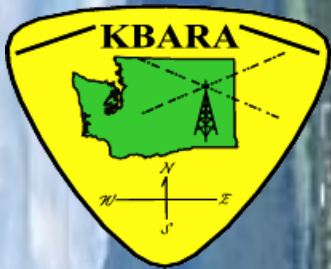


Summer 2024



Quarterly Journal of the Kamiak Butte Amateur Repeater Association

KBARA Gazette

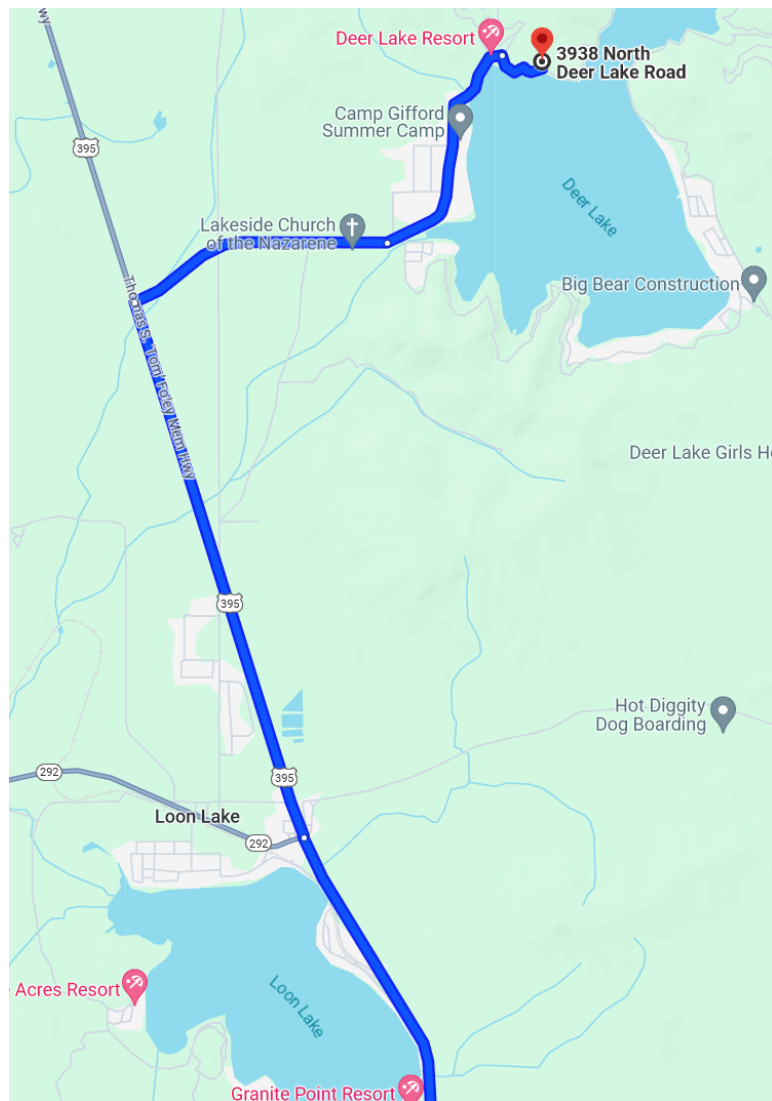
KBARA 46th Annual Meeting

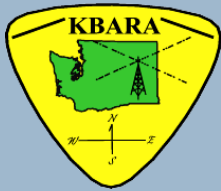
KBARA's 46th annual membership meeting will be held Sunday, August 18, 2024 at 1:00 PM, followed by a potluck lunch. The location is Deer Lake, WA this year at 3938 N. Deer Lake Rd, 3 miles north of Loon Lake.



Please bring your favorite beverage & potluck goodie to go with bbq'd ribs, hosted by Jim & Betsy N7WRR & N7WRQ.

Too, any KBARA member willing to offer their time in serving as a club officer, please contact the current officers.





Technical Update

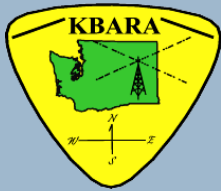
by Jim, N7WRR

We have been having some issues with the 147.38 Mica repeater. There has been a long tail caused by traffic coming in from the hub at Stensgar. I have checked and reprogrammed the controller at Mica several times. On May 27th Betsy N7WRQ and I went to Mica site and reprogrammed the link radio, but it still caused a long tail on the system. So thinking the tone board on the link radio might be bad, went down to Walla Walla on June 18th to get our radio gear from Logan, KK7HUI which included another link radio. A big thank you to Logan for all the help by setting up an internet link for the time the 147.28 link was down. I went back up to Mica on the 25th of June and switched in the link radio from Walla Walla and installed a new control cable. Still a long tail. Therefore assumed it must be the controller. We have had problems with port 2 (the hub port) on the controller for some time. The tune pots on the board are bad and very erratic and difficult to adjust. Then more recently the transmit link to the Hub at Stensgar started cutting out. I am thinking this is also related to the controller. On July 9th after getting approval from all the KBARA directors and officers a new controller was ordered. It is a 6 port controller and of newer technology than our existing 4 port ones. This will allow us to send back the one at Mica for repair and have it as an extra since the controllers at Stensgar and Lookout all also have at least one of the 4 ports not working. It will take at least 2 weeks to receive the new controller and at least another week for me to program it and get it ready. So in the meantime if you use Mica remember you can hear everything from the hub which includes all the rest of the system, including IRLP and EchoLink, but much of the time you will only be heard on the Mica repeater and not on the rest of the system. I will try and do another trip to the Mica site and check the link radio and antenna system, but am fairly sure it is the controller. While at Mica also did measurements for an ice shield for the hub antenna, and also increased squelch again on the link to Lookout to 6, this seems to have eliminated most all of the local interference.

On July 20th learned on the KBARA system that much of the cell service was out for southern Stevens County. People reported in on the 147.36 that Chewelah, Loon Lake – Deer Lake area, and Fruitland were all without cell service for all the major carriers. It remained out for most of the day. People take for granted that the cell service is always available and internet will always be there. It's nice to know that Ham radio can fill in communications when they fail. That is why KBARA is here and why we try to keep as much of the system with RF links as possible.

Remember to check into the weekly KBARA Wednesday evening nets at 7pm for more information on the status of the system and with any questions you may have regarding the system or questions in general regarding amateur radio. We will try to get you answers. Also don't forget the KBARA annual meeting on August 18th at Deer Lake. Come meet people, and have a voice in KBARA. We are always looking for more people that would like to help out.





Blast from the Past

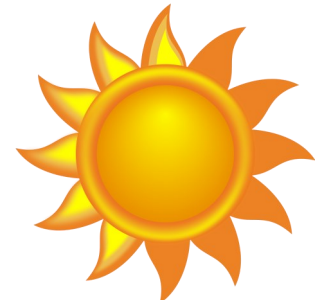
Solar Indices by John P. Dempster, W7OE from Summer 2014

We hear the terms "Solar Flux", "A Index" and "K Index" bantered about over Amateur Radio--especially by those that like to work a lot of DX. Many of us use this information to anticipate activity on various Amateur Bands--especially the upper HF frequencies. In a condensed version the higher the Solar Flux the better the propagation on the upper HF bands. This reflects the amount of ionization of the upper "F- layer" which reflects our signals and allows multi hop contacts all over the world. I remember around the year 2001 working Japan almost every afternoon on 6 Meters when the solar flux was between 200 and 300. This occurs during the peaks of the 11 year sunspot cycle. When the solar flux is low (around 100) the ionization of the F-Layer is low and usually the bands above 20 Meters are dead and 20 Meters is open for shorter--higher angle--propagation during the day. However, don't despair, the lower bands such as 160 Meters are great. Why? When the sunspot level is low and the solar flux is also low, that dreaded "D-Layer Absorption" is reduced and the lower-angle long-distance skip is more effective. I recall working Europe and Africa almost every evening on 160 Meters during this sunspot low.

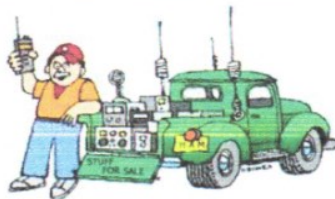
The "K" and "A" Indices represent the amount of geomagnetic disturbance--usually brought on by solar flairs (not to be confused with the flared pants worn in the 70s). Basically the "K" Index is the immediate measurement and the "A" Index is the average over and longer measurement period. A solar disturbance--with an associated high "K" Index" will completely destroy propagation on the mid HF bands such as 20 and 15 Meters with a lesser effect on the lower HF bands. I recall working a station on 20 Meters and all of a sudden he and all other stations completely disappeared on the band in a matter of a few seconds. The term "the solar curtain has dropped" describes this phenomenon. Again, don't despair, Auroral and Auroral-E propagation develops on the upper bands (10 Meters, VHF, and UHF). I recall a contact on 2 Meter CW with a station in Colorado with just a 5/8 wave mag mount antenna on my metal chimney cap. Usually I would assemble one of my yagis and point it north toward the auroral curtain and go from there for better results. If you see an Aurora Borealis by all means get on 6 or 2 meters and take a whack at it. Your success on FM may be limited due to the Doppler Shift. Why? The Auroral Curtain is moving in many directions at a significant speed. When components of the curtain approach you the received frequency goes up and the frequency goes down when components of the curtain recede from you. This movement is very rapid so the received signal is spread out over several KHz. On 2-Meter CW the received signals have a buzzing sound with no discernible tone. SSB is impossible to copy above 6 Meters. FM should even be worse since it has an even larger bandwidth.

I have provided a link for a more detailed summary of the Solar Indices provided by the ARRL which is--in my opinion--harder to understand than my simpler more interesting version.

<http://www.arrl.org/files/file/Technology/tis/info/pdf/0209038.pdf>



ARRL Idaho State Convention And KARS Hamfest 2024



2130 N Meyer Road, Post Falls, ID

08/03/24, 8AM – 3PM

Tailgaters Arrive 7AM, Visitors Arrive 8AM, Sales Begin 9AM

\$5 per Visitor, \$10 per Tailgate (includes entry)

Kids under 18 free

Raffle tickets \$1, or 6 for \$5

Grand Prize tickets \$5

Breakfast and Lunch Available

Club Resale Table and Program Your Radio Table

Commercial Vendors

Many Raffle Prizes

Grand Prize: ICOM 7300 HF Transceiver

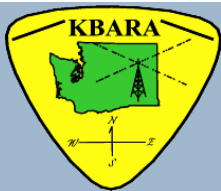
Contact Persons

Jay Bremner (KK7BVY) – (208) 640-4878

Ed Stuckey (AI7H) – (208) 699-7743

Visit us on *K7ID.ORG*

Talk-In: 146.98 Mhz, PL 127.3



Salmon Run 2024

Washington State QSO Party

1600Z Saturday, September 21, 2024 - 2359Z Sunday, September 22

While the [Pacific Northwest DX Convention](#) is just around the corner in August, Salmon Run is also quickly approaching the third full weekend in September. This year, it's September 21-22. Whether it's from home, mobile, or as an expedition, we hope that you all will consider participating in this year's Washington State QSO Party - the one and only Salmon Run. Whether it's to chat with old friends across the state or try and beat last year's score, there's an opportunity for fun and a little friendly competition for everyone!

Prizes! Top scorers have an opportunity to earn a slate of prizes including plaques, smoked salmon, and commemorative clean sweep glasses. See the rules page on the website for all the details.

The 2024 County Activations form and data display is now live on the [Salmon Run website \(https://salmonrun.wwdxc.org\)](https://salmonrun.wwdxc.org). Please visit the link to enter your activation information. All stations including fixed, mobile, and expedition are encouraged to list their activations. Some of our rovers and expeditions wait every year to see which counties are least active -- filling out your station information early helps them to plan and ensure everyone has a chance to earn the coveted clean sweep.

Upon submission, the system will send you an email titled "2024 Salmon Run County Activations." Look for and **save this email - you can use it later to update your submission** if needed, just click the "Edit Response" button in the email.

The form is fully self service again this year. Please read over the instructions prior to submitting the form; only stations working in multiple counties at different times (e.g. mobiles or traveling expeditions) should need to fill out the form more than once. If you need to update your submission, please don't submit the form again, use the link in the email as described above. The map results on the website are updated to display the submitted data about every 15 minutes.

Mobiles: if you're going to more than a few counties please contact me directly and I can enter the form information for you in a more efficient way.

Please email me directly at salmonrun@wwdxc.org if you have any questions or issues; I look forward to working you all in Salmon Run!

Justin, K5EM
WWDXC Salmon Run Committee Chair





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

August 3. Kootenai Amateur Radio Society (KARS) ARRL Idaho State Convention, Post Falls, ID. ***This is an ARRL Sanctioned Event.*** www.k7id.org

August 9-11. Pacific NW DX Convention. Everett, WA ***This is an ARRL Sanctioned Event.*** <https://pacificnwdxconvention.com/>

August 17. 15th Annual Tailgate Swapmeet. Mini-Cassia Amateur Radio Club, Inc. 9:00 am - 1:00 pm. Minedoka County Fairgrounds, 085 East Baseline Road, Highway 25, Rupert, Idaho. <http://www.minicassia.club>

August 18. Puget Sound Antique Radio Association Swapmeet. <https://www.pugetsoundantiqueradio.com/> [Flyer in PDF.](#)

September 22. Delta Amateur Radio Society CommFest. Delta, BC. https://hambone.ca/rac/events/detail.php?event_ID=2362

October 3-4-5. Microwave Update/Western Canada Weak Signal Association/Pacific Northwest VHF Society Conference. Vancouver, BC. <http://www.pnwvhfs.org/> <https://wcwsa.ca/>. [Flyer in PDF.](#)

October 19. Kitsap County ARC Hamfest. Bremerton, WA. <https://kcarc.org/hamfest/>

October 19. Swaptoberfest. Rickreall, OR. www.swaptoberfest.org info@swaptoberfest.org [Flyer in PDF.](#)

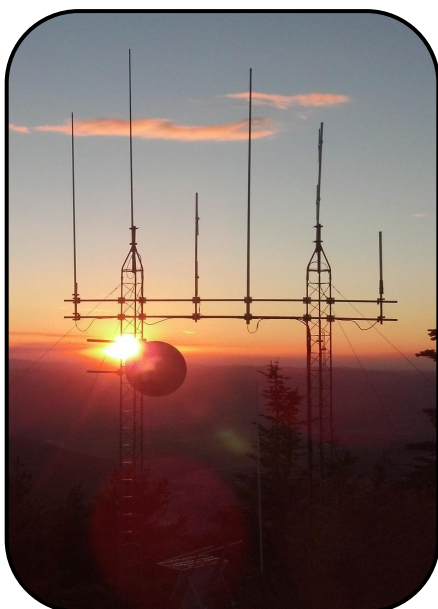
October. Walla Walla Valley ARC annual tailgate swapmeet. W7DP Clubhouse, 1504 Justice Ave, College Place, WA.





KBARA Repeaters and Echolink/IRLP Nodes

Frequency	CTCSS Tone	Location	Call sign	RF Link
Repeaters				
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
Links				
Echolink KB7ARA-R	N/A	Spokane, WA	KB7ARA-R	KB7ARA - 223.90
IRLP Node 3638	None	Spokane, WA	K1RR	KB7ARA—223.90 & 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

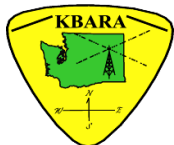
President: Dave Carleton, K7DSR
Vice President: Jim Johnson, KM7H
Secretary: Tim, N6JXN
Treasurer: Betsy Ashleman, N7WRQ

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 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.

KAMIAK BUTTE AMATEUR REPEATER ASSOCIATION

PO Box 30801

Spokane WA 99223-3013