



The BAARCer



August 2012

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+
<http://brainerdham.org>

OFFICERS

President + WWW

Editor:

Steve Mott **NØCRM**

Vice President:

John Luce **WØWY**

Secretary:

Ron Finger **KØGOP**

Treasurer:

Doug Bergsnev **KDØERE**

Director-at-Large:

Lyle Amundson **KØLFV**

Trustee + BAARCer

Editor:

Fritz Bertelt **WØKO**

Direction-Finding Antennas & Fox Hunting Attenuating Schemes



Lyle **KØLR** (l) and Lyle **KØLFV** (r) demonstrated their successful fox-hunting antennas. On the left is the loop-type and on the right is steel-tape-measure type. Both use plastic (PVC) piping. Another feature presented was the idea of attenuating the signal from the fox. Resistor circuits can be built and the hunter's body can reduce the signal in order to get more an accurate final direction to the target: the elusive transmitting fox. (See pages 4 & 5)

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— Events Calendar —

Sat., Aug. 4, Club Brkfst. @ 9 @ Northwind Grille in Brd.
Sat., Aug. 18, Club Brkfst. @ 9 @ Northwind Grille in Brd.
Sat., August 18, Club's Annual Picnic and Fox Hunt—Lum Park—No Regular Mtg. This Month. More Details will follow. Terry KIØFW is the Fox Hunt Director.

Check the Club's Website under Calendar of Events

Listen for Activity Updates on our Sunday Night Nets

Encourage New Membership: Dues are still only \$20/year—a bargain for all you get. E-mail Doug for info: djbdesk@gmail.com

Thursday-July 26, 2012 – 4:00 PM - BAARC Board Meeting Minutes Brainerd Fire Station

President: Steve Mott, NØCRM
Vice President: John Luce, WØWY
Treasurer: Doug Bergsnev, KDØERE
Secretary: Ron Finger, KØGOP
Director-At-Large: Lyle Amundson, KØLFV

Past Presidents: Charles Lane, W5CCL, Al Doree, WØRC
Community & Special Events Director: TBA
Director-At-Large: Lyle Amundson, KØLFV
Emergency Communications Director: John Luce, WØWY
Repeater Trustee: Fritz Bertelt, WØKO

Attendees: Steve NØCRM, John WØWY, Doug KDØERE, Ron KØGOP, Lyle KØLFV, Al WØRC, Shirley KØDCW, and Terry KIØFW.

The President opened the meeting at 4:09 PM with 8 members in attendance. The June 2012 Minutes were approved as published in the BAARCer, motion and second by Lyle KØLFV and John WØWY. The Treasurer's Report was given, discussed, and approved by John WØWY and Al WØRC. The Board thanked Lyle KØLFV for his tireless efforts at donated-equipment sales in support of the Club. Gratitude was also expressed for Fritz WØKO, and his efforts in coordinating donation contacts in addition to sending cards of encouragement to Club members and their families over the year.

Upcoming Events: The **BAARC Summer Picnic and Foxhunt** is scheduled for Saturday August 18th at Lum Park, Brainerd with Terry KIØFW as Fox Hunt Chairman. Upcoming Club programs and events were discussed including: a fall "**Mini-Field Day**", **Year-In-Review New Membership program** with mailers sent to area hams, a **Crow Wing Power Grounding/Lightning Protection program**, and **ARRL presentation**. Lyle KØLFV will forward an email request for the donation of radio equipment to the White Bear Lake Amateur Radio Club.

Digital & Emergency Communications: John WØWY gave a detailed report on the new radio tower, with the new Club repeater antenna installation at the top. The board discussed at length, several opportunities John has been pursuing for the possible availability of surplus county VHF radio equipment following the completion of the ARMER system switchover.

Al WØRC reported the UHF component of the Ski Gull repeater site is down, and being evaluated for repair by Martin Communications in Brainerd.

Following a motion and second by Ron KØGOP and Steve NØCRM, the board meeting was adjourned at 5:09 PM.

Thursday-July 26, 2012 - 7:00 PM - BAARC Membership Meeting Minutes Brainerd Fire Station

The President opened the Club membership business meeting at 7:02 PM with 19 members and guests present. **Forestview Middle School Balloon Project** teachers Jim Reed and Corey Olson presented a framed color photograph to Al WØRC in recognition of his dedicated efforts with the students and teachers over the 2011-2012 projects. The stunning image showed the vibrant blue curvature of the earth as photographed by the payload's onboard camera at 85,000 feet over the Mille Lacs area.

The June 2012 minutes were approved and seconded as printed in the June BAARCer by Steve NØCRM and Shirley KØDCW. The Treasurer's Report was presented, approved and seconded by John WØWY and Al WØRC. Lyle received a round of applause in appreciation for his continuous efforts in the securing and selling of donated equipment for the Club. Steve NØCRM shared upcoming events and future meeting dates and programs with the Club. Al WØRC reported on the UHF repeater failure and evaluation by Martin Communications. In his report on digital and emergency communications, John WØWY outlined several details of the new Club Crosby tower project.

Fritz WØKO has received from George KCØBH, numerous documents and photographs related to BAARC events and activities from years past. Fritz is seeking direction on archiving these materials for future Club use, and will retain them until other arrangements are made.

The business meeting was adjourned at 7:18 PM.

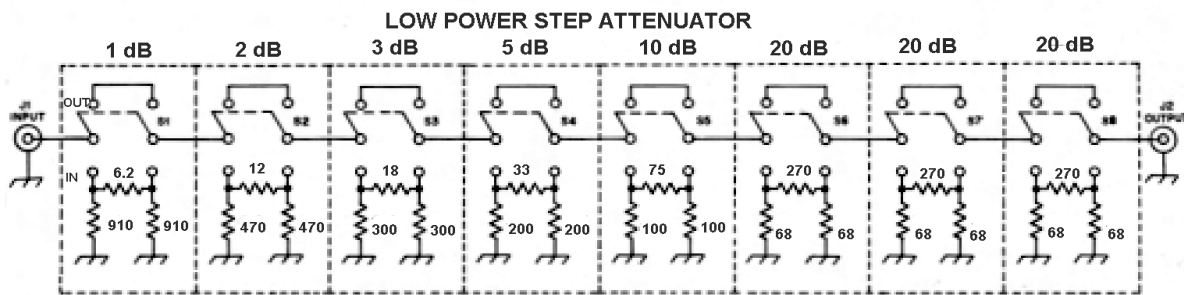
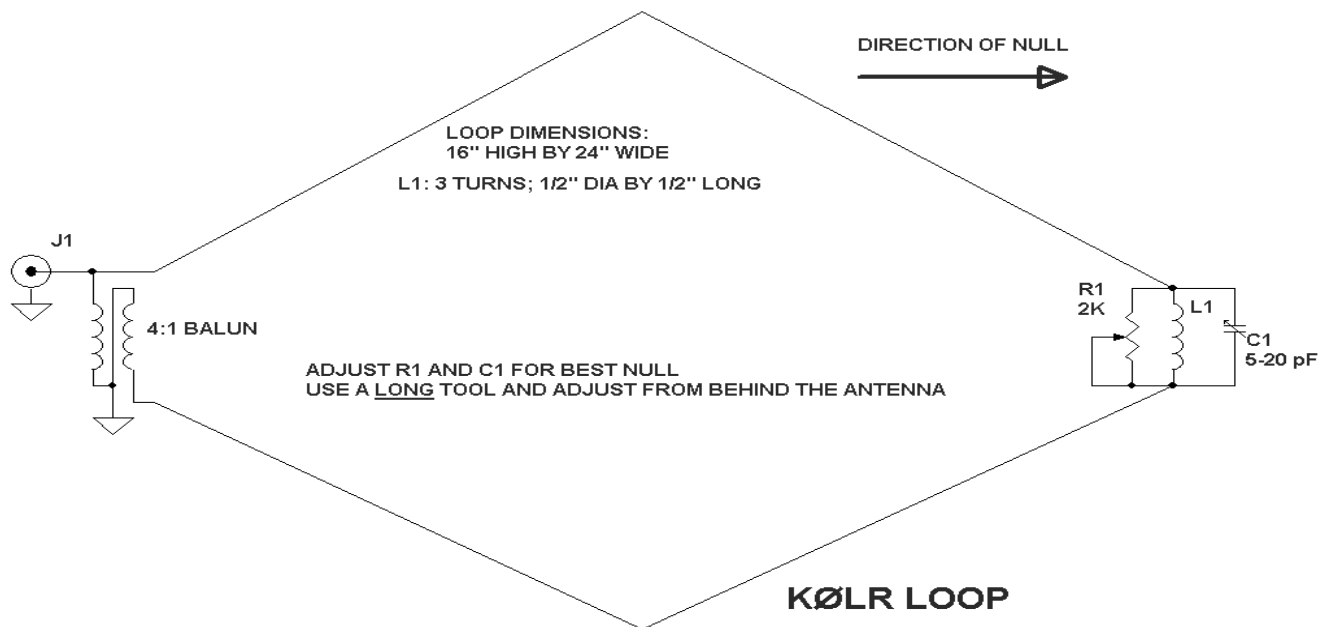
DX and the Paper Chase

Nobody promised us a rose garden, and so it goes with HF radio and especially DX over the past 6 weeks. Solar flares interrupted HF radio communications to a point of exasperation! Does that mean that there was no DX to be worked? Of course not. When the going gets tough, the tough get going. There was plenty of DX, but you had to work hard to both find it and to work it. The challenge of working so called "dead bands" and succeeding to get a DX contact is what makes this a great hobby and not a rose garden. Talk about innovations in the art of DX and especially the paper chase—a new system called Club Log is being used by most DXpeditions. After you make your contact, the online log is posted with your call sign and the band you worked and also the mode. If you drag your cursor over the band slot you worked, the operator's photo and call sign appears but wait, there's more. At the end of the DXpedition you can apply for your QSL card through an online QSL response service (OQRS) using your credit card. The cost is \$5.00 which is about the same as if you went the snail-mail process with prepaid return postage or an IRC. I have two DXpeditions that I worked and used the OQRS system, and both were new ones that apply to my DXCC 300 endorsement. I don't have to tell any of you that this is/has been a very hot summer season with plenty of summer to go. What better way is there to spend some time in your air-conditioned house working HF radio and especially DXing. Remember, sit down at your station and call CQ...someone somewhere is going to answer your call, so don't disappoint any of them. So long from Huntersville for now, 73 and good DX from **Bob/WØZPE**.

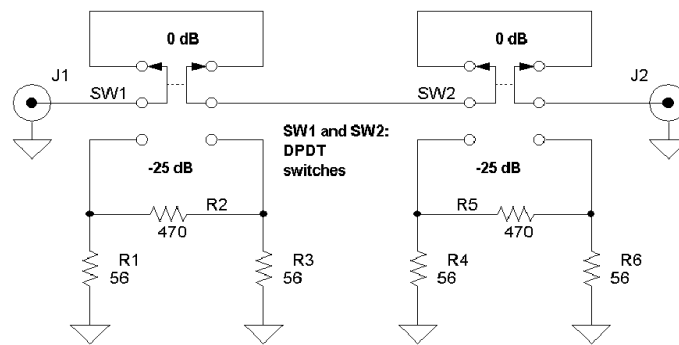


AL Doree, WØRC, on the left graciously accepted a large framed photo taken on the recent balloon launch from the Forestview Middle School by the Balloon Team. This presentation was made by the two teachers spearheading the classroom-extracurricular project involving some 13 talented students. Instructors Jim Reed (l) and Corey Olson (r) honored Al in recognition of his technical assistance with the launches. The framed photo was taken by the camera in the payload and shows the curvature of the earth at approximately 85K feet near Mille Lacs Lake. Another launch is planned this early fall. Good luck, teachers, students, parents, and advisors! (Photo by WØKO)

KØLR's Diagrams presented: Direction-finding Homebrew Antenna with switchable Attenuator:



http://www.arri.org/files/file/Technology/tis/info/pdf/September1982_Attenuator.pdf

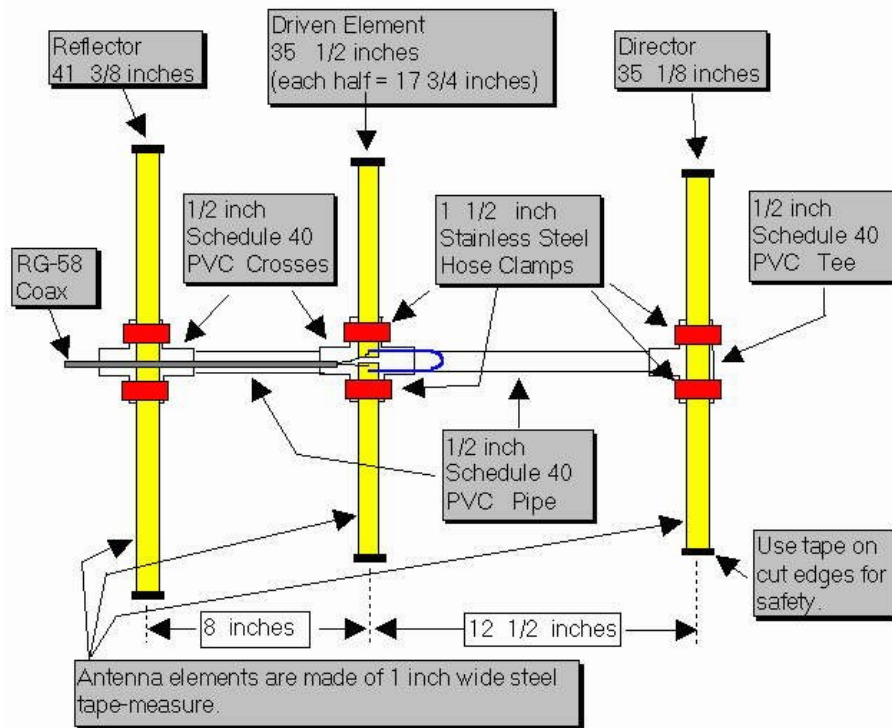


50 dB ATTENUATOR

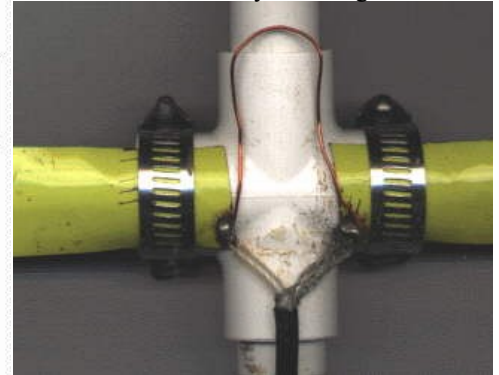


Circuit Diagrams above provided by KØLR. On the right is a picture of one attenuator with bottom cover off. The slide switches are on the back. The idea behind the presentation was to get hams interested in improving their skills. Lyle KØLR expertly presented attenuator circuits—some very simple. Looking up “attenuators” on the Internet could lend more help also. Tip: Hunters can also tune to the 3rd harmonic of the 2 mtr. freq., which will fall into the 440 MHz band with a reduced signal level. We are sure he could also answer some questions. TNX, Lyle, great job!!!!.

Lyle KØLFV's Tape-Measure Antenna—Easy to Build



Driven Element Pictured Below with hairpin match—Photo and Diagram from KØLFV. Below is Ron KØGOP with his version of Lyle's design.



Lyle KØLFV's Summary Notes

This beam has been used on Fox-Hunts (hidden transmitter hunts), on mountain tops, at local public service events, outdoors, indoors in attics, just about everywhere. The SWR is typically very close to 1:1 once adjusted. Front-to-back performance is exactly as predicted. The null in the rear of the pattern is perfect for transmitter hunts. When tested using a sensitive field-strength meter and a low-powered fox transmitter, full-scale readings were seen from a distance of ten feet. With the same field-strength meter I was able to point the antenna away from the transmitter and move the reflector element to within a few inches of the transmitter antenna and still not see a reading. I don't have the facilities to verify a 50 db notch as predicted by the Yagi-CAD software, but it surely seems close. The flexible elements have taken a lot of abuse. My antenna has seen a lot of use and has held up quite well. Best of all, when on a fox-hunt, this beam is a breeze to get in or out of the car.—by Lyle KØLFV. (P.S. As Lyle pointed out at the meeting, the elements can be folded in toward the center and rubber-banded for easier transport. Also, in case you do not have a tape measure that is no longer functional, replacement steel-tape stock can be purchased. Lyle's design is from a shareware computer-aided yagi program written by Paul McMahon VK3DIP. Surely Lyle would be glad to answer any questions if you are attempting to build this.)—Thanks, Lyle, for the informative program. Readers could go to this website for additional info

<http://theleggios.net/wb2hol/projects/rdf/tape_bm.jpg>

Minnesota Flood of 2012 - Hams Responded (ARES E-Letter from the ARRL)

Northeast and north central Minnesota recently suffered one of its worst rain fall events in many years. As much as 10 inches of rain inundated this part of the state, and its effects will be felt for many years as recovery takes place.

A powerful low pressure area moved into the region from the Pacific Northwest on the heels of previous systems that had saturated the ground in the Upper Midwest. Along with another moisture laden front from the south, the stage for flooding was set. The National Weather Service had been warning of the potential for flash flooding in the days preceding the arrival of the system, and with the ground saturated, the potential became a reality as the area of low pressure moved slowly across the region on June 19 and 20. Torrential rainfall from severe thunderstorms that trained along the front caused havoc as many communities and counties were affected. Homes and businesses were flooded, and roads and bridges were either dangerously compromised or washed out by rushing flood waters.

Lake County Emergency Coordinator Jeff Nast, KCØMKS, reported that Northland SKYWARN was activated from 1800Z on June 19 until 0145Z on the next day. Lake County RACES/ARES was also activated on June 20 to provide emergency communications for a fiber cable failure at the Knife River expressway bridge.

Cook County officials requested disaster response communications for the hospital in Grand Marais. All communications were severed during the storm, and the hospital was without contact with the hospitals in Duluth. Pat Scully, NØWSI, made the request and a communications response resulted. "We were without phone, cell, Internet, and 911 service for approximately 12 hours," reported Jayne Fingerman-Johnson, NØUYQ, of the Cook County ARES Response Team (CCART). "We set up our Amateur Radio station at the Cook County Northshore Hospital to provide communications to the outside world."

Garry Hooghkirk, KDØDHB, Bob Schulz, KCØNFB, and Tom Kurtovich, KBØLSS, responded to the St. Louis County EOC in Pike Lake. Gary Hanson, KDØCVO, Dave Leslie, KC9MKJ, and Doug Nelson, AAØAW, activated the Douglas County, Wisconsin EOC to coordinate communications to Grand Marais as well as for net controls for a Duluth/Superior net to record road closure information to help travelers trying to get through the area. "We had people running net control from the Douglas County EOC, and St. Louis EOC was also manned," Nast reported. "We also had a presence at the NWS during the net." [See more info, links [here](#).]

Nast activated the EOC in Two Harbors for Lake County. Bob Hoyt, KCØEIM and Grant Forsyth, KCØWUP went up to the radio desk at the National Weather Service office in Duluth to become real time providers of any weather information needed. Garry Hawkinson, WØELH, set up and monitored 7.250 MHz SSB as a back up.

Bill Fleischman, KCØZZL, located phone numbers for Life Flight to establish hard wire communications with them if needed. Ham communicators handled closure information and a doctor replacement issue. Dave Miller, WØNWO, was instrumental in coordinating many facets of the response. Several local amateur operators went mobile and called in damaged areas to the net.

A call for help came in from MPR (Minnesota Public Radio): One of their reporters had a relative living up the shore in Two Harbors, and hams were able to give her information so that her dad's medical supply service could get supplies to him.

Regular communication services were restored to the Northshore communities, and the amateur response was no longer required. Thanks to the active participation by many local ARES members, a ready and capable multifaceted response resulted. Thanks to all operators who took time from their own issues to make Amateur Radio work in this time of need. While the severity and widespread magnitude of the flooding exceeded expectations, the hams were still able to meet the challenge. Once again, Amateur Radio proved itself as being the one reliable means of communication in a real emergency when all else fails. -- *KDØCI's Radio Newsletter*, July 2012 issue; by Doug Nelson, AAØAW, with contributions by Jayne Fingerman-Johnson, NØUYQ, Kenny Broshofske, KDØCI, and Jeff Nast, KCØMKS .

From the ARRL Letter

End of an Era: Heathkit Declares Bankruptcy, Closes for Good (Again)



The July 19 edition of *The Herald-Palladium* -- a newspaper serving the communities of Benton Harbor and St Joseph, Michigan -- is reporting that Heathkit Education Company has declared bankruptcy and has officially closed its doors after defaulting on its lease.

According to the paper, Heathkit employed more than 1800 people in its heyday after World War II. When it finally closed, its workforce totaled fewer than six people. This is the second time since 1992 that Heathkit Educational Services has shuttered its doors. In August 2011, Heathkit announced it was returning to the kit building business, and in September, that it would once again be manufacturing Amateur Radio kits. Heathkit owner Don Desrochers told the newspaper that he has filed for bankruptcy and a bank now owns what's left of Heathkit; the bank is disposing of some items via online auctions. "The situation was purely one of the economy," he explained in the article. "Heathkit was primarily dependent upon federal and state funding for schools. Spending in education continued to drop down, and it was economically unfeasible to continue operating. When we got back into the kit business, we were losing the education business faster than we were growing the kit business. It was not sustainable."

According to the newspaper, Heathkit abandoned its lease around March, and in May, Phil Maki said he received notice that Desrochers had declared bankruptcy and that Heathkit would be closed. Maki is treasurer of Southshore Companies, the company that owns the building that Heathkit had leased a portion of. "It's a sad thing for the community," Maki said. "A lot of us grew up using Heathkit products, and it's sad they ended the way they did."

In May 2012, the ARRL [reported](#) there were rumors of the company's demise, but nothing was certain. Tom Ferriter, of Technical Education Products in Hampden, Massachusetts, told the ARRL at that time that "Heathkit is telling us [outside sales representatives] that they have temporarily closed, but that they are hopeful that they will be able to reorganize. While they're not telling us too much, they did say that they were having poor sales for a myriad of reasons and are hopeful that they will be able to refinance the company and negotiate with the bank to refinance some of the debt."

Desrochers -- who served as Heathkit's President and Chief Executive Officer from 1995-2000 before purchasing the company in 2005 -- told *The Herald-Palladium* that closing Heathkit was hard for him: "It was a tough decision, but you can't operate and lose money. Hopefully the employees will find other employment. They were great, loyal employees for a long time." -- *Thanks to [The Herald-Palladium](#) for the information and to Lee Lull, WR8R, for bringing this to our attention.* **BAARC Editor's Note: This should make old Heathkit gear even more valuable.**

Olympics' Special Event Stations/Operation

Two special event call signs were activated on Wednesday, July 25 to celebrate the London 2012 Olympic and Paralympic Games: **2O12L** from London, England and **2O12W** from Barry, Wales. Both stations will be on the air for the duration of the Games -- July 25-August 12 -- and continuing through September 9. Organizers hope to make at least 80,000 contacts during the seven weeks that 2O12L and 2O12W are on the air

FCC News: Vanity Call Sign Fee to Go Up 80 Cents

On July 20, the FCC announced that the cost of an Amateur Radio vanity call sign will increase 80 cents, from \$14.20 to \$15. The fee will increase 30 days after notice of the increase is published in the *Federal Register*; no date has yet been set for publication. Earlier this year, the FCC released a *Notice of Proposed Rulemaking and Order*, seeking to raise the fee for Amateur Radio vanity call signs. The vanity call sign fee has fluctuated over the 14 years of the current program -- from a low of \$11.70 in 2007 to a high of \$70 (as first proposed in the FCC's 1994 *Report and Order*). In FY 2012, the FCC expects to grant 14,300 vanity call signs, bringing in \$214,500 from the vanity call sign program, and looks to recover a total of \$339,844,000 in fees from all the Services that it regulates.

SUNDAY NIGHT NET OPERATORS

08/05/12	Fritz	WØKO
08/12/12	Joe	KBØVYJ
08/19/12	Charles	W5CCL
08/26/12	Doug	KDØERE
09/02/12	John	WØWY
09/09/12	Bob	WØZPE
09/16/12	Marcia	WØZMC
09/23/12	Doug	KDØERE
09/30/12	Fritz	WØKO

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

PLEASE????????

SIMPLEX NET IS OPTIONAL.

Our thanks to all NCS Volunteers.

Can you get your BAARCer via the Internet? It can save the Club money and time. Some 90% now can. Please let Fritz know.

Happy Labor Day Weekend. American workers have made this country great—we Americans certainly owe a lot to the work ethic of our forbears.

Best Wishes for a Speedy Recovery went out to Sharon Duit, KBØSQX, who recently underwent shoulder surgery. A card of cheer was sent out to Sharon on behalf of the BAARC members.

Know of any BAARC Member needing a card sent? Let Fritz know the circumstance, and he will send the appropriate one.

For Sale: IC-745 Xcvr (100w HF 1.8-30 Mhz with General Coverage Receive), incl. manual, hand mic., DC cable---tested FB on DC power—got good report, even from DX. **Maxi Tuner** rated 3KW 1.8-30 Mhz, for balanced and unbalanced antennas, with roller inductor & metering. **Mirage 23 2-mtr. Linear amp.** (input from HT and up to 30w out), with DC power cable. **Heathkit Electronic Keyer HD-10** with manual---works on AC. **Sears Wayfarer AM, FM, SW Radio** (older portable runs on D cells or AC. Tested & Works—Great full sound.—And Misc. Interested? **Contact Fritz WØKO <w0ko@arrl.net**

Want to place an ad? Contact Fritz.

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