

# KB7ARA

*Kamiak Butte Amateur Repeater Association*

Winter 2012 Edition

## KBARA Gazette

### KBARA Elected and Appointed Officials

**President**—Duff, WA7BFN

**Vice-President**—Scott, KA7FVV

**Secretary**—Glen, KF7QLH

**Treasurer**—Betsy, N7WRQ

**Regional Representative**—John, KD7AAT

**The Listener**—Larry, WB7 Victor Kilo X-ray



### Annual Holiday Luncheon

Our annual holiday gathering at the valley Longhorn Barbecue Restaurant was well attended. Allowing many of us to meet fellow amateurs that we have only spoken with on the air. We had approximately 50 amateurs,



XYL's, friends and family in attendance. This may have been close to a record according to long time attendees. Thank you to Santa's Helper, AKA Betsy, N7WRQ for the arrangements and email announcements. Hope to see everyone again next year.



Remember KBARA is on Facebook. Search for KBARA and click



Even though KBARA is not on Twitter, it is a great tool for hams to make schedules for QSO's.



From Duff, WA7BFN,  
President KBARA  
Greetings and Happy New Year .



This has been a tremendous year for KBARA. An exciting time, as we extend the capabilities of our system, increase the membership and in all making KBARA a fun place to visit and enjoy. A big thanks go to those technology accrued folks that have worked so hard for the benefit of our club. John, W7OE, Mark K7HPT, Jay N7ZUF and Glen KF7QLH for the ongoing dedication and tireless efforts, in climbing mountains, performing suicidal acts of antenna installs, system maintenance and adjustment. John, KD7AAT for his ongoing preparation and delivery of KBARA's Streaming Audio services from the website. And Glen's KF7QLH, development of an additional IRLP node, efforts to re-establish the KBARA Nets on the Crossroads Reflector and re-work of the KBARA Website a great place to visit.

Additional Kudos to our VP and Newsletter Editor, Scott, KA7FVV and of course Betsy, N7WRQ for keeping the funds and the treasury in order. I would also like to recognize Randy, KF7RVY for his re-establishment of Echo-Link for KBARA and our club "Scribe" Larry, Mr. "VQH" for posting the VUUL. Very Useful Users List.

And to all the repeater owners, Net Operators and members of KBARA...

Thank You !. Without you we wouldn't be.

2012, will undoubtedly be another exciting year for KBARA. In the works the annual campout, hamfest representations and as yet to be named activities that will be a lot of fun. Also some challenges along the way.

Should you have any questions, comments or suggestions, please feel free to contact any of the officials of your club.

73 and the best to you in 2012.

Duff Johnson, WA7BFN

## New Antenna for 147.38 Repeater

Peqoud-2 - by: Jay Lopes, N7ZUF



It all started the night after the 2011 Spokane Hamfest. While driving back from Spokane and reviewing the events of the day I thought about what had been discussed at the emergency KBARA meeting: the loss of the Mica Peak antenna. Estimates of the replacement were between \$1000-2000 and that would be quite an expense for the club. When I got home I took out my graph paper and calculator and started to draw up plans for a coaxial dipole antenna.

I patterned the antenna after the one I had built for the 6-meter repeater: the Peqoud-1, but scaled the values down for two-meter use, specifically 147.380MHz. The Peqoud-1 was a lot longer, at almost 13 feet in length, than would be its "2-meter Brother", the Peqoud-2 which would be half of that. That night I had a plan laid out, but did I have enough stainless steel leftover from the Peqoud-1 to build the Peqoud-2? The next morning, I went out to my shop and inventoried how much stainless steel I had left. After a few measurements, I found that I had enough material to make a majority of the antenna.

After talking with John- W7OE, he recommended estimating a cost of the necessary materials and submit it to the KBARA weekly meeting for a vote. On October 21<sup>st</sup>, I submitted my plan for the cost of \$350, and it passed. The first question I usually get about this antenna is, "Why use stainless steel?" Stainless steel oxidizes very slowly over time verses regular metal. It is a lot stronger than aluminum, making it ideal in a windy environment and it can handle extreme temperatures like those of Mica Peak. It has proven itself so far on Kamiak Butte.

The second most frequent question I get is, "Where did the name "Pequod" come from?" I originally wanted to call the first antenna the "Harpoon", but Dan, K7MM, pointed out that the name was already in use with another antenna. Dan wanted to call it the "Queequeg" after one of the characters from Herman Melville's "Moby Dick", but I did not want to spend the money on tattoos for the antenna. Dan asked me the name of the ship from the novel and I remembered it from when I had read it in high school: it was the "Pequod".

John- W7OE and Mark-K7HPT took delivery of the antenna on November 13<sup>th</sup> 2011 and installed it on the 20<sup>th</sup>. The antenna now stands atop Mica Peak and it is working fine.



## KBARA'S STREAMING AUDIO PROJECT by John, KD7AAT

It started out with a few conversations between Duff "WA7BFN", Glen "KF7QLH" and myself. Let's setup some streaming audio of the repeaters. It's being done with other clubs and individuals. Take the audio from a radio, run it through some software, feed it into the Internet and let people listen where ever they are. Sounded like fun for sure.

Duff the audio guy that he is, took the reins and got the ball rolling. After some looking around for something we could use that was cheap/free, he set up a computer with BroadWave streaming software, connected a radio and there we were. The KBARA repeaters were now world wide on the Internet.

Problem was, that without a static IP address, every time Duff's Internet provider changed his, the stream would quit working. We looked around and tried to find some solutions. About that time, I was getting interested in playing with the streaming myself. I had a computer that wasn't being used so I setup the software, John W7OE donated a radio that was good for receive (the front end was blown for transmitting), I made a receive only vertical antenna for 2 meters, and in a short time I was putting out the audio from the repeaters over the Internet.

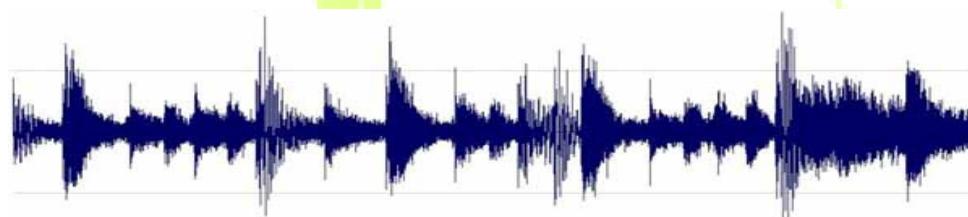
My Internet provider decided it was time to change my IP address and I ended up with the same problems as Duff. Along comes Randy KF7RVY. Randy suggested that I set up a system called DDNS. It's a way to keep your IP address from changing. BINGO!! I now had a static IP and no more problems.....

I was now streaming the audio from the KBARA repeaters on a stable system. A short time later we figured out that audio files could be also sent into separate streams with the software. Download the file, set it up, and stream it. ARRL Audio News was on the stream. Next came HamNation, Amateur Radio Newsline, The Rain Report, the Mystery podcast and more. This was now a great project and a lot of fun.

Today the computer I have running 24/7 is streaming the audio live from the 147.38 repeater along with six recorded streams. The recorded podcasts I update as soon as they are released and then put them into the stream.

Something different, something new and something for everyone to enjoy. That's what Ham Radio is all about. Click on KBARA.ORG and check out the Streaming Audio link.

John  
KD7AAT  
kd7aat@comcast.net



# Signals from Space. More than just amateur radio satellites.

## Weather Satellite Reception and Monitoring by Scott, KA7FVV

Last falls editorial about working Amateur Radio FM Satellites I hope sparked some interested in the hobby. Another facet of the hobby is monitoring and decoding satellite transmissions as well.

Another aspect of tracking satellites is monitoring satellites other than amateur radio. Weather and Cosmos Russian Navigational satellites to name a couple. These satellites are easy to hear with a standard scanner or portable radio since the signals are fairly strong.

### NOAA 18 on January 7th

#### Weather Satellite Frequencies

NOAA 15 - 137.500

NOAA 18 - 137.9125

NOAA 19 - 137.100

Weather satellites can also be decoded to see the weather picture. Weather satellites transmit a 30 khz signal and it usually takes a special receiver to decode successfully. The WxtoImg program claims they can decode well with a 5 khz receiver with their registered version of the program. Both John, KD7AAT and myself Scott, KA7FVV have had great luck with the unregistered version and a vhf transceiver or communication receiver for reception.

[www.wxtoimg.com](http://www.wxtoimg.com).

Weather satellite status updates: [home-page.ntlworld.com/phqfh1/status.htm](http://home-page.ntlworld.com/phqfh1/status.htm)

#### Cosmos Russian Navigational Satellites

149.910, 149.940, 149.970, 150.000, 150.030.

These satellites are in the musson.txt element set on Celestrak.

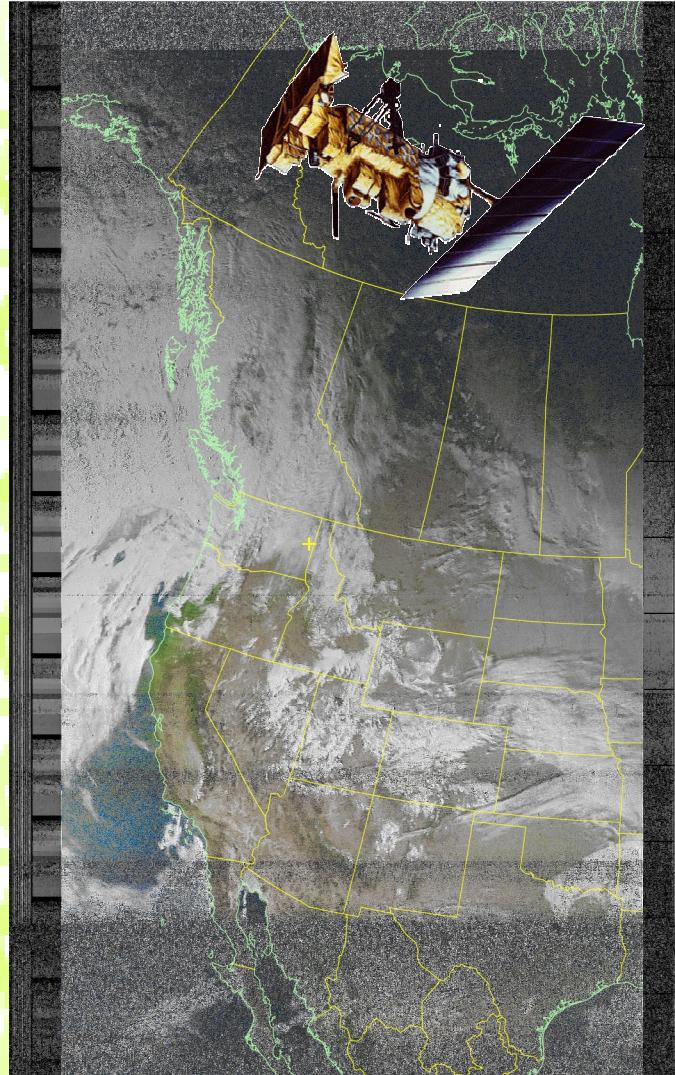
#### Satellite names and frequencies

[www.hobbyspace.com/Radio/index.html](http://www.hobbyspace.com/Radio/index.html) is another good source.

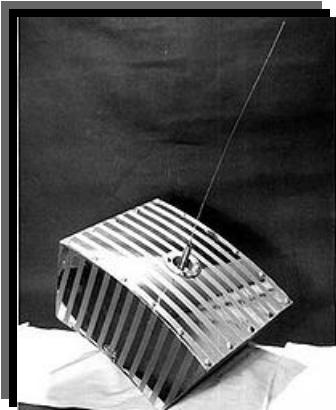
Good comprehensive list of frequencies: [www.zarya.info/Frequencies/FrequenciesAll.php](http://www.zarya.info/Frequencies/FrequenciesAll.php)

**International Space Station** is easy to monitor on 145.825. This is the APRS frequency and is active most of the time. It can be worked easily with a APRS station. It is also the brightest satellite in the sky when morning or evening passes allow viewing.

**Orbitron Satellite Tracking:** <http://www.stoff.pl/> is great free tracking software.



## Celebrating 50 years of Amateur Radio Satellites



On December 12, 1961, Oscar 1 was launched. Carrying a simple CW beacon transmitting Hi Hi on 145 mhz the satellite was heard around the world by many amateur radio operators.

To date more than 70 amateur radio satellites have been launched. The most recent being AubeSat-1 that has been designated Amsat Oscar-71 (AO-71) similar to Oscar 1 it carries a CW beacon on 437.475 mhz..

More information can be seen about Oscar 1 at the links below:

<http://www.arrl.org/news/oscar-i-and-amateur-radio-satellites-celebrating-50-years>

<http://en.wikipedia.org/wiki/OSCAR>



## RIP to ARISSat-1 and AO-51

ARISSat-1 went QRT on January 4th at approximately 0700 UTC. After 154 days in orbit and fascinating hundreds of amateur radio operators.

AO-51 went QRT on November 29th after operating for 7 years. Our next FM Amateur Satellite will be Fox-1 with an approximate launch window the second half of 2013.



## Amateur Radio and

A new TV series on ABC, Last Man Standing will feature amateur radio. Tim Allen known for Home Improvement, The Santa Clause, Toy Story and Galaxy Quest to name a few is Mike Baxter, KA0XTT. The producer of the show John Amodeo, NN6JA is a amateur and wanted this featured in the show. The show takes place in Colorado and the fake callsign reflects this for the 0 call area. The X in the suffix reflects a experimental call. The XTT has also been rumored to mean ex-Tim Taylor, Tim Allen's character in Home Improvement. The producer has convinced some cast and crew to get their amateur radio licenses. No word if Tim Allen will be getting his anytime soon. One of the first episodes featuring amateur radio will air in mid-January. See the ARRL web page for more information.



Our Annual Meeting and Camp out is coming up this summer. It will be here before you know it. Look for details in the spring newsletter.

## CAMP OUT!



# Amateur Radio License Testing - provided by Betsy, N7WRQ

## Chewelah, WA, ARRL VEC

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



## Coeur d'Alene, ID, ARRL VEC

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, (877)877-0040 email: [vetesting@k7id.org](mailto:vetesting@k7id.org)

## College Place, WA, ARRL VEC

February 26, 2012, 2:00PM, Walla Walla University, 100 SW 4<sup>th</sup> 1<sup>st</sup> 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](mailto:wb5avh@msn.com)

## Colville, WA, ARRL VEC

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

## Kennewick, WA, ARRL VEC

January 15, 2012; March 18, 2012; May 20, 2012; 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](mailto:kc7cck@frontier.com)

## Lewiston, ID, ARRL VEC

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

## Pullman/Moscow, WA, ARRL VEC

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

## Republic, WA, ARRL VEC

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

## Spokane, WA, ARRL VEC

Contact: Mary Qualtieri, AA7RT, (509)723-2503 or (509)991-2192; email: [aa7rt@arrl.net](mailto:aa7rt@arrl.net)

## Spokane, WA, W5YI VEC

February 25, 2012; April 28, 2012; June 23, 2012; August 25, 2012; October 27, 2012; December 15, 2012; all at 10AM; St. Mark's Lutheran Church Library, 316 E 24<sup>th</sup> Ave, Spokane WA 99203; contact: Betsy Ashleman, (509)448-5821 email: [n7wrq@aol.com](mailto:n7wrq@aol.com)

Please bring two pieces of identification, one having a photo, radio license, if any, plus a photocopy, & any outstanding Certificates of Completion, plus a photocopy, & Social Security number or FCC Registration Number (FRN), and cash or check made out to the "ARRL" (\$15) or "W5YI" (\$14). If you pass a lower class license, you may sit for the next highest class on the same exam fee. You may re-take any failed exam for an additional fee at the same testing session

## Hamfests for February through May 2012

**February 18, 2012. Salem Hamfair & Computer/Electronics Swapmeet.** Rickreall, Oregon at the Polk County Fairgrounds. <http://www.w7sra.com> . Flyer: <http://www.w7sra.com/flyer/Flyer%202012%20Final%20-%202011-10-18b.pdf> (588K) or a [low resolution flyer](#) (142K)

**February 25, 2012. Ham Days, Grays Harbor ARC. Elma, WA.** <http://www.gharc.org> . *This is an ARRL sanctioned event.* Contact: Les, N7GH [N7GH@arrl.net](mailto:N7GH@arrl.net) . 360-532-0157.

**March 10, 2012. Mike & Key Swap Meet.** Puyallup fairgrounds exhibition hall, Puyallup, WA. *This is an ARRL sanctioned event.* For information, contact [dmdink@yahoo.com](mailto:dmdink@yahoo.com) or [n7wa@arrl.net](mailto:n7wa@arrl.net) . <http://www.mikeandkey.org/flea.htm> Flyer in PDF. (298K)

**March 31, 2012. MicroHAMS Digital Conference. Redmond, WA.**  
<http://www.microhams.com/softcontent.aspx?scId=58>

**April 14, 2012 Yakima Hamfest. Yakima, Washington.** Selah Civic Center, 216 South 1st Street, Selah, WA. *This is an ARRL sanctioned event.* For information, contact Lindsay Kooser (509)965-6612 [n7rhw@arrl.net](mailto:n7rhw@arrl.net) . <http://w7aq.org/>

**April 14, 2012. Communications Academy.** Seattle, WA. *This is an ARRL sanctioned event.* <http://www.commacademy.org>

**April 20-22, 2012. Idaho State Convention.** Boise, ID, Voice of Idaho ARC. *This is an ARRL sanctioned event.* Info, Lynn Rasmussen , W7RAZ, (208)550-7710, [w7raz24@gmail.com](mailto:w7raz24@gmail.com) . <http://www.idahostateconvention.com/>

**May 4-5-6, 2012. EmComm West.** Reno, Nevada. *This is an ARRL sanctioned event.* <http://www.emcommwest.org/>

**May 6, 2012. Maple Ridge Swapmeet.** Maple Ridge, BC.  
[http://rac.eton.ca/events/detail.php?event\\_ID=1517](http://rac.eton.ca/events/detail.php?event_ID=1517)

**May 18-20, 2012. Washington State Search And Rescue Conference.** Goldendale, Washington. <http://wasar2012.org/Home.aspx>

**May 19, 2012, Pateros 13th Annual Ham Radio, Campout/Potluck. Pateros WA.** Free "dry" camping. Always on the 3rd Saturday in may - Victoria Day weekend. <http://lakechelanradioclub.com/> Info, Roger Odorizzi [w7ch@arrl.net](mailto:w7ch@arrl.net) (509)687-3919.

**May 2012. Stanwood Camano Amateur Radio Club Hamfest,** Stanwood Middle School, Stanwood, WA. Contact Vic, N7KRE (360)387-7705) [nwecop@tgi.net](mailto:nwecop@tgi.net) . <http://www.scarcwa.org/>

**From Pacific Northwest Hamfairs and Events** <http://www.n7cfo.com/amradio/hf/hf.htm>



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>



## Unused Ham Equipment

If you have old unused ham equipment around the shack, consider selling it on the KBARA Swap N Shop. Click on the Swap N Shop link in the menu on [kbara.org](http://kbara.org).



## Amateur Radio History

I have fond memories of subscribing to this magazine. This magazine was published from October 1960 to September 2003. It was the loss of a great amateur radio magazine when Wayne Green discontinued publication. There is an online archive of the entire 43 year run. All are in PDF format and around 20 to 23 mb in size for each edition. Use this URL to link to the archive.

<http://tinyurl.com/73Magazine> Thanks to John, KD7AAT for this information.



That's all folks for this issue. Have a safe rest of the winter and look forward to another information filled issue of the KBARA Gazette in the spring. 73 for now.

Scott, KA7FVV  
Vice President and newsletter editor.



**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 N1NG** 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 #3957 N1NG** South Hill of Spokane, WA, owned by Mike, N1NG

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

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

PO Box 30801

Spokane WA 99223-3013