



The BAARCer



August 2014

For Anyone Interested in Amateur Radio

Page 1 of 8

Club Call Sign: WØUJ

BAARC REPEATERS

53.110 MHz- 123.0 Hz
147.225 MHz+ (main rpt)
 145.130 MHz- Echo Link
 Node number 233515
 443.925 MHz + 110.9 Hz
 Packet: 145.670 MHz
 MNBRD, BRDBBS
 144.390 WØUJ-5 APRS
 Crosslake 147.030 MHz+
 Crosby 146.700 MHz+
 Tone 127.3
 Crosby 444.925 MHz +
<http://brainerdham.org>

OFFICERS

President + WWW

Editor:

Steve Mott NØCRM

Vice President:

Lyle Amundson KØLFV

Secretary:

Ron Finger KØGOP

Treasurer:

Doug Bergsnev KDØERE

Director-at-Large:

John Luce WØWY

Trustee + BAARCer

Editor: Fritz Bertelt
 WØKO

**High Altitude Balloon Program by Forestview Middle School
 Instructors : (1) Cory Olson (KDØVJI) & Jim Reed**



These enthusiastic teachers are proud of their group of students in the Science & Mathematics (STEM) program where they are encouraged to be creative and to problem solve. Another launch is coming this month. Al WØRC and Shirley KØDCW are again assisting them. Want more info? Go to their website <hab.forestviewmultimedia.com> District 181 is indeed fortunate to have such national award winners on staff with supporting parents and BAARC hams.

Index of the BAARCer

Mtg. Minutes-	2
DX Report—	3
ARRL News	
ARRL NEWS	4
HAM History	
WØWY's trailer	5
Donation	
More Ham History	6
Stan K3JKW's Need	
Military Crew & Pix	7
Last Word—Updates	8
Sunday Night Net	

— Events Calendar —

Sat., Aug. 2, Club Brkfst. @ 9 @ Northwind Grille in Brd.
Sat., Aug. 16, Club Brkfst. @ 9 @ Northwind Grille in Brd.
Sat., Aug. 23—Annual BAARC Fox Hunt and Picnic—Lum Park—more details to follow—Note: **NO REGULAR MEETING THIS MONTH**
Sun., Aug. 24—Annual BAXTER Lakes Country Triathlon. Starts @ 7:30 for BAARC volunteers. Contact John WØWY & Dave KBØSCT
Sat., Sept. 27, FARGO HAMFEST—VE TESTING, SWAPFEST, ND ARRL State Convention—**MORE @ West Fargo—Fairgrounds**—same as last year from 8-2 p.m.

Check the Club's Website and Activity Calendar
Listen for Activity Updates on our Sunday Night Nets
 Member info?— E-mail Doug: djbdesk@gmail.com

Thursday-July 31, 2014 - 4:00 PM - BAARC Board Meeting Minutes Brainerd Fire Station

President: Steve Mott, NØCRM

Vice President: Lyle Amundson, KØLFV

Treasurer: Doug Bergsnev, KDØERE

Secretary: Ron Finger, KØGOP

Past Presidents: Charles Lane, W5CCL; Al Doree WØRC

Director-At-Large: John Luce, WØWY

Repeater Trustee: Fritz Bertelt, WØKO

Emergency Communications Director: John Luce, WØWY

Attendees: Steve NØCRM, John WØWY, Doug KDØERE, Al WØRC, Shirley KØDCW, Ron KØGOP, Lyle KØLFV, Roger WØWUG, and Dave KBØSCT.

Secretary's Report: June Meeting Minutes were published in the June 2014 BAARCer; no corrections were noted. The website was updated for the August 2014 Field Day. A thank you letter and donation check of \$200 was received from the "Paul Bunyan Cyclists" Club for the June **Tour of the Lakes** event. A thank-you letter was drafted and sent by Steve NØCRM and Al WØRC to the ANG 210th Div. in appreciation for their recent removal of 2 antenna towers. **Motion to accept:** Al WØRC, **Second** John WØWY, **Passed**.

Treasurer's Report: Treasurer's report submitted showing all month's account transactions and balances to date. Future expenditures for updated repeater hardware at one or more sites are planned. Lyle KØLFV presented a check for recent Club equipment sales.

Motion to accept: John WØWY, **Second** Al WØRC, **Passed**.

Membership Meeting Program: Steve NØCRM gave an overview of recent and future Club programs and events. August 23 has been selected as the date for the **BAARC Picnic and Fox Hunt** in Lum Park, Brainerd.

Upcoming Events: **The Lakes Country Triathlon** will be held on Sunday, August 24, at Whipple Beach in Baxter. Chair John WØWY says a minimum of 6 operators are needed for this morning event. Dave KBØSCT will use his Communication trailer for event Net Control at the Whipple Beach Start/Finish area. **A Tail-Gate Hamfest** is being discussed for next year at the Crow Wing County Fairgrounds. This would be an opportunity to informally socialize and buy and sell radio gear with minimal Club effort. However, since the meeting, it was discovered that there were too many scheduling conflicts for it this year.

Digital & Emergency Communications: The lack of activity during recent years' **Goblin Watch** events, raises the question of whether that long-standing Club Event still remains relevant by providing additional area patrols on Halloween. John WØWY will address this question to CWC ESC, John Bowen, and report back to the Club. John has not heard back yet from the county regarding ARMER re-programming of 2 donated 800 MHz radios, by Granite City Electronics. The radios will be placed in the Club trailers for event emergency use, with anticipated improvement over the portable HT's currently loaned for this purpose. Steve NØCRM went over the initial meeting minutes of the **BAARC Repeater Committee**. Dave KØNRI recently took on the considerable task of clearing all the weeds and bramble from the Gull Lake (WJY) tower site.

The board meeting was adjourned at 5:06 PM.

Thursday-July 31, 2014 - 7:00 PM - BAARC Membership Meeting Minutes Brainerd Fire Station

A program followed the business meeting on the 2014 **Forestview High Altitude Balloon Club** Launch by Jim Reed and Cory Olson, KDØVJI. A special **Fun Launch** is planned for Club Members in August.

--Respectfully submitted by **Ron KØGOP**, Secretary

DX and the Paper Chase

This past month saw a steady decline in sunspot numbers from a high of well over 250 to today's paltry 25. Still and all there was plenty of DX available even though band conditions were a bit noisy. Laos (XW) was transmitting on 17 meters, but there was no propagation to the upper Midwest. Perhaps I'll hear him on the next go-around. As for the paper chase, I received a QSL card from the Island Republic of Mauritius (3B8) which I worked on CW. Mauritius is in the Indian Ocean 1200 miles southeast of the continent of Africa, and it's in a tough spot from there to here with poor-to-no propagation most of the time. This is where the CW mode of operation does well when phone contacts are difficult. So, the long and the short is simply this: this hobby is about operating an amateur radio station and that's what I do every day. I do not allow the hobby to get in the way of things that need to be done, but there's time in each and every day to enjoy your station. Sit down in front of your radio and call CQ because someone somewhere in this world is listening for your call. Also, don't forget that CW rocks. So long for now from Huntersville, 73 es gud DX from Bob/WØZPE.

~~~~~

## A Century of Amateur Radio and the ARRL

This week, we'll look at the 1950s. Danny Weil, VP2VB, began his well-known series of *Yasme* DXpeditions around the world in 1955, putting some rare countries on the air. That series lasted until 1963, and it gave thousands of DXers the opportunity to work some new ones. In the mid-1950s, The FCC ran out of 1 × 3 call signs with W and K prefixes and began reissuing lapsed W and K call signs. When those ran out, they went on to 2 × 3 call signs with WA (and, later, WB) prefixes. The log periodic antenna -- a new and very useful concept -- was introduced to hams in the late 1950s. It had been developed by D.E. Isbell at the University of Illinois. Late in 1958, hams lost the shared use of 11 meters, which then became the Class D Citizens Band. During the late 1950s, amateurs continued to push the limits of VHF and higher bands. W6NLZ and KH6UK ran regular schedules on VHF and succeeded in making two-way contact on 144 MHz in 1957, and on 220 MHz in 1959. Another Amateur Radio first took place in 1960, when the first EME (moonbounce) [contact](#) was made on 1296 MHz between W6HB in California and W1BU in Massachusetts.

During the 1950s and 1960s, The USSR and the US were in the midst of the so-called "Cold War." Fearing that Soviet bombers could home in on radio signals to find their targets, the CONELRAD (CONtrol of ELEctromagnetic RADiation) system went into effect from 1957 to 1962. For their part hams were required to (1) monitor an AM broadcast station at least every 10 minutes to be sure it was still on the air; and (2) shut down, if broadcast stations went off the air. In the event of such an emergency, key 50 kW AM stations would move to either 640 or 1240 kHz to broadcast emergency information. The stations on each of those frequencies would go on and off the air in a continually varying sequence, while all carried the same audio to provide continuous information to the public. -- *Al Brogdon, W1AB*

## A Century of Amateur Radio and the ARRL

Looking further at the early 1950s, we see that amateur incentive licensing (an on-again/off-again thing with the FCC) ended on February 18, 1953. That same month, a QST article by W1GXJ introduced a new gadget to hams -- ferrite cores.

K2AH authored a QST article in March 1953 telling of what appears to be the first use of a transistor in a ham transmitter, running 50  $\mu$ W output on 2 meters to make contacts of up to 25 miles away. In the same issue, an article reported the success of W4AO and W3GKP in receiving a 2 meter ham signal bounced off the Moon!

W6QYT and W6POH were exploring another new frontier -- meteor-scatter communication on 20 and 15 meters. CW still reigned as king in the 1950s, which saw many articles published in QST about electronic keyers. Those ran the gamut from W3FQB's tubeless "Corkey" to W6SRV's "Ultimatic Keyer" with three dual triodes and seven relays. In the May 1953 issue of QST W6DSR described building a 40 meter CW transceiver around a BC-453 command receiver; as you tuned it, the transmitter frequency moved in sync.

Effective March 28, 1953, phone operation was allowed on 15 meters.

One facet of the Amateur Extra exam during the 1950 was amusing: The transistor, invented in 1948, was in its infancy. The FCC, wanting to keep up with the latest, formulated *one* question about transistors, which found its way into various study guides and appeared in every Extra class exam for a couple of years.

The May 1953 issue of QST published an article by W3FQB that remains, to this day, one of my favorite QST offerings -- "The Man Who Broke the Bank." Although written as a humor piece, it had the ring of futuristic hamming about it. It tells the tale of a radio club with a new member whose day job was working with those newfangled electronic calculators. Sweepstakes rolled around, and the new ham turned in an unbelievably large score. There was much heated discussion over the entry's validity, but the club finally agreed to submit it to ARRL, which didn't believe it, either. After cross-checking every single contact, they admitted that it was accurate and correct. Two weeks later, Ed Handy, W1BDI, visited to tour the new member's station to get to the bottom of the story.

That's all the room I have for this week, so visit the ARRL website, [search](#) for the article, and read the whole thing. Enjoy! -- Al Brogdon, W1AB



During the early years of the Novice license, theory and code classes sprang up all over. Most were taught through radio clubs, but even ham employees of Allied Radio started a class, as a volunteer effort. This 1958 photo shows father and son Ed Bachner, Jr. and seventh grader Ed III, at one of the classes. Father Ed, now SK, became KN9OIS, and son Ed became KN9OBZ.

**Donated Communications Trailer:** Recently John WØWY graciously donated this gem to the BAARC . He is shown here at FD 2014 with it. The Club is indeed fortunate to now have two units. Below the photo is John's description of his unit and its accessories.



**Description:** 2007, Cargo Mate, single axel, enclosed trailer, 10-feet long, 6-feet wide, 6-feet high, current Minnesota permanent license #ABPV152. I am enclosing a form PS 2000 (with the original) which can be used to transfer the license registration according to the Brainerd License Office.

Equipment attached to, or belonging to, the trailer,

**exterior:** top-mounted ladder rack; 2-padlocks; 1-'step-up', entry box; 3-screen doors; 2-NMO roof antenna mounts, 1-with dual band (VHF/UHF) antenna; 1-CHA-250, Comet , all-band (HF) vertical antenna; 1- drive-over, tilt-up base plate for mast or Rohn 25G tower; 4-8-foot sections Rohn 25G tower; 1-17-foot aluminum mast with support bracket;

**interior:** 1- 8-foot counter-top; 1-8-foot shelf; 1-6-foot shelf; 2-metal cable trays; carpet; 2-12VDC light fixtures (trailer circuit); 2- 120VAC, table lamps (interior circuit); 2-coat hooks; 1-towel rack; 1-ARRL world radio map; 2-coax switches; 2-cable entry pipes; and, misc. power cords and grounding cable.

## A Century of Amateur Radio and the ARRL

On June 25, 1950, the Korean War began, with a surprise invasion by North Korea. In the days following, Amateur Radio played a valuable and unexpected role. When the invasion began, military personnel who were hams -- mostly in South Korea, Japan, and the US -- were the first bearers of the bad news, even before military communication links got word back to Washington. Until United Nations military personnel became organized with their own communication, hams continued to provide early radio communication.

Throughout the Korean War, the Military Affiliate (now Auxiliary) Radio Service (MARS) and amateur operators devoted tens of thousands of hours to handling phone patch traffic between military personnel and their families back home.

In 1952, W2ZXM/mm, Captain Kurt Carlsen, [brought the world's attention](#) to Amateur Radio in a huge way. His command, the passenger/freighter *Flying Enterprise*, was damaged mid-sea by hurricane-force winds and high seas. "Captain Stay-Put" -- as the news media dubbed him -- ordered crew and passengers to abandon ship when the vessel started taking on water and listing heavily. Using his ham know-how, he managed to stay on the air using improvised equipment, antennas, and power, even after the radio room was flooded. He remained in radio contact from the ship until just before it sank. He was the star of a New York City ticker-tape parade and was knighted by the King of Denmark for his heroism.

The 15 meter band opened for US hams on May 1, 1952 -- at first, for CW only. At the same time, the 40 meter voice sub-band was opened to US hams.

On August 15, 1952, the Radio Amateur Civil Emergency Service (RACES) came into being. *QST* continued to publish article on mobile/portable Civil Defense equipment for 10 and 6 meters. In addition to RACES operation on 10 meters, many hams were becoming quite interested in the band for its DX potential. Two interesting articles appeared in *QST* describing extreme 10 meter antennas. One was a 3 element vertical

Sixty years ago: The June 1954 cover of *QST* featured this fanciful Field Day on the moon cartoon by Gil, W1CJD.

beam for mobile use. A quarter-wave director and reflector were added to the typical mobile whip for portable (*not* mobile) use on a rear bumper-mounted boom.

The driver would position the car to "rotate" the antenna. The second extreme antenna was a full-sized Yagi featuring rack-and-pinion gearing to adjust the lengths of each element from the shack, so the antenna could be tuned exactly. A third extreme antenna



-- not reported in *QST* -- was built by a Midwestern ham who commuted daily in his VW Beetle. Much of his commute involved about 40 minutes of driving on a long stretch of highway with no overpasses. He built a quarter-wave mobile antenna that could be assembled and disassembled quickly. When he reached the start of his unobstructed drive, he would put up his antenna and put out a *big* signal on 40 phone. Lots of things were happening in Amateur Radio in the early 1950s, so next week we will look at that period a bit more. -- *Al Brogdon, W1AB*

### **Stan K3JKW needs some on-the-ground help:**

I need assistance in re-assembling two antennas (a 2-meter beam and an HF triband beam), as well as construction of a 40-meter dipole. The project also includes wiring up a rotor to its control box.

No climbing is required! All work can be completed on the ground. Please bring all the tools needed for the task... esp, soldering gun and solder, ceramic insulators for the dipole, and stripping tools for coax. If you have some extra coaxial cable, it might come in handy as I have random lengths that may not be quite long enough. I also need about 30 feet of stranded cable for the rotor.

I will pay for any of your supplies that I use.

I need to get this project completed sometime in the next 4 weeks. I live just outside Emily, which is about 45 minutes NE of Brainerd.

I will pay \$50 to whoever can help me. It needs to be someone who is relatively fluent in antenna construction, since I am not. I do have technical drawings of the tribander, and all the 2-meter beam needs is a new connector. Phone number: 530-949-6104

Email: [stanleyaclark@hotmail.com](mailto:stanleyaclark@hotmail.com)

**Tower Project:** These magnificent 8 men did a superb job taking down two ham radio towers with antennas for the BAARC as a training exercise. It was professionally done June 22-25 in Brainerd and Baxter.



Pictured (l-r ) SSgt Dominic Tunison, SrA Justin Smith, SSgt Jeff Sprick, TSgt Zechariah McConnell (Team Chief), TSgt Joe Wenisch, SrA Jacob Nelson, SrA Mathew Incitti, and SrA Tyler Borrell. By checking the URL in this text, you can see a portion of an interview Sprick did with AI WØRC on site at that time. By the way, we appreciate AI's involvement as the Coordinator between the BAARC and the MN Air Force National Guard. Interestingly, the collaborative effort came about due in part to AI's and John WØWY's volunteer teaching the licensing classes at Camp Ripley, which was a multi-day event. From it, conversations with the guardsmen in the classes led to their wanting a training session in tower work. So both they and we in the BAARC benefited. <https://www.youtube.com/watch?v=3B11tU6A64c> The BAARC helpers for the takedown sessions were AI WØRC, Shirley KØDCW, Terry KIØFW, Roger WØWUG, Stan K3JKW with his brother-in law, Fritz WØKO, Dave KDØVJL, and Lyle KØLFV. Lyle did extra by also hauling of the beams, HF vertical, etc. and 60-ft tower. Fortunately also, the WX cooperated. *Photo by Fritz WØKO.*

*Note: An official letter from the BAARC by Pres. Steve Mott and Coordinator Al Doree has been sent to thank the military for their outstanding public service work for the Club.*

**SUNDAY NIGHT NET OPERATORS**

08-03-14 Rick NØBJN  
 08-10-14 Dave KCØTGT  
 08-17-14 Tim KDØYLO  
 08-24-14 Doug KDØERE  
 08-31-14 Tim KDØYLO

09-17-14 Rick NØBJN  
 09-14-14 Dave KCØTGT  
 09-21-14 Tim KDØYLO  
 09-28-14 Tim KDØYLO

Can't make the schedule? Find a substitute operator. BAARC Sunday Night Net Control Coordinator is Fritz WØKO. To volunteer: w0ko "at" arrl.net

***Any changes/corrections can be heard on the Sunday Nets.***

***Please help fill the next NCS Slots for October and November.***

CC&R-Modification of very restrictive homeowners associations' on ham radio operations in certain communities may get eased if enough hams influence our nation's Representatives and Senators. Search "grassroots campaign" for a full reading of **HR 4969**. Then contact your federal Representative and Senators and ask for ham radio support. For us in this area it is Rep. Rick Nolan and Senators Amy Klobuchar and Al Franken.

September 25th (Thurs) Mtg. It will tentatively will feature Steve NØCRM's presentation on his many business trips for LandisGyr to Tokyo. For us in attendance it should be a cultural learning experience for us. Thanks, Steve, San.

Greetings and Welcome to two visiting hams at the July meeting: Leon Mumaw, KEØAFY, of Baxter and Carl Dabelstein, KØSBV, of Tucson, AZ. We hope we see them more often. You are welcome to participate in the BAARC.

A Tailgate Hamfest was discussed at the meeting. However, there were too many scheduling conflicts discovered after the meeting to conduct it this year, so it will be reviewed for next year. The plan was to have it at the Fairgrounds and it would have been a free one—buy/sell from hams' trunks or tailgates.

United We Stand



**FIRST CLASS MAIL**  
 Address Correction Requested

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