



The BAARCer



May 2014

For Anyone Interested in Amateur Radio

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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

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WINNERS AT HAMFEST: On the left is John Wicklund, KDØGWB, of Horace, ND. He won the Raffle Drawing of the tuner. Not pictured and the winner of the Entry Ticket Drawing was Art NØTN J—of Staples. Art won the handheld. His prize was mailed. In the middle is Art WAØNJR of St. Cloud, winner of a \$25 certificate from ARRL. To the far right is Blake NØWSH of Bertha, winner of a \$50 certificate from Radio City. Congrats to all!!!!



We had many complimentary comments from visitors on how well we conducted this Hamfest and those in the past. Obviously, it takes a lot of work planning and actually doing it. Lyle and Al deserve a lot of credit along with all the volunteers.

— Events Calendar —

Sat., May 3, Club Brkfst. @ 9 @ Northwind Grille in Brd.
Sat., May 3, Duluth Hamfest in Superior @ Fairgrounds—
Mon., May 5, SKYWARN Training/Refresher @ Brainerd @ 6:30 P.M. in Crow Wing County Land Services Bldg., 322 Laurel St.
Sat., May 17, Club Brkfst. @ 9 @ Northwind Grille in Brd.
No MAY MTG. Instead go to DINNER-MEETING @ NISSWA
May 22 (Thurs) See last month's BAARCer or p. 8 here.
Thurs., June 19. Meeting— FD Preparation—more details later
June 28 and 29—Annual ARRL Field Day at Crow Wing Fairgrounds.

 Check the Club's Website and Activity Calendar
Listen for Activity Updates on our Sunday Night Nets

Thursday-April 24, 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: Doug KDØERE, Al WØRC, Shirley KØDCW, Ron KØGOP, Lyle KØLFV, Dave KBØSCT and Roger WØWUG.

Secretary's Report: March Meeting Minutes were published in the April 2014 [BAARCer](#); no corrections were noted. The website will be updated for the BAARC 2014 Spring Banquet. Activities included updating membership rosters and minutes. **Motion to accept:** Lyle KØLFV, **Second** Al WØRC, **Passed**.

Treasurer's Report: Treasurer's report submitted showing all month's account transactions and balances to date. The treasurer reported a very profitable Brainerd Hamfest in comparison to recent years, with 120 paid participants. **Motion to accept:** Al WØRC, **Second** Ron KØGOP, **Passed**.

Membership Meeting Program: Meeting program topics: May Spring Dinner Program: "Amsterdam Island DXpedition" by Ralph Fedor KØIR, May 22, Nisswa Legion. The public and local radio clubs will be invited with a paid reservation, by a [Brainerd Dispatch](#) Calendar announcement. Registration deadline is May 16. June meeting moved to 19th: "Field Day Prep".

Upcoming Events: **SKYWARN Spotter Training** has been rescheduled for Monday, May 5, 6:30PM at CWC Land Services Building, Brainerd. Co-Chairs Al and Shirley discussed the **Brainerd Jaycees "Run For The Lakes" Marathon** on Saturday April 26th in Nisswa. **Forestview Middle School High Altitude Balloon Launch** scheduled for 9 AM, Wednesday, April 30. **Tour of the Lakes Bicycle Ride** will be Saturday, June 7 at Forestview Middle School; Shirley and Doug, Co-chairs. **ARRL Field Day 2014** will be June 28-29 at the Crow Wing County Fairgrounds.

Digital & Emergency Communications: John WØRC reported several stations checking in to the recent SKYWARN weather net held during the NWS tornado drill on Thursday, April 24. Al WØRC reported the APRS digipeater is now fully functional using one of the new Club computers recently purchased by Lyle KØLFV.

Old / New Business: Al WØRC reported progress in adding Lyle KØLFV as a monthly Central-MN Hospital Net operator at the Essentia / St. Joseph's Hospital location.

The board meeting was adjourned at 4:47 PM.

Thursday-April 24, 2014 - 7:00 PM - BAARC Membership Meeting Minutes

Brainerd Fire Station

Attendees: Prior to the business meeting, Al WØRC demonstrated using Echolink to communicate with the NWS in Duluth. The Vice-President opened the Club membership business meeting at 7:35 PM with 25 members and guests present.

Information supplemental to Board Meeting Minutes: Al WØRC discussed details for the April 30 High Altitude Balloon Launch using 2 balloon sizes and payloads. John WØWY discussed the importance of amateur radio support of events like the recent Boston Marathon. During stressed communications conditions, and the resulting failure of those infrastructure systems, amateur radio works, and can save lives.

The business meeting was followed with a program by Rick KDØVLR featuring his recent experimentation with Software Defined Radio (SDR) receiver dongles and applications.

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

Hamfest Crews: Not pictured because Fritz forgot his camera on Friday—only listed: Erik Vinje, Rick KDØVLR, Dave KBØSCT, Terry KIØFW, Lyle KLFV, Chris KDØLFA, Pat WØOPW, Mitch ADØHJ, Al WØRC, Roger WØWUG, Ron KØGOP, ick KDØLFC, Tim KDØYLO, Dave KDØVJL, Larry KDØVJJ, Alan AAØAS, Shirley KØDCW, and Terri Hembre. Below & pictured—**KITCHEN CREW from Saturday:** Back row l-r Alan AAØAS and Dave KBØSCT. Front row l-r Judy Bergsnev (YL of KDØERE), Terri Hembre (YL-to-be of KDØLFA), Michelle, YL of NØMR, and Shirley KØDCW, YL of WØRC. In addition, (not pictured) Marilyn, YL of KØLFV, sold breakfast coffee and rolls with help from her HS champion hockey goalie granddaughter. (We apologize if we inadvertently left out a name from listings)



Pictured below is a partial representation of the **Saturday take-down Crew:** Back row l-r: Rick KDØVLR, Erik Vinje, Rob KDØVJM, Tim KDØYLO, Chris KDØLFA, Alan AAØAS, Dave KDØVJL, and Steve NØCRM. Front row l-r: Al WØRC, Fritz WØKO, Doug KDØERE, Terry KIØFW, Shirley KØDCW, Larry KDØVJJ, Dave KCØTGT, and Mitch ADØHJ. TNX to Judy Bergsnev for taking the photo. (not shown: WØWUG, KØTI)



The VE team seated (clockwise): Tom KDØMOM. Terry KIØFW, Steve NØCRM, and BAARC VE Coordinator John WØWY. Behind them smiling with justification is Rick Peterson, KDØLFC, who just passed his Extra. Dan Swanson, KDØWOG, also did, though he is not pictured here. Congratulations to all the successful examinees!!!!!!

Hamfest 2014: Some of our worker-volunteers and visitors from far and wide



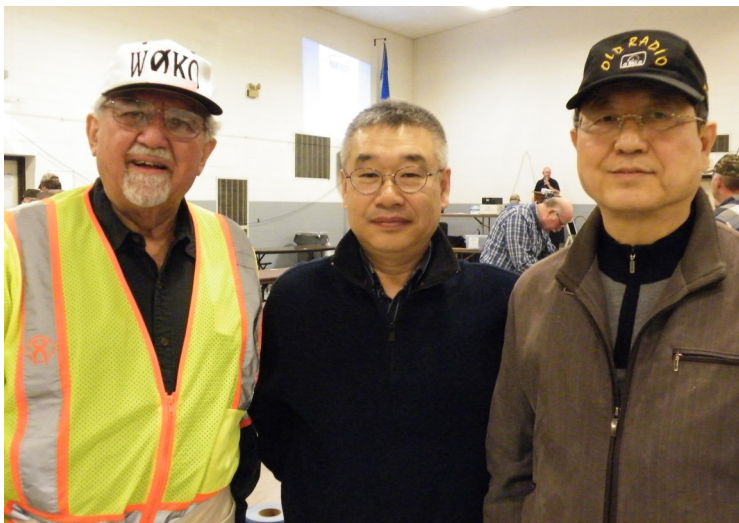
Dave KCØTGT at the mike.



Lyle KØLFV, salesman for the BAARC.



Jim WØJDS selling tickets.



Fritz with two interesting visitors: Middle is Tim ABØD from Maple Grove with Suh Chan-Woo HL1IL, Busan, Korea. Both were here last year.



FYI: Erik Vinje, now KEØAGA, with his proud dad Rick KDØVLR, who passed Extra a few weeks ago. It as Erik's lucky day, for he also won a \$50 ARRL gift certificate.



On the left is Chris KDØLFA, who successfully sold some raffle tickets to some of his up-north ham buddies. *Your humble (hah!) editor may have missed listing some volunteers and /or not having photographed them. His only excuse is having been busy competing against the formidable raffle ticket-ticket seller Chris KDØLFA. Seriously—we were all busy doing many different jobs at different times. Thanks for everyone's help. We especially thank Co-Chairs Al WØRC and Lyle KØLFV—to Shirley KØDCW for their critically helpful roles.*

VE Test Session held for Military 4-10-14 at Camp Ripley

Many soldier examinees were served with some taking more than one element in one test session. The license results: 21 new Technicians, 2 new Generals and 1 new Extra class were earned. The veteran ARRL BAARC VE Team consisted of (l-r) Roger Williams (WØWUG), Tom Kilian (KDØMOM), Fritz Bertelt (WØKO), Shirley Doree (KØDCW, Al Doree (WØRC), and John Luce (WØWY). This year Guardsmen MSG Dan Swanson (KDØWOG) and MSG Rick Vinje (KDØVLR) taught the classes. Rick said they learned a lot from Al and John, who mentored their review sessions on Monday and Tuesday. All did an excellent job!



Lyle KØLFV found this gem of a cartoon. It is was apparently clipped from a Feb. 17, 1940, publication. TNX, Lyle, for sharing it.

John Luce, BAARC's VE Coordinator, Reported another successful test session held during the 2014 Hamfest.

4 new Technicians: 14-year old, Erick Vinje, Little Falls (son of Rick KDØVLR); Mike Hoffman, Leon Muman and Mike Ruen---all from the Brainerd/Baxter area; 1 new General: Martin Erickson, KDØZUX, Twin Cities; and 2 new Extras: Rick Peterson, KDØLFC, Merrifield; and, Dan Swanson, KDØWOG, Randall.

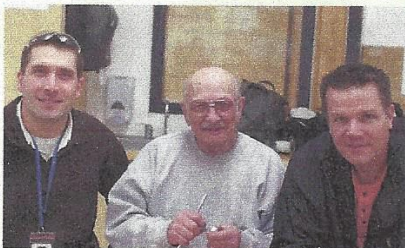
VE's: Terry KIØFW, Tom KDØMOM, Steve NØCRM, and VE Coordinator, John WØWY.—Look for more pictures in this BAARCer of this group of VE's and Hamfest volunteer helpers.

FORBES

BrandVoice | BY SAMSUNG

Launching Students Into Science: How a Middle School Touched Outer Space

CORY OLSON AND JIM REED
TEACHERS
FORESTVIEW MIDDLE SCHOOL, BAXTER, MINNESOTA



FROM LEFT TO RIGHT: CORY OLSON; AL DOREE, HAM RADIO VOLUNTEER; AND JIM REED

Jim Reed, a multimedia teacher, and Cory Olson, who teaches technology and engineering, were looking to push the envelope for their 500 seventh graders at Forestview Middle School, in rural Baxter, Minnesota, about two hours north of St. Paul.

"We wanted something that was hard to accomplish," says Olson. "We wanted our kids to think outside the box." The teachers formed a high-altitude balloon club and spent their first year watching helium-filled weather balloons with crude instrument packages vanish into the stratosphere.

"That first year, all we really cared about was getting our gear back," Reed jokes. Then they learned of the Samsung *Solve for Tomorrow* competition, which encourages middle and high school students to come up with solutions for local problems using skills in science, technology, engineering and math (STEM).

"We wanted to give the kids as much as exposure to STEM as we possibly could," says Reed, "and get them thinking about careers in STEM-related fields." The competition provided the perfect incentive to take the project to the next level. The teachers and students decided to send a sophisticated instrument package right to the edge of outer space.

Soon enough, the students had all sorts of engineering puzzles to solve: shaving every extra gram they could to send their balloon higher, learning

CAD design to "print" payload pieces cleanly and elegantly, and configuring the payload for stability as it encountered jet stream winds of 140 miles per hour.

On the day of the balloon launch, students and teachers hopped in chase vehicles, and a dozen local ham radio operators relayed coordinates to the club, which was in quick pursuit. "That was where you saw the kids take complete ownership of the project," recalls Reed. Eventually, the balloon popped and fell back to earth. Then—just as planned—a parachute dropped the payload safely onto a farmer's field.

The judges selected Forestview Middle School's balloon project from thousands of entrants as one of five national winners of the Samsung *Solve for Tomorrow* competition.

"We wanted to give the kids as much as exposure to STEM as we possibly could."

JIM REED
TEACHER, FORESTVIEW MIDDLE SCHOOL
BAXTER, MINNESOTA

"You could see the earth's curvature and the blackness of space on video taken at 85,000 feet," says contest judge and Samsung Executive Vice President David Steel.

Reed and Olson point to their classrooms as the real scene of victory: Dozens of students, energized by their experience, are preparing to send up two more balloons—one to study the effects of solar radiation on plants and bacteria, another to try to break the 100,000-foot barrier. "It's all been an absolutely huge step forward for us," says Reed.

Congratulations to teachers Jim Reed and Corey Olson from the Forestview Middle School. Of course, we are equally proud of our BAARC mentor to that group—Al Doree, WØRC. This is world-wide publicity in the Forbes magazine of April 14, 2014, p. 99. SUPER!!!!!

HAMFEST 2014 RESULTS-- de AI WØRC & Lyle KØLFV, Co-Chairs: Despite having a possible conflicting date this year—it was a success with some 120 attending. The Entry Ticket prize of TDX-ONE Dual-Band XCVR was won by Art NØTNJ of Staples. The Raffle ticket drawing of an AT-300 HF Tuner was won by John KDØGWB of Horace, ND. Blake NØWSH won a \$50 Radio City Gift Certificate. Erik Vinje (prospective Technician) won a \$50 ARRL gift Certificate. He is the son of Rick KDØVLR. Also winning an ARRL \$50 certificate was Cletus KBØLBS. Winning \$25 gift certificates were Art WAØNJR and Phil NØOE. **Our thanks to David KCØTGT, who again did an outstanding job with the announcements and prize distributions. Plus, he expertly operated the sound system—no easy task in that building.**

Treasurer Doug KDØERE reported a successful financial operation and gave a final report at the meeting in April.

Lyle KØLFV previously spread the word far and wide about our annual Hamfest at other events. Also with his many successful sales for the Club of donated gear, he brought another sizeable check into the treasury at the meeting.

Shirley KØDCW and her Kitchen Crew again outdid themselves with tasty food and service. You will see them pictured in this **BAARCer**.

Chris KDØLFA, with some help from **Fritz WØKO**, sold enough raffle tickets to help cover those drawing expenses. By the way, Chris and yearly kitchen helper Terri Hembre are getting married this summer. Best Wishes! **DXers Visited** : They were HL5IL, Suh Chan-Woo, of Busan, Korea. He was with Tim ABØD of Maple Grove. They were here last year. See p. 4 for pix.

+++++ Steve WØTNT & Mitch ADØHJ were at the backdoor table.

Feature: A Century of Amateur Radio and the ARRL

When the US entered World War II, Amateur Radio operations were immediately shut down for the duration. After one false start, authorization soon was given for amateurs to operate on 112 MHz for emergency drills and actual emergency operations, as members of the War Emergency Radio Service (WERS).

During the war years *QST* published many articles on WERS equipment suitable for 112 MHz -- especially portable and hand-held gear -- and on club preparedness. Announcements in *QST* made repeated calls for trained operators to volunteer for the military and for civil service. At one time, the Navy made a call for 5000 men specifically to be trained as radar operators and maintenance personnel -- state-of-the-art work.

As America's young men went to various parts of the world to fight the war, the nation called on its women to help with the war effort. Many female hams became military radio operators within the US, and others went to work in defense plants building radio equipment, just as their sisters built the aircraft, ships, and vehicles required by modern warfare.

Manufacturers' ads in *QST* started using photos of radio operation during military training maneuvers and even from the battlefield. Early in the war years, manufacturers were unable to keep up with the military's demand, and other ads called for hams to sell or donate their radio gear and components (panel meters were especially needed) for the war effort. Manufacturers expanded their facilities and work forces as quickly as possible, and they soon were able to meet the need.

It has been reported -- but never confirmed -- that, following the attack at Pearl Harbor, Japanese Admiral Isoroku Yamamoto said, "I fear all we have done is to awaken a sleeping giant and fill him with a terrible resolve." Regardless of the proof of that exact quote, Admiral Yamamoto's writings confirmed that those were, indeed, his feelings. And those feelings were soon proven to be correct.

Next week: We will continue to look at how hams and the ARRL backed the war effort. —from the [ARRL Letter](#)



Armed Forces Day Crossband Test Scheduled for May 11, 2014

In celebration of the 63rd anniversary of Armed Forces Day (AFD), the Army, Air Force, Navy, Marine Corps and Coast Guard are co-sponsoring the annual Military/Amateur Radio Crossband Communications Test. Although Armed Forces Day is traditionally celebrated on the third Saturday in May -- May 18 in 2013 -- the AFD Military/Amateur Crossband Communications Test will be conducted on May 11 to prevent conflict with the **Dayton Hamvention®**, scheduled for May 17-19.

The annual celebration features traditional military-to-amateur crossband communications SSB voice and Morse code tests. These tests give Amateur Radio operators and short wave listeners an opportunity to demonstrate their individual technical skills and to receive recognition from the appropriate military radio station for their proven expertise. QSL cards will be provided to stations making contact with the military stations.

Military-to-amateur crossband operations will take place on the dates and time in UTC on the frequencies **listed** for the Army, Air Force and Navy/Marine Corps and Coast Guard MARS stations. Voice contacts will include operations in single sideband voice (SSB); some stations will use CW to provide the opportunity to check in by Morse code. Depending on propagation and staffing, some stations may not operate the entire period. Participating military stations will transmit on selected military MARS frequencies and listen for Amateur Radio stations in the amateur bands. The military station operator will announce the specific amateur band frequency being monitored. Duration of each voice contact should be limited to 1-2 minutes. The annual Secretary of Defense message will be transmitted via digital modes, including RTTY, PACTOR, AMTOR, PSK-31, MFSK and MT63 from certain stations.

Check the **MARS Armed Forces Crossband Test website** for schedules and frequencies of participating military stations, including a list of stations that will be transmitting the annual Secretary of Defense message. Instructions on how to copy and submit the message are also included.

SUNDAY NIGHT NET OPERATORS

05-04-14 Rick NØBJN

05-11-14

05-17-14

05-25-14 Doug KÐØERE

06-01-14 Rick NØBJN

06-08-14

06-15-14

06-22-14

06-29-14

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

Can you help fill the schedule above?

Hospital Net 4-2-14: We had a good group of operators manning 3 county stations in downtown Brainerd for the monthly Central MN Hospital Net. Al WØRC met us at the Fire Station to orient us with the two VHF radios there and their operation. Operators then left for their assigned stations on the 1PM net: Brainerd Fire Station – Al WØRC, Rick KÐØLFC; Crow Wing County Public Health – Dave KØNRI; Crow Wing County EOC – Lyle KØLFV, Ron KØGOP. Conditions were more difficult than usual, perhaps due to an M6 Solar storm (with 3 more to follow) that hit Earth at 1400Z. Lyle will pursue manning the station at St. Joseph's Medical center, which hasn't been on the air for a long time. Thanks to all who participated!—**Ron KØGOP**

Voice of Russia (former Radio Moscow) is really off the air as of April 1, 2014, with its short and medium wave transmissions. The radio service was an easy one to pick up for many SWLs and easy to understand because of its superb language service.—ARRL Let

Dakota Division has its own Website: According to Greg KØGW, it is now <www.arrldakota.org>

IMPORTANT REMINDER ABOUT MAY 22 DINNER-MEETING: Mail your \$15 check to Doug KÐØERE on or before **May 16**. See last month's BAARCer for full details. We have an excellent program provided by KØIR of Amsterdam Island DXpedition—Plus tasty food.

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