mobile with an Icom 706 MK-II-G.

WØKO, Fritz Bertelt, is the Trustee for the Club and a member since its beginnings. Last month he retired from CLC teaching English and German. He was born in Germany and was an immigrant in 1951. Over the years he has held various offices, but now is the Editor of the BAARCer and a VE. On HF, CW is his chief mode—with SSB when the bands are really good. Although licensed since 1957 and an Extra Class, he is merely enjoying the hobby as an appliance operator. The real experts are in this Club, of which he is proud. By the way, Fritz and Judy (KØMAH) have two great grandkids in Fergus Falls.

KDØERE, Doug Bergsnev, is Treasurer for the Club and a member since he earned his Technician license in August of 2008. Born in Brainerd, he lived on a farm just west of South Long Lake until he was in 3rd grade. He and his family then moved up to a little town called Greenbush (yes, that is still in Minnesota). With a draft number of 13 in 1972, he had no doubt that he would be drafted, so he selected the service he wanted before he got his draft notice. He chose the Navy and enjoyed it enough to stay for 23 years. When he retired from the Navy, he returned to his roots in lake country. Since Navy retirement, Doug has been working for the Housing and Redevelopment Authority of Crosby as the Maintenance Engineer. In addition, he drives Bus #4 for the Crosby-Ironton Schools. He now owns a home east of Brainerd about a quarter of a mile from the airport. Doug got interested in Amateur Radio when his brother-in-law, W5CCL, Charles Lane, moved to Crosby. Needless to say, he enjoys being a part of the amateur radio community and is currently working on earning his General Class license.

WØWY, John Luce, is a member of the Club's Board of Directors and its Director of Emergency Communications. He has many years in both public service leading the Club's community service activities and in public safety communications working with law enforcement, fire, and emergency medical service agencies. In late spring of 2009, John was appointed Emergency Coordinator for Crow Wing County by the ARRL. He is also a Volunteer Examiner (VE) for amateur (FCC) license testing and has assisted with the Club's training classes for many years. John has been a member of the BAARC since 1989, and previously has served as Director-at-Large, Vice President, and President (93-94). John has been a licensed ham for over 50 years, since he was a junior in high school. He is active on all amateur bands 80 meters through 70 cm: fixed from his home near Pequot Lakes and mobile (you can find him on APRS as WØWY-9). John's professional background is in the electrical design field, and he recently retired from the architectural/engineering firm of Widseth Smith Nolting, where he worked as a project manager.

W5CCL, Charles Lane, is President of the Club. He is a transplanted Texan, who has been a Club member several years, and he holds a General Class License. Besides fishing and HO model trains, his true love is amateur radio. He is active in Club public service events and enjoys HF, APRS, Echolink and storm spotting for the National Weather Service. After 28.5 years as a Psychiatric Social Worker for the State of Texas, he is retired. He and his wife Kathy, KD5EGN, reside in Ironton.

(Continued on the next page)

Officers (continued from P. 5)

KDØGOP, Ron Finger, is the Secretary and a recently licensed Club member, but long-time radio/electronics hobbyist, first building NAND gates with transistors in the late 60's. An after-school job hooked him up with a talented company engineer who introduced him to the world of logic circuits, op-amps, and those "new" 7400 series IC's. Pursuing an EE degree in college, he ended up swapping his minor with his major and instead became a freelance illustrator. Passing the 30-year mark at the drawing board, he decided to re-enter the world of radio/electronics via amateur radio last spring. Another mentor from his youth was a MARS Ham, who gave him several surplus military "boat anchors" to play with. He is revisiting his fascination with military radio gear by converting a surplus military communication shelter to a mobile Ham shack. He says his learning curve is pretty steep when it comes to this new pastime, but he is amazed at the depth of the Club members' knowledge and their ready willingness to help out a new Ham. Enjoying the opportunity to serve through the many Club activities, he appreciates all the hard work and dedication shown by previous Club officers and members to the benefit of the community, and amateur radio. Ron is looking forward to his role as Secretary, following the years of fine service provided by Darrell ABØVP at that post.

KCØYTE, Steve Mott, is the Vice President, Program Chairman, and Web Editor. He followed his dad Curt (NØCRM) into hobby. Starting in 2006 he earned his Technician Class license and a few months later in 2007 passed his General exam He is married and proud of his two special daughters. His electronic engineering career began with Control Data followed by 11 years at Rosemount Engineering. Growing tired of big city life, the Motts moved north joining the new Hunt Technologies firm in Pequot Lakes. After 6 years he went to work for Nortech Systems where he was responsible for its global repair operations. After that stint he returned to Hunt Technologies (now called Landisgyr). He has been working as a projects manager for them for some years.

Annual Christmas Get-Together held on 12-17-09 at the Brainerd Library.

The photos below show some of the members enjoying the treats and socialization. Our thanks to all who brought goodies to share—all tasty. There was lots left even though we all got to sample them and consume their calories. The bottom left photo shows 2010 President W5CCL (l) receiving the gavel from former President WØRC. With the Santa hat is ABØVP, former Secretary, doing his annual humorous Christmas readings. In the next photo new Treasurer KDØERE (l) is getting advice from retiring Treasurer W3MQD. In the far right pix (l-r) are WØYA, KAØEXB, KDØGOP, and KCØTGT enjoying some of those holiday goodies and conversation.



Photos by WØKO.



Brainerd Area Amateur Radio Club MEMBERSHIP FORM



Dues Year January 1, 2010, to December 31, 2010

ARRL Affiliated

(Please print/copy this and submit one application for each person.)

Name (First, MI, Last): _____ Call Sign _____

Street Address: _____ License Class: _____

City: _____ State: _____ ZIP: _____

Phone: (____) _____ - _____ Additional Phone: (____) _____ - _____

Date of application: _____ Check one: New application: ___ Renewal: ___

E-mail address: _____ Member ARRL? _____

I would like to receive the BAARC'er newsletter via the Internet _____ via the US mail _____ (Internet saves Club money)

Amateur Radio Interests: If there is a program you would like to see at an upcoming meeting, please indicate the topic

and possible presenter: _____ The goal is to make Club meetings fun and informative.

Check one: \$20 Full Membership _____ \$10 Additional Family Member _____ \$10 Student Member _____

Note: For first-time members, pay \$5 per quarter for the time remaining in the year you join.

Membership Dues \$ _____

Voluntary Contribution \$ _____

Total Enclosed \$ _____

Make checks payable to
BAARC, The club is a 501C3
non-profit organization. Contributions are
tax deductible.

Mail to: Doug Bergsnev
Mail to: Doug Bergsnev

KDØERE
KDØERE
(BAARC Treasurer)
(BAARC Treasurer)
15912 Olsen Lane
15912 Olsen Lane
Brainerd, MN 56401
Brainerd, MN 56401

I hereby make this application for membership in the BAARC and agree to abide by the Club By-Laws.

Signature: _____ Date: _____

Disclosure: With the data, the Club can plan activities of interest to the majority of the members. This information will not be sold or given to other organizations without permission of the BAARC member. Please, one form per member—along with dues, for each person who wants to be a Club member.

SUNDAY NIGHT NET OPERATORS

01/03/10	Steve	WØTNT
01/10/10	Lyle	KØLR
01/17/10	Wynn	KA3DQN
01/24/10	Terry	KIØFW
01/31/10	Doug	KDØERE
02/07/10	Bob	WØZPE
02/14/10	Mike	NØGAU
02/21/10	Marcia	WØZMC
02/28/10	Shirley	KØDCW

Don't use LSAC during Trng. & Beargrease Event
 Can't make the schedule? Find a substitute operator. BAARC Sunday Night Net Control Coordinator is Fritz WØKO. To volunteer: w0ko "at" arrl.net



BAARC, Inc.
 Ham Radio at its best in the Lakes Area
 Affiliated with the ARRL

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

Condolences on SK: Dave Bauer, **KTØQ**, died on Dec. 6, 2009. He was a former member of the BAARC, and at one time he and his wife Karen put our old-style bulletin together. Dave was retired from State employment. As an Extra Class licensee he enjoyed CW. After living in the Brainerd-Baxter area, they moved to Hillman, MN. We have sent a card and extend our condolences to Karen and the family. *P.S. Karen has acknowledged and appreciated the card.*

No e-mail notification—Check our website any time after the first of the month or by the end of the first week of the new month to read the **BAARCer**.

HAM RADIO LICENSING CLASSES: Interested? Contact Al WØRC <w0rc "at" arrl.net> Al and his instructors are thinking of doing a Technician and General Class on the same night. It is possible that the classes may start in January and run for 8 weeks (one day a week). The testing session would be on the last day. Stay tuned for details.

For Sale: K2 Elecraft Transceiver, expertly built by engineer WØQF (SK), with matching 10 amp supply, other accessories, many features. This is the 10-watt model. Excellent condition. 160-10 with built-in tuner, keyer etc. Great for camping, backpacking, bike mobile and Field Day— \$700—Contact **Fritz WØKO** <w0ko "at" arrl.net>

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