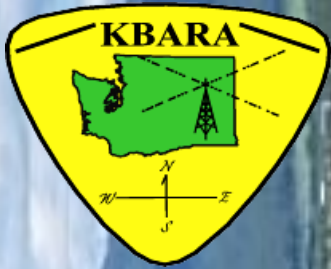


Fall 2023



Quarterly Journal of the Kamiak Butte Amateur Repeater Association

KBARA Gazette

Our old Lookout Repeater Building

Jim and I made a trip to both Lookout and Mica troubleshooting the link between the two mountain tops on September 21st. We had seen the one picture of our old repeater building that had collapsed last winter. We had to go by and see it for ourselves. I think the pictures speak for themselves. Montana Highway Patrol still have a repeater on the west end of the building that didn't collapse. Scott, KA7FVV



Technical Update

By Jim N7WRR

This summarizes the main technical issues for the quarterly newsletter which I cover weekly on the KBARA Wednesday evening nets. Tune in to the weekly Wednesday 7 PM nets for more detailed information and discussion. The big news for the last few months is that the Lookout Pass repeater is linked back into the rest of the system. Stensgar 147.36, Mica 147.38 and West Twin 147.32 are all working fairly well. Pikes Peak 147.28 is still on a temporary IRLP link until we can repair the link antenna system, which is underway.

Lookout Pass 147.02 repeater. On September 21st Scott KA7FVV and I went to the Lookout site to attempt to reestablish the link with Mica. The Lookout repeater would receive the Mica 147.38 repeater, but Mica was not receiving Lookout. I went to Mica the day before to take the filter off the link receive and lower the squelch, but it still was not receiving from Lookout. On the 21st Scott and I found that the Lookout link radio was transmitting fine; there was good power out and a very low SWR. The output power was increased from 20 to 35 watts. So that same day we went back to Mica knowing the problem was there, and after trouble shooting Mica found that the Bridgecom link radio would receive Lookout if taken off "auxiliary mode" where the controller does everything, and put on "repeater mode" instead. It's unclear why the Bridgecom repeater stopped working on auxiliary mode. In any case, the link is now established, again. Over the next few days, we were getting some interference from Lookout. So on September 27th I returned to Mica and put the filter back on the receive side and increased the squelch from 2 to 4. This has eliminated most of the interference problems but there is still some occasional interference at Mica during some of the morning nets. I will increase the squelch some more next time I go up to Mica.

Pikes Peak 147.28 repeater. On October 11th Betsy N7WRQ and I went down to Pikes Peak and spent a day in the rain working on it. I checked out the feed line with some some tests, then disassembled the 4 damaged 4-element yagi antenna array that had fallen off the tower, bringing it back to Spokane for repair. Also I installed a dipole antenna in the building for the 220 link radio. We then went to visit Logan KK7HUI in College Place. He has been very generous to host the IRLP connection to Pikes Peak via a 2m radio. We tried to use a 220 radio along with a dipole antenna I had made up. That night, Betsy hosted the Wednesday evening KBARA net from Walla Walla and we found low audio and some interference. It turned out that even with just the dipole antenna, the link radio at Pikes Peak was picking up the hub at Stensgar Mt., and combining with the up link from Logan to cause interference. The following day we took the 220 radio off line and went back to the 2m link. I disabled the repeater ID and Glen K1RR was able to remotely reprogram the IRLP to send out the ID's for the repeater, but keep them off the reflector. This will keep the IRLP folks happy until we reestablish the RF link.

Hub linking repeater 223.90 MHz. On September 16th Jim K7PDZ and I went to Stensgar to assist Karl AK2O on his system, along with removing the old duplexer from the KBARA site which was a two person job. I went back up to Stensgar to assist Karl with his repeater again the next week and found that Avista had finally moved out of the building into their new building nearby. Karl tested our hub without the filter we had on loan from him and found we still had interference from them. So he is letting us use it a bit longer and has found a company to make a replacement filter for \$600 to \$700. On the October 18th Wednesday evening net we did a straw poll of the members and all 6 that checked in voted in favor of the expenditure along with all 6 of the officers. The filter was ordered the following day and should arrive by the end of next month.

Kamiak Butte Amateur Repeater Association

August 20, 2023

3938 N Deer Lake Rd, Loon Lake WA 99148

Annual Meeting Minutes

The 45th annual KBARA meeting was called to order by Treasurer Betsy Ashleman at 1:12PM because President Dave Carleton K7DSR was not present. Fourteen were in attendance.

Last year's minutes were read by Betsy N7WRQ and approved by the members.

The Treasurer's report was reviewed. The club had 85 members; a bank balance of \$7,830.34; revenues totaled \$2,746.11; expenses \$3,110.14; memberships \$925; extra donations \$1,821.11. The expense of replacing the Stensgar hub duplexer for \$694.88 was not expected. The report as read was approved by the members.

A silent key was remembered: Harry Estep W7HEE passed away suddenly earlier in the year. He was an active member of KBARA as Secretary and also active with ARES/RACES and is very much missed.

Under new business, reports on the repeaters were given by Jim Ashleman N7WRR. The hub repeater 223.90 Mhz on Stensgar Mt. was purchased by KBARA from Karl Shoemaker AK2O for \$200.00. The hub connects the 147.36, 147.38, 17.28 repeaters and IRLP. A new duplexer was purchased for it as mentioned previously.

KBARA now is majority owner of the repeater system, with various site leases & frequencies listed in the club's name.

The Stensgar Mt. repeater 147.36 still cuts out from time to time, but restarts immediately after the system drops. A filter was tried, but to no avail.

Regarding the Mica Peak 147.38 repeater, a battery backup was put in place, and a tune-up was conducted by Rod Ekholm KC7AAD.

Regarding the Lookout Pass 147.02 repeater, the link to Mica Peak is still down. Earlier this year, the owner of the Lookout site died; the site was then sold to a communications company, and it was understood that KBARA's lease would still be honored for several more years. The old building the repeater was formerly in collapsed this last year.

About the Stensgar Department of Natural Resources lease, the fee is still \$100 per year, but as the State of Washington continues to look for revenues, this fee may increase substantially in the future.

The Pikes Peak 147.28 repeater is still linked to KBARA by IRLP; the intention is to re-establish that link via rf when the link antenna can be repaired and remounted on the tower.

EchoLink is working well, thanks to Fred W5MGM. The future of IRLP reflector 9075 was discussed should its owner Dave KL7M retire.

The ID'er on the Pikes Peak 147.28 repeater still broadcasts throughout the entire system; that should be corrected soon.

The group gave approval for \$1000 to be spent toward purchasing a new 4 port controller to be used as a backup.

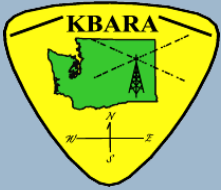
The officer and director elections were held, with Dave K7DSR being again elected as President, Jim Johnson KM7H as Vice President, George Timm N6JXN as Secretary, Betsy N7WRQ as Treasurer, and Jim Ashleman N7WRR as Director (a three year term).

The meeting was adjourned at 1:52PM.

Respectfully submitted,

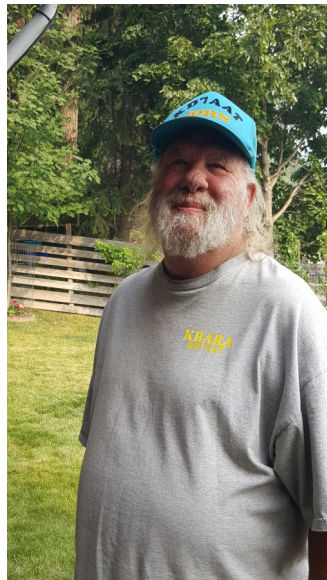
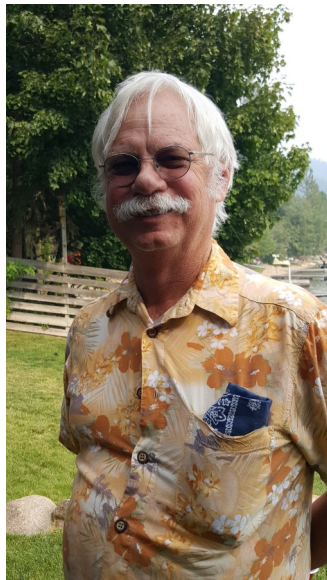
Betsy Ashleman N7WRQ

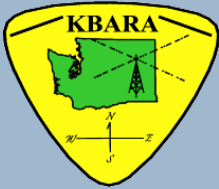
KBARA Treasurer



Pictures from 2023 Annual Meeting

Thank you to Valaire, KG7OWX for the pictures





GMRS in the Spokane Area

by Scott, KA7FVV/WRUT868

Some of us are already familiar with GMRS (General Mobile Radio Service). When I got involved in it about a year ago, I was surprised at the number of local amateurs that were also licensed GMRS operator as well. Almost like it was a deep, dark secret. I have met some other hams through GMRS radio as well.

In the last year the cost of the GMRS license had dropped from \$70 to \$35 just like our amateur license. There is no test for GMRS. Just the license application on the FCC website and the \$35 fee. As a amateur radio operator you all ready have a FRN number (FCC registration number). This make applying for the GMRS license much easier. The new license will be linked to the same FRN as your amateur callsign. Once your application is complete and the license fee is paid it only takes 2 or 3 days to receive your callsign via email. This is good for 10 years just like our amateur radio license.

There is a lot of GMRS activity in the Spokane area. Here are the local repeaters:

Krell: Rx 462.675 Tx 467.675 Tone 77.0

Arbor Crest: Rx 462.625 Tx 467.625 Tone 100.0

Liberty Lake: Rx 462.550 Tx 467.550 Tone 77.0

Loon Lake: Rx 462.575 Tx 467.575 Tone 141.3

Cheney: Rx 462.725 Tx 467.725 Tone 127.3

There is a Facebook group for the local area, Inland Empire GMRS Operators.

Net on Krell every Saturday night at 7pm.

We have been doing a simplex test on Channel 7 (462.7125) on Friday and Saturday evening at 6:30 pm. Just get an idea of how far we can talk. Or how many "FARS", is a joke in the GMRS world.

There is a GMRS Breakfast at Uncle Rusty's on 2nd and Maple the 2nd Sunday of every month at 8 am.

GMRS radios like Baofeng's, Radioddity and Tidiradio handhelds are fairly inexpensive.



Greetings,

Please join your fellow Hams in celebrating the holiday season with a no-host luncheon:

**December 16, 2023, Saturday, 1PM
Longhorn Barbecue Restaurant
2315 N Argonne Rd
(corner of Argonne & Montgomery)
Spokane Valley WA 99212
509-924-9600**

All Amateur Radio operators, their families & friends are invited to attend this 22nd annual fun get-together.

73,

de S Claus





Kamiak Butte Amateur Repeater Association
 KB7ARA
 PO Box 30801
 Spokane WA 99223-3013



KBARA is a support group for several club and privately owned linked Amateur Radio repeaters. The system covers an area from NE Washington to NE 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, IRLP, EchoLink KB7ARA-R, and AllStar node 53587. The repeaters' frequencies, call signs and locations are as follows:

- 147.380 MHz N7WRQ on Mica Peak near Spokane, WA, owned by Betsy N7WRQ & Jim N7WRR
- 147.360 MHz N7WRR on Stensgar (Stranger) Mt. near Chewelah, WA, owned by Jim N7WRR & Betsy N7WRQ
- 147.320 MHz (103.5 Hz tone) KA7FVV on West Twin near Moscow ID, owned by Scott KA7FVV & KBARA
- 147.280 MHz KB7ARA on Pikes Peak in the Blue Mountains near Walla Walla, WA, owned by KBARA
- 147.020 MHz KB7ARA on Lookout Pass on the Idaho-Montana border, owned by KBARA
- 223.900 MHz KB7ARA hub repeater on Stensgar (Stranger) Mt. near Chewelah, WA, owned by KBARA
- 444.350 MHz N1NG (192.8 tone) on Mica Peak near Spokane, WA, owned by Mike N1NG
- IRLP Node #3638 in Spokane WA owned by Glen, K1RR

All licensed Amateur Radio operators are welcome to use this open repeater system.

To support KBARA, please send your contributions to: KBARA, P.O. Box 30801, Spokane, WA 99223-3013

Name _____ Call Sign _____

Address _____

City/State _____ Zip _____

Telephone _____ Amount Paid _____

Email Address _____ ARRL Member? _____

Dues are \$15.00 per year for individuals and \$20.00 for a family (all must be living at the same address), but any amount will be greatly appreciated. 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. Also, any contribution to the Repeater Fund will be gladly accepted. For more info, please visit our website at www.kbara.org. See us on Facebook.



Upcoming Hamfests and Events

Courtesy of N7CFO.com

~~~~~2024~~~~~

**February. Salem Hamfair.** Rickreall, OR. <http://www.w7sra.com/>

**March 9th. Mike & Key Swapmeet.** Puyallup, WA. <https://www.mikeandkey.org/index.php>

**April. Kamiah Hamfest.** Kamiah, ID.

**May 11. Stanwood Camano ARC 31st Annual Electronic Flea Market and Hamfest.** Stanwood, WA. [https://scarcwa.org/ham\\_fest.shtm](https://scarcwa.org/ham_fest.shtm)

**May. N7YRC Tailgate Party,** Union Gap, WA.

**May 31, June 1-2, 2024. SEA-PAC Hamfest and ARRL Northwestern Division Convention.** Seaside Convention Center, Seaside, Oregon. [info@seapac.org](mailto:info@seapac.org) . [www.seapac.org/](http://www.seapac.org/) .

**June. Wenatchee ACARC Hamfest,** Dryden, WA. <https://www.applecityarc.com/>

**June. Grays Harbor Electronics and Hamfest/Flea Market.** Hoquiam, WA.

**June. Port Ludlow ARC Tail Gate Swapmeet.** <https://www.n7pl.org/>

**July. Glacier Waterton International Peace Park Hamfest.** Glacier Meadows Campground, 13 miles west of East Glacier on MT Hwy 2. <http://www.gwhamfest.org/>

**July. Coos County Radio Club Hamfest and Swapmeet.** Bandon, Oregon.

**July. Chehalis Valley ARC Ham Radio Tailgate Swapmeet** Flyer in PDF. <http://www.cvars.org/>

**August. Puget Sound Antique Radio Association Swapmeet.** <https://www.pugetsoundantiqueradio.com/>

**August. Pacific NW DX Convention.** <https://pacificnwdxconvention.com/>

**August 12. Kootenai Amateur Radio Society Hamfest.** Post Falls, ID. **S**

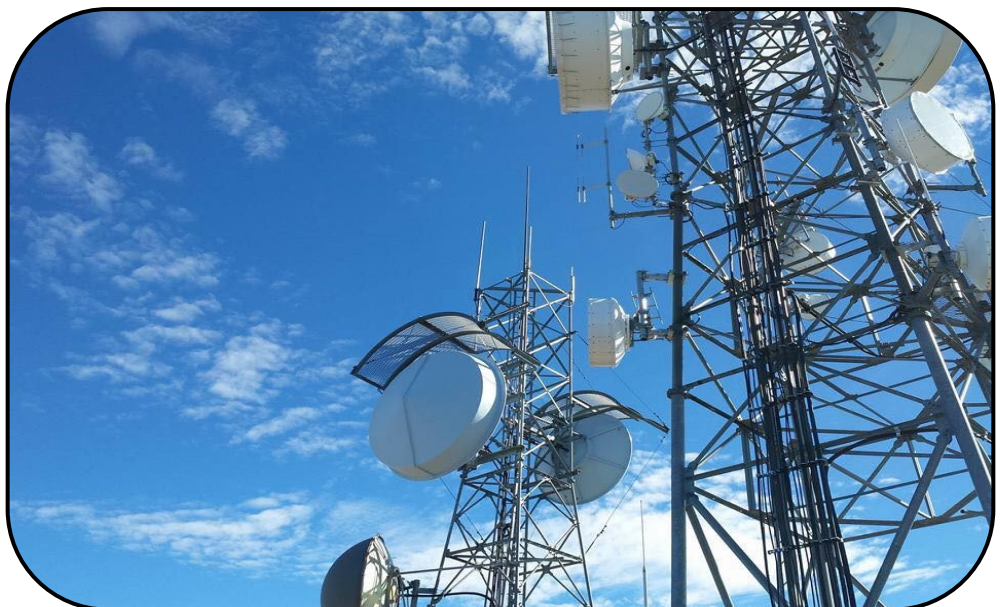
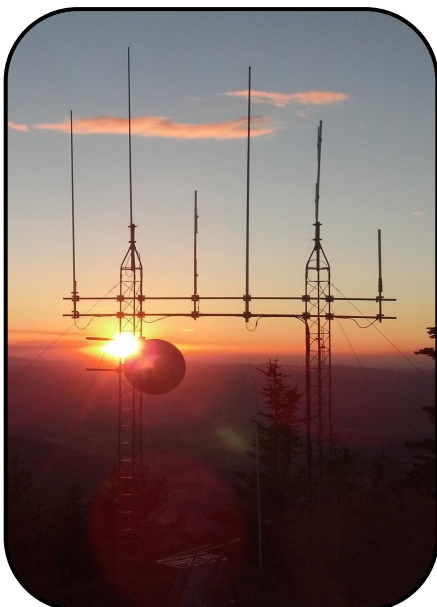
**September 30. High Desert Amateur Radio Group 3rd Annual High Desert Ham Fest,** Redmond, Oregon. Deschutes County Fairgrounds. [www.hidarq.org](http://www.hidarq.org) contact [kf7max@arrl.net](mailto:kf7max@arrl.net)





# KBARA Repeaters and Echolink/IRLP Nodes

| Frequency         | CTCSS Tone | Location          | Call sign | RF Link                     |
|-------------------|------------|-------------------|-----------|-----------------------------|
| <b>Repeaters</b>  |            |                   |           |                             |
| 223.90 MHz        | None       | Stensgar Mtn      | KB7ARA    | Hub                         |
| 147.38 MHz        | 100.00     | Mica Peak         | N7WRQ     | KB7ARA—223.90               |
| 147.36 MHz        | None       | Stensgar Mtn      | N7WRR     | Hard wired Hub              |
| 147.02 MHz        | None       | Lookout Pass      | KB7ARA    | N7WRQ—147.38                |
| 147.28 MHz        | None       | Pikes Peak        | KB7ARA    | KB7ARA—223.90               |
| 147.32 MHz        | 103.5      | West Twin, Moscow | KA7FVV    | IRLP                        |
| 444.350 MHz       | 192.8      | Mica Peak         | N1NG      | Stand Alone                 |
| <b>Links</b>      |            |                   |           |                             |
| Echolink KB7ARA-R | N/A        | Spokane, WA       | KB7ARA-R  | KB7ARA - 223.90             |
| IRLP Node 3638    | None       | Spokane, WA       | K1RR      | KB7ARA—223.90<br>& Ref 9075 |



**KBARA Membership / Support Information:** The KBARA repeater system consists of several club & 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. All licensed Amateur Radio operators are welcome to use this open repeater system. Your support would also be greatly appreciated. Please visit this site for more information:

<http://www.kbara.org> for more information about the club and repeaters.

## KBARA Officials

### Directors

Jim Ashleman, N7WRR  
Scott Harvey, KA7FVV  
Glen Ahlborn K1RR

### Officers

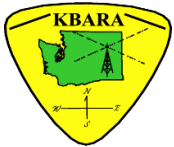
President: Dave Carleton, K7DSR  
Vice President: Jim Johnson, KM7H  
Secretary: Tim, N6JXN  
Treasurer: Betsy Ashleman, N7WRQ

Testing is held the 3rd Wednesday of every month. Brought to you by Glen, K1RR. If you have any questions please contact Glen at [glen@k1rr.com](mailto:glen@k1rr.com) or 509.216.0666.

**Contact Glen for updates on testing.**



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. This can also be done via PayPal on our webpage at [www.kbara.org](http://www.kbara.org).

## KAMIAK BUTTE AMATEUR REPEATER ASSOCIATION

PO Box 30801

Spokane WA 99223-3013