

KB7ARA

Kamiak Butte Amateur Repeater Association

Summer 2012 Edition

KBARA Gazette



KBARA Annual Camp Out & Meeting

***** July 27th—29th *****

At Boyer Park. Detailed information on page 2.

D-Star Information

by Scott, KA7FVV

Thanks to Pat, K7HRT we have a D-Star repeater in Spokane. The Frequency: **443.125 +, V 1293.3 out , 1273.3 in V , 1249 D simplex for data.** Currently located in the Spokane Valley.

The first question that comes to mind is: **What is D-Star?**

D-STAR (Digital Smart Technologies for Amateur Radio) is a digital voice and data protocol specification developed as the result of research by the Japan Amateur Radio League to investigate digital technologies for amateur radio.

Currently Icom is the only manufacturer that has elected to build D-Star technology into their amateur radio line.

D-Star Links—There is a wealth of information on the internet about D-Star.

Great info page—<http://www.comfac.com/SMCARA/DSTAR.htm>

Icom's Page—<http://www.icomamerica.com/en/products/amateur/dstar/dstar/default.aspx>

D-Star Info—<http://www.dstarinfo.com/home.aspx>

PDF with great info—<http://www.arrl-nh.org/What-is-D-Star.pdf>

Icom Canada D-Stat Info—<http://www.icomcanada.com/dstar/index.htm>

Hollywood Trivia: Last Man Standing comedy with Tim Allen as a amateur radio operator, Mike Baxter, KA0XTT, is using an Icom IC-9100 and IC-92AD radios and D-STAR.



Remember KBARA is on Facebook. Search for KBARA and click Like Even though KBARA is not on Twitter, it is a great tool for hams to make schedules for QSO's.





Kamiak Butte Amateur Repeater Association

Camp Out & Annual Meeting, July 27 -29, 2012

All are welcome!

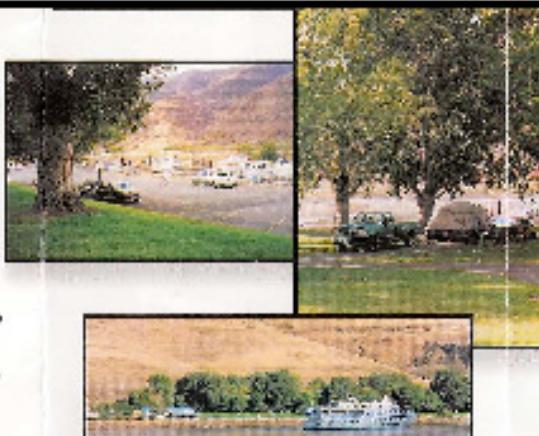


Here's your chance to eye-ball each other, along with camping, swimming, fishing, schmoozing & just generally Hamming it up. This is an annual Ham-O-Rama & summer bash. Do not miss it!

The Port of Whitman County maintains Boyer Park and Marina which is leased from the U.S. Army Corps of Engineers. The park has a full-time supervisor and concession are ready and willing to help with the needs of recreational enthusiasts.

The Marina provides free boating alongside a service dock where gasoline is available. Motorboats conveniently accommodate two boats and can be rented on a daily or monthly basis.

Boyer Park Board of the four pleasant rooms for your overnight stay. A fully accessible travel room is available on request. Boyer Park Restaurant offers a relaxing atmosphere and a varied menu. Covered shelters accommodating 50 are available for rental for those special gatherings. A convenience and RV store is handy for those vacation items. Boyer Park offers the Snake River Trail for

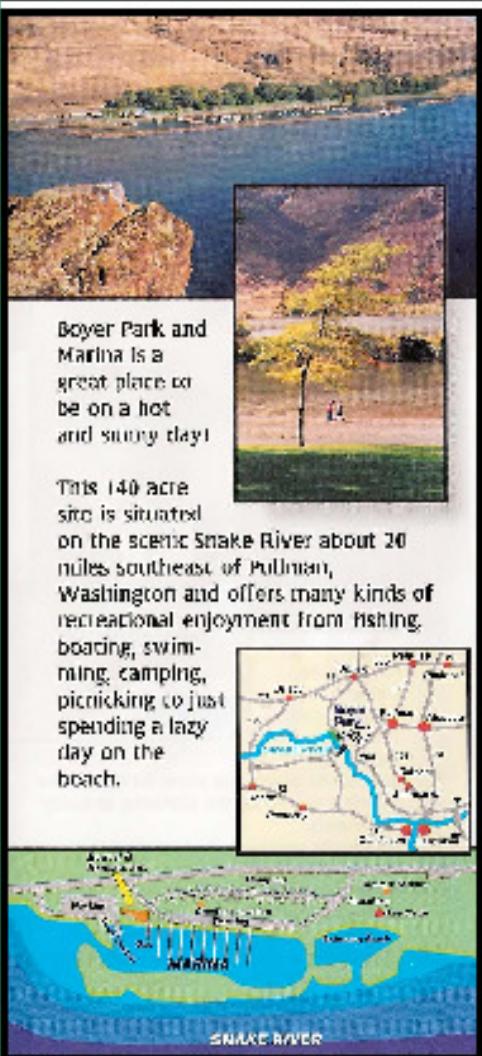


rollerblading, boating or a history walk. The enclosed swimming area, sandy beach, and picnic facilities make a perfect setting for the gathering of family and friends.

Overnight camping sites have all the extras... with water, electricity, sewer hookups, carriage collection, dump station for holding tanks, hot showers, rest rooms, laundry facilities, and sites included.

All facilities are open 7 days a week from mid April until mid October.

Lower Granite Lock and Dam is 2 miles from Boyer Park. The Visitor Center contains a Fish Viewing Room and Counting Station.



Come to the KBARA Camp Out & Annual Meeting at beautiful Boyer Park & Marina, 1753 Granite Rd, Colfax, WA 99111 on the Snake River, just downriver from the Lower Granite Dam.

PANCAKE BREAKFAST: Saturday, July 28, 2012, 8AM

ANNUAL MEETING: Saturday, July 28, 2012, 3PM

POTLUCK DINNER: Following the annual meeting, around 5PM, July 28, 2012

TALK-IN FREQUENCY: 146.74 MHz (-) repeater & 146.520 MHz simplex

DIRECTIONS TO BOYER PARK: from Spokane drive south on Hwy. 195 to Colfax; drive through town on Main St., following the sign to Almota going up the hill (just past Eddy's Chinese Restaurant on your right); continue to follow the signs to Almota & Boyer Park/Lower Granite Dam; drive time about $1\frac{1}{2}$ hours & 77 miles from Spokane. From Pullman, & points south, from Hwy. 195 at Pullman, take Hwy 194 west, following the signs to Almota & Boyer Park/Lower Granite Dam.

FOR INFO ABOUT BOYER PARK & MARINA call 509-397-3208 or visit www.bpark.biz; in KBARA group area sites 2-7, partial hookup sites \$27 per night, tents \$12; sites available Friday, 7/27 2PM to 7/29 2PM; for reservations contact Betsy, N7WRQ, phone: 509-509-448-5821, e-mail: n7wrq@aol.com

From the Desk of our President

Hello,

It's been a great year for KBARA and I'm privileged to have served in the position of your president. It has given me the opportunity to get to know more of our wonderful members, dedicated owners, and those who through contribution and tireless energy have made this club even greater. Of particular

note are the contributions of Randy KF7RVY our IS go to guy, for the KBARA "EchoLink". Glen, KF7QLH, our Secretary, Co-Owner of the "36" and our IRLP, Betsy for her tireless contributions over the years to KBARA, our Treasurer and Scott, KA7FVV, our VP and Newsletter editor.

Last but not "Least" John, KD7AAT, our Spokane Rep and Net Manager. And all the Net Control

Operators that have gone on to make sure we have a 7AM net 365 days a year. BRAVO you guys and gals. Hats off to you all.

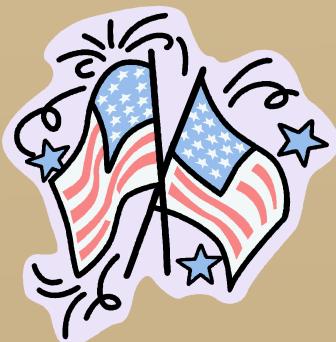
The Annual KBARA campout is fast approaching, July 27th – 29th at Boyer Park. The business meeting will be held at 3PM on Saturday (28th) followed by what looks like a GREAT potluck dinner.

If you can, come on down and join us. It's always a great time.

The Spokane Hamfest will be here before you know it. Betsy, N7WRQ has been busy working the plans for what I'm sure will be another fine event. They can always use extra help. If you have any ideas for securing door prizes or other donations to the event, please let her know.

That's it for this time. Have a great summer. We'll see you at the campout

Duff
WA7BFN



Status of Amateur Radio Satellites by Scott, KA7FVV

FM Satellites

With the demise of AO-51 last winter the only two active FM satellites that we have are AO-27 and SO-50. Both are in good health. AO-27 is the most used of the two since AO-50 is a little weaker and harder to hear. AO-27 was launched in September of 1993 and SO-50, December of 2002.

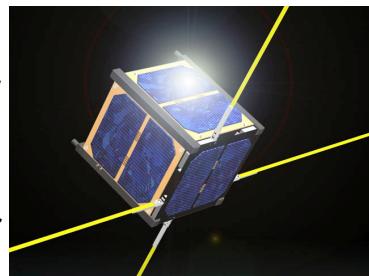


Linear (SSB) Satellites

If you have the SSB radios to work these satellites there is VO-52 and FO-29. Both these satellites are in opposite modes. VO-52 is U/v mode or vhf uplink/uhf downlink and FO-29 is V/u or uhf uplink/vhf downlink. These used to be called mode B and J. AO-7 is a 38 year old satellite that has recently come back to life and is active in daylight passes.

New Satellites and Launches

There are several satellites in production currently. Probably the first to be launched will be FunCube. Funding for this satellite was obtained primarily by selling the FunCube Dongles. A small USB software defined receiver about the size of a USB thumb drive, \$196 shipped to us in the US. This will be a linear (SSB) satellite and will be launched later in 2012. Am-sats project is called Fox. This has split off into two different satellites. The first Fox-1 will be a FM sat to replace AO-51 with similar performance and will be able to continue operating after the batteries fail. Slated to be launched sometime in the second half of 2013. Fox-2 will be a linear satellite and launch slated for 2015.



New simple satellite tracking program. A very slick program. Moving map of where the satellite is passing over if there is a internet connection.

[http://www.tomdoyle.org/simplesatlookdown/](http://www.tomdoyle.org/simplesatlookdown/SimpleSatLookDown.html)
[SimpleSatLookDown.html](http://www.tomdoyle.org/simplesatlookdown/SimpleSatLookDown.html)



Satellite information in this article and additional info on satellites can be obtained from <http://www.amsat.org> and <http://www.uk.amsat.org>

KBARA Field Day Events



CQ Field Day CQ Field Day de N7LC 3A EWA

Once again, the ARRL Field Day, held June 22-June 24, 2012 at Valleyford, WA, was a complete success. As always, thanks go to Bob, AC7GP, and the Lilac City ARC for hosting this multi-club event which had non-stop transmitting, socializing, eating. And, as per usual, the weekend was not without antenna & equipment dilemmas & an electrical storm. Fun was had by all !





36th Annual SPOKANE HAMFEST

and

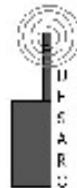
American Radio Relay League Washington State Convention

September 22th, 2012

University High School

12420 E 32nd Ave, Spokane Valley WA 99216

Hosted by 8 Amateur Radio Clubs:



Raffle prizes: 1st Prize: Yaesu FT-897D HF/6m/2m/430 Transceiver; 2nd Prize: Yaesu FTM-350AR 50 w 2m/440/1w 220 FM Transceiver; 3rd Prize: Kenwood TH-D72A 5 w 2m/440 FM HT w/GPS/TNC Transceiver ~ Raffle tickets available now from Hamfest Committee members

Door prizes, seminars, demos & displays: "NVIS (Near Vertical Incidence Skywave) Antennas" by Bill, KL7BB & Daniel, KL7WM (antenna given away as class attendance door prize) ~ "1000' Beverage Antenna Construction" by Wilse, WX7P ~ "D-STAR Voice & DRATS Data System & Operation" by Bill, KL7BB & Daniel, KL7WM ~ARRL HQ guest Debra Johnson, K1DMJ, Education Services Manager ~ "How to Beat the Morse Code (CW)" by Bill, KL7BB ~ "Junque" Auction by Wilse & Gimmie, WX7P & AL7LB ~ "Roving Helmet-Cam Reporter" with John, KD7AAT ~ Fox Hunt Demo ~ "Radio Test Gear" table with Jack, AD7FO ~ ARRL QSL & WAS Card Checking by Wilse, WX7P ~ License Exam Hamfest Photographer Jim, K7HU ~ Commercial & non-commercial vendors ~ Non-stop coffee, sodas, food ~ And much, much more

Admission \$5

Age 18 and under FREE

Commercial tables \$15

\$12 if paid before September 1st

Swap tables \$7.50

\$5.00 if paid before September 1st

Admission not included in the price of table space

Friday, September 21st

Vendor Setup: 7PM-9PM

Saturday, September 22nd

Vendor Setup: 8 AM

Open to Public: 9AM – 5PM

"Junque" Auction: 3:00PM

Raffle: 4:00PM

No-host Post Hamfest Dinner: 5:30PM

Timber Creek Grill Buffet

9211 E Montgomery Dr.

Spokane Valley

Program advertising available: 1/4 page for \$40 to full page ad for \$120

Free off-street parking for cars & RV's

SPOKANE HAMFEST 2012 REGISTRATION

Name _____ Call Sign _____

Address _____

Phone number/E-mail address _____

Please make checks payable to & mail to: Spokane Hamfest
PO Box 2552
Spokane WA 99220-2552

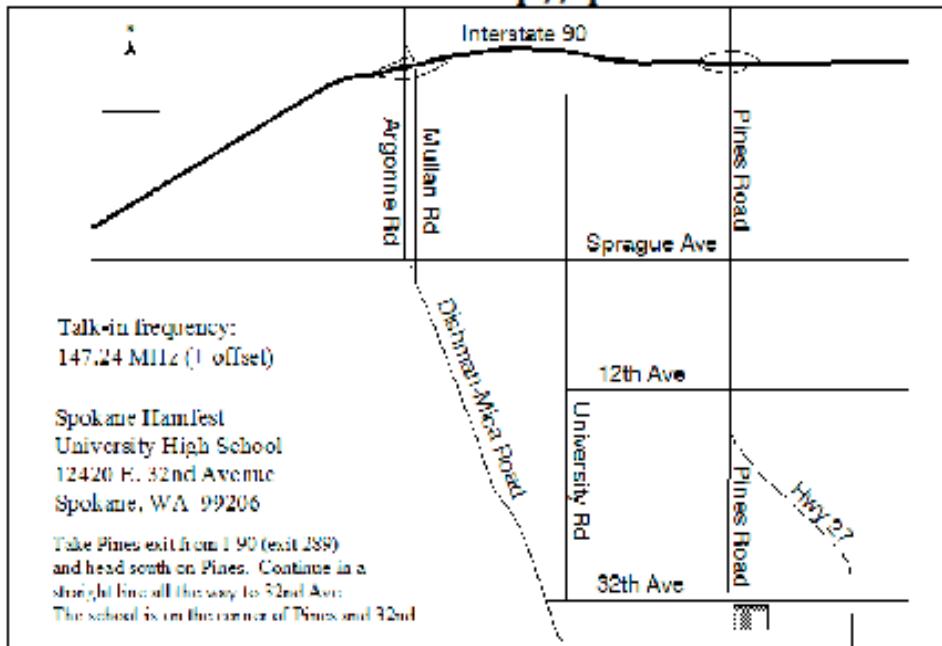
Registrations @ \$5 each	\$
Age 18 & under free	
Commercial tables @ \$15.00 each	\$
\$12 before 9/01/12	
Swap tables @ \$7.50 each	\$
\$5.00 before 9/01/12	
Tables available while they last	
Total	\$

Vendors may have only one helper; helpers must be pre-registered; no helper tickets sold at door; helpers are required to leave until doors are opened for the general public once vendor set up is complete.

Prepaid registrations will not be mailed, but will be held at the ticket table & available for pickup starting Friday, 9/21, 2012, 7 PM - 9PM

The SPOKANE HAMFEST is an annual event hosted by eight Amateur Radio clubs: The Inland Empire VHF Radio Amateurs, Kamiak Butte Amateur Repeater Association, Northwest Tri-State ARO, Spokane DX Association, Palouse Hills ARC, University High School ARC, Lilac City ARC, and Panoramaland ARC.

For additional information contact: Bob Meenach, AC7GP, 509-327-3188
E-mail: spokanehamfest@comcast.net
<http://spokanehamfest.com>



Amateur Radio License Testing Sessions

Chewelah, WA, ARRL VEC

Contact: Karl Miller, WX7DX: (509)258-8922 email: wx7dx@msn.com



Coeur d'Alene, ID, ARRL VEC

July 9, 2012; August 13, 2012; September 10, 2012; October 8, 2012; November 12, 2012; December 10, 2012; Second Monday of every month starting at 5:30PM at the Search & Rescue Building, 10865 N. Ramsey, Hayden, ID 83835.near the South end of CDA Airport; contact John Hollar, Jr., N7JU, (208) 968-0703 email: n7ju@roadrunner.net

College Place, WA, ARRL VEC

July 19, 2012, 7PM; Walla Walla University, 100 SW 4th 1st Door Bldg, Chan Shun Pavilion, Lecture Hall RM 154, College Place WA 99324-9999, contact Mable Babbitt WB5AVH, (509) 525-7003, email: wb5avh@msn.com

Colville, WA, ARRL VEC

Contact Tommy L Howe, (509)684-5565; email: thowe@hotmail.com

Kennewick, WA, ARRL VEC

July 15, 2012; September 16, 2012; November 18, 2012; 2:00 PM (Walk-ins allowed); Boy Scout Office, 8478 W Gage Blvd, Kennewick WA 99336-1075; contact: Michael Tesky, KC7CCK (509)783-6236; email: kc7cck@frontier.com

Lewiston, ID, ARRL VEC

Contact: Emmett McCormick, NA7EM, (208)798-3279, email: na7em@arrl.net

Pullman/Moscow, WA, ARRL VEC

Contact: Tom Storer, KI6DER, (509)334-6979; email: KI6DER@AmSat.org

Republic, WA, ARRL VEC

Contact: Sam Jenkins (509)775-2923; email: samhbi@aol.com

Spokane, WA, ARRL VEC

July 21, 2012; August 18, 2012; September 15, 2012; October 20, 2012; November 17, 2012; December 15, 2012; all at 12 PM; Outpost (behind Conley's Restaurant), 12624 E Sprague Ave, Spokane Valley WA 99216; contact: Mary Qualtieri, AA7RT, (509) 991-2192; email: aa7rt@me.com



Summer Hamfests

Information obtained from <http://www.n7cfo.com/amradio/hf/hf.htm>

July 13-16, 2012. SalmonCon. Pacific Northwest QRP Group annual weekend outing. Valley Camp, North Bend, WA. [Flyer in PDF](#). (95K) Contact Wayne NB6M@Comcast.net .

July 20-22, 2012. Glacier Waterton International Peace Park Hamfest. Glacier Meadows Campground, 13 miles west of East Glacier on MT Hwy 2. www.gwhamfest.org .

July 20-22, 2012. 3rd Annual 2012 KUH Pig Roast & Campout. Springdale, WA. Contact Ray, (509)258-7078 cdknray@wildblue.net
[Flyer in PDF](#). (781K)

July 21, 2012. Coos County Radio Club Hamfest and Swapmeet. North Bend, Oregon. *This is an ARRL sanctioned event.* zane.albertson@gmail.com

July 27-29, 2012. KBARA CampOut/Annual Meeting, Boyer Park & Marina, Colfax WA . <http://www.kbara.org/> [Flyer in PDF](#) (514K) Contact n7wrq@aol.com .

July 28, 2012. Chehalis Valley ARS 13th Annual Swap. Lewis County Fairgrounds. *This is an ARRL sanctioned event.* Contact John Ellingson, K7OSK. k7osk@boatanchor.com . <http://www.cvars.org/>

August 3-5, 2012. 57th Annual Pacific Northwest DX Convention. Monarch hotel in Clackamas, OR. *This is an ARRL sanctioned event.* Hosted by the Willamette Valley DX Club. <http://wvdx.org/dotnetnuke/>

August 11, 2012. Radio Club of Tacoma Hamfair. Graham, WA. *This is an ARRL sanctioned event.* <http://www.w7dk.org/>

August 10-12, 2012. Radio Amateurs of Canada Convention. Edmonton, Alberta. <http://convention2012.rac.ca> . convention2012@rac.ca

August 19, 2012. Antique Radio Swap Meet. Puget Sound Antique Radio Association. 9 AM to 1 PM. Shoreline Senior Activity Center, 18560 1st Northeast, Shoreline, WA 98155. Free admission. <http://www.eskimo.com/~hhagen/psara/swap.html> (Always the 3rd Sunday in August)

August 25, 2012, Annual Clark County Amateur Radio Club (CCARC) Ham Fair, Vancouver, WA. *This is an ARRL sanctioned event.* Held at the Clark County Square Dance Center, 10713 NE 117th Ave, Vancouver, WA. For more info: clarkcountyhamfair@w7aia.org or www.w7aia.org .

August 25, 2012. Highline ARC Hamfest. Des Moines, WA. *This is an ARRL sanctioned event.* <http://www.highlinearc.org/swapfest.html>

August 25, 2012. Bozeman Hamfest. Bozeman, MT. *This is an ARRL sanctioned event.* <http://www.w7ed.com/>

September 7-9, 2012. Northwest Automatic Position Reporting System (NWAPRS) Summer Gathering. Always the first weekend after Labor Day. Valley camp, North Bend, WA. Contact Thom k7fzo@arrl.net <http://nwaprs.info/sg.htm>

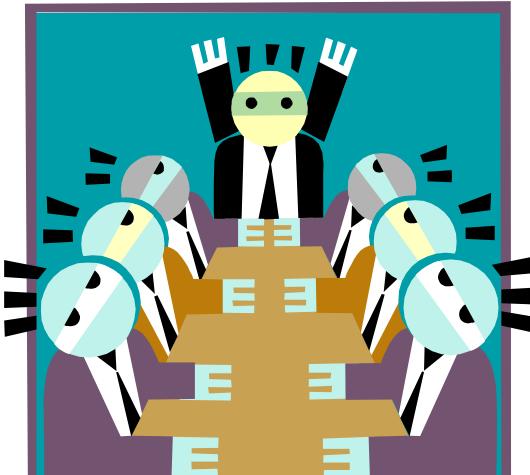
September 22, 2012. Spokane Hamfest/ARRL Washington State convention. University High School, 12420 E 32nd Ave, Spokane Valley WA 99216. *This is an ARRL sanctioned event.* For information contact Bob, AC7GP ac7gp@hotmail.com . [Flyer in PDF](#). (104K)

September 29 & 30, 2012. Gallatin County Hamfest. Bozeman, Montana. Info, mail@gallatinhamradio.com . <http://www.gallatinhamradio.com/>

September 30, 2012. COMFEST. Delta Amateur Radio Society, Delta, BC. http://rac.eton.ca/events/detail.php?event_ID=1514

KBARA Members for 2012

<i>Call</i>	<i>Name</i>	<i>Call</i>	<i>Name</i>	<i>Call</i>	<i>Name</i>
	Juanita M. Johnson	VE7KLI	Dona Mottishaw	KF7SKO	Robert Wilson
	Edward C. Johnson	W7KLL	Kenneth L. Lindahl	KF7SLW	Andrea Nierstheimer
	Sarah Sirott	KC7LBY	Daniel G. Penny	KF7SLX	Geoff L. Webb
	Flathead Valley Repeater	AD7LJ	Robert M. Purdom	KA7SUZ	JoAnn Gemmrig
NB1A	Kevin B. Albaugh	N7LKG	Bill Korthage	KF7THD	Dan Croskrey
KD7AAT	John P. Myers Jr.	N7LVO	Nell P. Gallup	KB7TYR	Kerry Griffith
KET7ADN	Gabbee (Gall) Perry	KF7LXH	Chris Causey	KB7UIR	Richard L. King
KET7ADT	Robert Bearpaw Galindo	K7MAT	Kendall (Todd) Wagner	KF7VH	Patrick Brandt
W6AEA	George H. Tuncil	KF7MCC	Brad Highley	WB7VKX	Larry L. Sayrs
W7ALT	Walter A. Davis	WA7MJB	Michael J. Brewer	KK7VO	Elizabeth Simon
KG5AO	Steve Krause	K7MM	Dan Ransom	KD7VRK	Sherman Carlton
WB7AUK	Art Gemmrig	K2MMH	Mary M. Hartman	W7VWV	Dean Simmons
KF7AZP	John D. Kimball	KE7MPM	craig A. Davis	VE7WC	Al Nelson
WX7B	Christopher J. Pritchard	KE7MPN	Ellen Le Vita	N7WRQ	Elizabeth Ashleman
WA7BAA	Donald J. Vogel	KF7NFD	Jonathan Rumsey	N7WRR	James Ashleman
WA7BEV	Bev Starbuck	N1NG	Michael Maxson	KB7WTO	Royal Moore
WA7BFN	Rollin A. Johnson	AD7NH	Larry L. Stevens	K0WZA	Donald J. LaFavor
W7BRT	Mark R. Bamford	N7NJH	Nancy Hall	AD7XH	Richard L. Schultz
WA7CBX	Bernie Frazier	KF7NLD	Virgil Vigil	N7XXC	Richard L. Wurdack
K2CLH	Christopher L. Hartman	KE7NUB	Duane Statler	KE7YHK	Christina Burns
W7CQW	C. Q. (Quint) Webb	WB7NUE	Gerald Harnols	KB7YLO	Alma J. Vogt
KD7DDQ	Ken Crosswhite	AK2O	Karl Shoemaker	KC4YTZ	Richard Fleetwood
KI6DER	Thomas J. Storer	W7OE	John P. Dempster	N7ZUF	Jay F. Lopes
K7EFX	John Brackemyre	KF7OFA	Mary C. Drennan	W7ZVD	George C. Copeland
KF7EHT	Michael J. Sirott	KD7OJ	Robert (Skip) Bacon, Jr.		
WE7EM	Ed Martin	VE7OLV	Oliver Amateur Radio Club		
WJ7F	Bob Ryno	KC7OQR	Cathie Hebel		
NOFED	Loyd L. Drennan	KC7OQS	George Hebel		
AD7FO	Jack Tiley	KC7ORO	Denise Hebel		
N9FOX	Barbara J. Moore	AA7P	Richard J. Hebel		
KA7FVV	Scott P. Harvey	W7POV	Michael R. Cramer		
KB7GJY	Allen Gemmrig	KF7QGL	Sam Lassiter		
KC7GKY	Joseph P. French	KF7QGM	Brian Stevens		
AC7GP	Bob Meenach	KC7QHE	James L. Willard		
W7GSV	Robert M. Rosle	K7QHZ	Leighton K. Pittmann		
VA7GV	Guy Venne	W7QHZ	Martin Pittmann		
W7HFI	Robert Lemon	KF7QIP	Dave Hall		
W7HNH	John L. Williams	KF7QLH	Glen Ahlborn		
K7HPT	Mark Van Winkle	KD7QLT	Wilber H. Earl		
K7HRT	Patrick P. O'Dea	W0QPO	Daniel G. Cummings		
KE7IAT	Gary Roth	WB7RED	M.D. "Red" Nierstheimer		
K6II	John David Wittenbecher	N7RHX	Jim Lawrence		
W9IIT	Arthur R. Vogt	K2RLH	Richard L. Hartman		
KF7JJC	Roger Krug	KC7RQF	Charlene E. Davis		
W7JJL	John J. Lally	KE7RSD	Robert A. Pekich		
KC7JLU	Brad Forker	KF7RTC	Paul Stone		
N6JUQ	Bruce Burris	KF7RVY	Randall Wilkinson		
N7KGA	Ralph Javins	KG7SD	Richard Thornton		
KF7KHV	Jeanetta R. Taylor	K3SHD	C. Victor Bak		





Please remember to renew your membership for 2012



Name: _____

Call Sign: _____

Address: _____

City/State: _____ Zip: _____

Telephone: _____ Amount Paid: _____

E-Mail: _____ ARRL Member #: _____

Would you rather receive the newsletter via computer, instead of receiving it in the mail? YES NO

Dues are a minimum of \$15.00 per year for individuals and \$20.00 for a family (all must be living at the same address). Dues are due January of each year. If they are paid between September 1 - December 31, they will be applied through the entire following year. And any additional amount going toward the Repeater Fund will be graciously accepted. To support **KBARA**, please send your contributions to:

KBARA, PO Box 30801, Spokane WA 99223-3013

Please visit our **KBARA** website for more information: <http://www.kbara.org>



KBARA REPEATER FUND MEMBERS 2011-2012

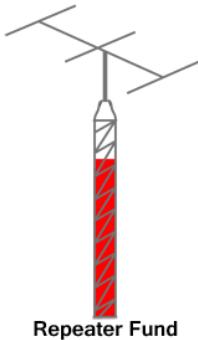
We wish to thank the following contributors for their very generous donations to our Repeater Fund.

Bronze Membership \$1-\$20

Christopher, WX7B
Mark, W7BRT
Doug, KE7CMF
Christopher, K2CLH
Scott, KA7FVV
Gary, KE7IAT
John, K6II
Art, W9IIT
Chris, KF7LXH
Brad, KF7MCC

Michael, 8 WA7MJB
Mary, K2MMH
Nancy, N7NJH
Virgil, KF7NLD
Duane, KE7NUB
Brian, KF7QGM
Leighton, K7QHZ
Dave, KF7QIP
Daniel, WOQPO
Jim, N7RHX

Richard, K2RLH
Robert, KE7RSD
Randall, KF7RVY
Robert, KF7SKO
Geoff, KF7SLX
Dick, N7XKC
Alma, KB7YLO
Richard, KC4YTZ



Silver Membership \$21-\$49

John, KF7AZP
Bev, WA7BEV

Joseph, KC7GKY

Robert, W7GSV

Gold Membership \$50-\$100

Kevin, NB1A
Art, WB7AUK

JoAnn K4TSUZ
Roger, KF7JJJC

Martin, W7QHZ
Wilber, KD7QLT



KBARA Membership / Support Information: The KBARA repeater system consists of several privately owned linked Amateur Radio repeaters. It covers an area from northeastern Washington to northeastern Oregon, and from western Montana to central Washington. The KBARA system is also part of the Evergreen Intertie, an interconnected group of repeaters located in western Washington and Oregon. The primary purpose of the KBARA repeaters is to provide a means for emergency communications within the above areas, and secondarily for routine radio traffic. It makes possible a single system of mobile communications coverage, extending the limited range provided by any single repeater operation. The KBARA FM repeaters operate in the VHF bands and are linked by UHF radios. The repeaters' frequencies, call signs, locations and owners are as follows:

KB7ARA REPEATERS and IRLP Nodes

146.74 W7HFI Kamiak Butte, near Pullman, WA, owned by Bob, W7HFI, John, W7OE, & Mark, K7HPT

147.02 K7HPT Lookout Pass on I-90 on the Idaho-Montana border, owned by Mark, K7HPT, & John, W7OE

147.28 KD7DDQ Pikes Peak in the Blue Mountains, SE of Walla Walla, WA, owned by Ken, KD7DDQ & Mark K7HPT

147.36 KF7QLH Stensgar (Stranger) Mountain, near Chewelah, WA, owned by Glen, KF7QLH, & John, W7OE

147.38 W7OE Mica Peak, east of Spokane, WA, owned by John, W7OE

223.90 AK2O Stensgar (Stranger) Mountain, near Chewelah, WA, owned by Karl, AK2O

444.35 N1NG Mica Peak, east of Spokane, WA, with a 192.8 Hz tone, owned by Mike, N1NG

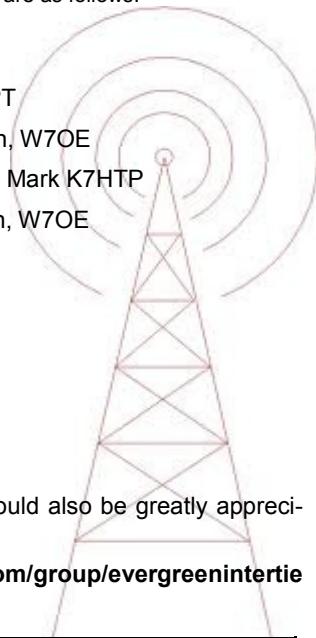
53.750 N7ZUF Kamiak Butte, near Pullman, WA, owned by Jay, N7ZUF

IRLP Node #7141 KF7QLH South Hill of Spokane, WA, owned by Glen, KF7QLH

Echolink courtesy of Randy, KF7RVY. Look for KF7RVY-R.

All licensed Amateur Radio operators are welcome to use this open repeater system. Your support would also be greatly appreciated.

Please visit these sites for more information: <http://www.kbara.org> and visit <http://groups.yahoo.com/group/evergreenintertie>



To support KBARA, please send your contributions to:



KBARA
PO Box 30801
Spokane WA 99223-3013

Annual support is \$15 per calendar year for a single membership and \$20 for a family membership. Dues are due in January of each year and if paid between September 1 and December 31, they will be applied through the entire following year. Also, any contribution will be gladly accepted to the Repeater Fund.

KAMIAK BUTTE AMATEUR REPEATER ASSOCIATION

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