

KBARA Gazette

Quarterly Journal of the Kamiak Butte Amateur Repeater Association

Summer 2022

Parks on the Air—POTA

In years past I had written an article on Summits on the Air—SOTA. This requires scaling a summit that is on the activation list and one of the requirements is to carry your gear at least the last 100 feet and then setup and activate. Another seemingly more popular and easier activity is called Parks on the Air or POTA. Looking on the POTA website, <https://parksontheair.com/>, most of us probably have a park or several near us that are activation points. A lot easier than scaling a mountain and carrying your equipment the last 100 feet.

I have asked two of our local hams that are active in POTA to write articles for this quarters newsletter to introduce you to the activity or contest if you will, of Parks on the Air or POTA. Please see their articles by Dale, N7DFL and Jim, WA7VFQ. I have also tried POTA with either my Icom IC-705 running QRP at 10 watts or Icom IC-718 at 100 watts and have yet to activate a park. Dale and I were at Riverside State Park and he got the activation and I only had two contacts. Still trying different antennas to see what works. On our activation I did hear Italian stations on my Wolf River Coil antenna. POTA is like a Field Day that you can do all year instead of just June or December. It can be done on VHF, UHF and HF or all of the bands.

Scott, KA7FVV



KBARA's 44th annual membership meeting will be held Sunday, August 21, 2022 at 1:00 PM, followed by a potluck/hamburger lunch. The location is Deer Lake, WA this year at 3938 N. Deer Lake Rd, 3 miles north of Loon Lake.



Bring your swimsuit, favorite beverage & potluck goodie if you wish; bbq'd burgers provided 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.





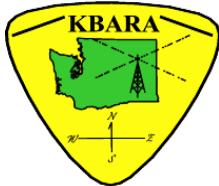
KBARA Technical Update

by Jim, N7WRR

Most of the KBARA system is working fairly well at present. The IRLP node 3636 on East Tiger that connects the westside BEARS repeater with the KBARA system is working again thanks to Bob WA7HTJ. Its good to hear folks from the Puget sound again. Lookout is left off line much of the time due to interference getting into the link, but works well as stand-alone. I still have intentions of trying to solve the problem.

West Twin 147.32 went down during an electrical storm. Scott (KA7FVV) and I got replacement gear and parts together and Scott programed up a repeater I had in case we needed it. We made a trip down on 21st of July to make repairs. It turned out there was no damage to the repeater and controller; it just needed a power down and restart and both are now working fine. We were glad to get it back on line quickly since two of our net controls use that repeater. Next time we get access to the site we will add some additional grounding to the equipment to help avoid future problems, although the repeater has been working well for quite a few years.





POTA Activations

by Dale, N7DFL

I upgraded to General about a year ago and wanted to try something fun and challenging on the bands. I kept hearing people calling CQ Parks on the air (POTA), so I answered me caller and he gave me a quick explanation about POTA and to YouTube it to learn more, sounded interesting so I did! I began "hunting" activators first and I believe I'm in the top 300 Hunters (There are 21,005 hunters today) with a total of 2282 contacts, 1268 parks hunted to date, I try to add to this total daily!

I finally watched enough YouTube videos to feel like I could Activate a park, so I loaded up my IC 7300 and a EFWH antenna I had and off to Riverside State Park I went, I took me about a hour to finally get set up and get the nerve to call CQ POTA..... I am so glad I did. Working endless pileups for the first time was very addicting! I now have perfected and have the right equipment to set up in just 10 minutes, to date I have activated 57 unique parks with 1064 QSO's and plan to actually as many parks as possible in the PNW. If you are interested in trying POTA I highly suggest you get on YouTube and watch as much content on Parks on the air as possible. There are a lot of suggestions that will speed up the learning curve and make it super easy to accomplish, I would also like to help out with any questions that you have!

My POTA backpack:

Xiegu G-90 transceiver

20' coax

Packtanna EFWH 20m,linked 40m,linked 75 meters. Antenna

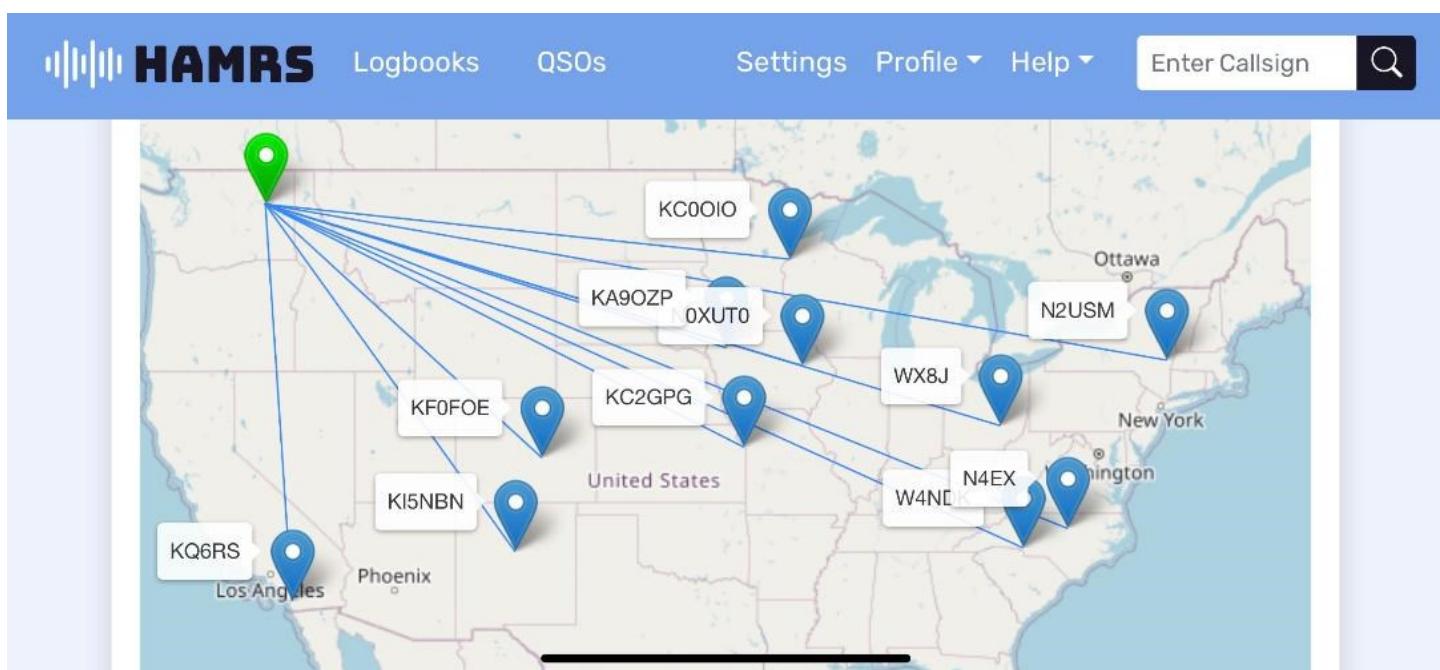
2-3 amp hour Bioenno Battery's

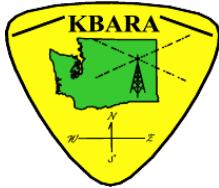
HP laptop for logging on the "HAMRS app"

Fiberglass 40' telescoping pole

Along with a bag of parts just in case!

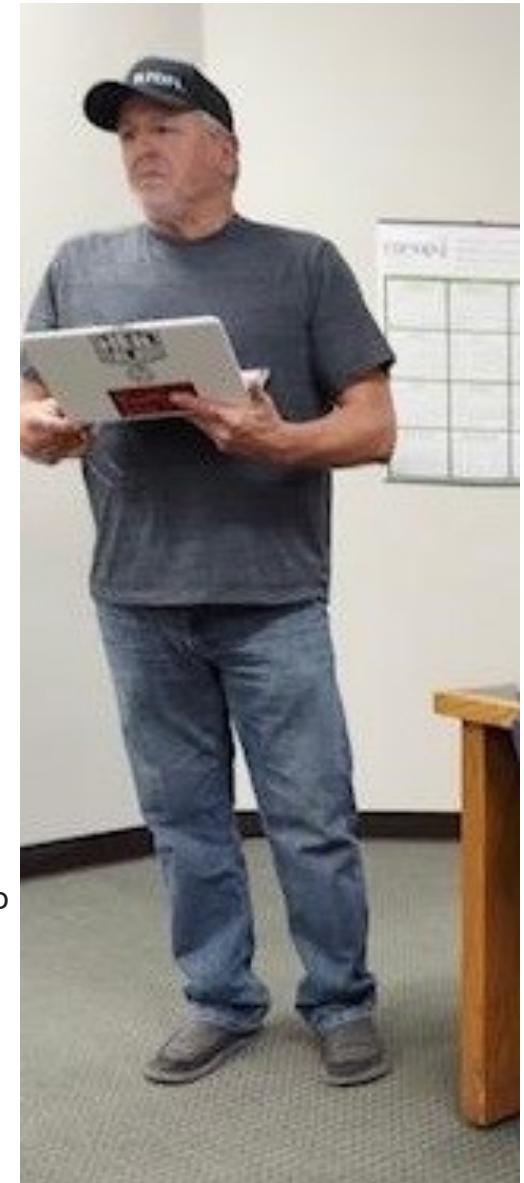
If you need more info QRZ my call





POTA Activations

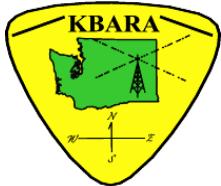
by Dale, N7DFL



Giving a POTA talk this spring

Go to my YouTube channel "The Landreth Farm" I have a video about my POTA backpack.

Thank you, Dale
from K Dale Landreth "The most Dangerous Farmer on ham
radio"
(K7DFL, WRCI575) 73



Parks on the Air—POTA

By Jim, WA7VFQ

In 2016, the ARRL had a program called National Parks on the Air – NPOTA. It was wildly successful and when it ended and 2017 was upon us, a group was formed to create Parks on the Air – POTA. POTA started with all the National Parks from the previous group and added state parks around the USA. Today there are 204 POTA parks in Washington State and 120 in Idaho.

In the fall of 2017, I was introduced to POTA while camping at Heyburn State Park near Plummer, Idaho with some ham buddies. Dave, K7MTD, was activating the park that day and told me about the process. Interesting stuff, but that day was really my first day playing with HF a serious way. I didn't try to activate the park, just keep my head above water and just try to make an HF contact.

Fast forward to January 2020, I was a little bit interested POTA and watched a video by Thomas, K4SWL about how to choose a campsite to activate a park, he was using the new Icom IC-705 QRP radio. I was in the middle of a CWops Basic class and was very interested in QRP. I watched the video about 3 times, and I was hooked. The real beginnings of my POTA adventure were born here but didn't get out of infancy for another year. I sold some equipment and picked up the Icom IC-705, a tuner and I was off to the races in March 2020, and then everything shut as COVID-19 hit. Parks were closed, travel was curtailed, and I put things on hold, but I could hunt!

Let's get a few terms squared away: mostly Activation, Activator, Hunter.

1. Activation – going to a park, being within its boundaries, setting up, calling CQ and logging. An activation occurs when you have 10 people respond. It's just an attempt if you don't get 10 contacts. You send in your log as an .adif file either way.
2. Activator – one who goes out and activates.
3. Hunter – the contact person at home or in another park. POTA has a spotting page, and you can find the callsign, frequency, and park of those who are currently activating. Therefore, you can HUNT them.

I spent most of 2020 and into 2021 hunting and gathering parks that I've hunted. Again, I was learning a lot during this period and experimented with modes and easily deployable antennas for that moment I could go out and activate. I started hunting with FT8 and gathered about 50 FT8 contacts my first year. The number of FT8 activators is much smaller than SSB, but it gave me a start. Soon I was venturing into SSB hunting and my hunted park list grew rapidly. In early spring 2021, I headed off to a park to activate and was totally skunked. I found that my setup acted differently "off the grid" and I had issues that I hadn't anticipated. I think we've all had a field day experience that taught us a big lesson, this was one of those teaching moments for me.

2021 was a big learning year with one activation. 2022 has been a year with a bunch of successes and a chance to put my learning and planning to work. Let's look at a few activations.

My first activation was 2m simplex from the top of Steptoe Butte that was done rather impromptu. We drove up and I thought, I doubt if I got on the spotting page it would help with 2m simplex, so I just started calling CQ POTA and I immediately had two hits. The first was Dan, KG7ZCW and then a guy that was rolling down state hwy 195 just below me. I then spotted myself by announcing on the local repeaters I was on simplex 146.520 calling CQ for POTA. One repeater after another and suddenly I had 11 contacts and my first activation. My next trip to Steptoe Butte in the spring of this year and this time I tossed my Icom IC-7100 in the truck and headed up. Being right at 3600 ft, Steptoe has a nice clear reach and allows a lot of distance. . I tossed a tuned 20m hamstick on a



Parks on the Air—POTA (continued)

By Jim, WA7VFQ

magmount and I was off to the races. Contacts ranged from the Atlantic coast, Nebraska, Kentucky, Alabama, and the island of Trinidad. Again, I had an activation, but not just 1, I had 2. I worked the end of the day UTC (5pm our time) and the beginning of the next day UTC, thus one park on two different days.

My next big POTA was a big deal for me. We were traveling to North Carolina for our grandson's graduation from ECU in Greenville, NC. I decided I wanted to activate an historical Atlantic coast fort, so off we traveled to Fort Macon on the Bogue Banks. I carefully planned my gear and all my setup prior. You don't want to travel 3,000 miles and have a blip. The day arrived, we headed to the park and setup just 40 yards from the warm waters of the Atlantic Ocean. I was going to try SSB QRP 10 watts on my IC-705. All was well until I started having stations setup on my frequency because they couldn't hear me. I was as far as reaching Texas, but I had to move and re-spot myself 4 times. I went into hunter mode and located stations on the spotting page and had Park 2 Park contacts. Three hours later I hit 10 stations and said goodbye to QRP for the day, I had an activation, and I was pleased. That day I had contacts north to Indiana, west to Texas, and south to Florida.

Since then, I have activated two locations on the Ice Age Flood Geologic Trail, one two-fer Park and back to Steptoe Butte. A two-fer park is a park boundary that has an overlapping park or trail.

My last trip to Steptoe Butte netted 58 contacts and a pileup that lasted till I had to say I had to leave.

I'm having fun and look forward to my next outing to a park nearby. Up till now I've only activated parks in Washington State and North Carolina, with Idaho 1 mile east of my QTH, it's time to head east and find a park.

So far, I have made contacts via SSB, CW, and FT8 for POTA and hope to someday activate in the park across the street from my son's condo in the heart of Tokyo.

My favored equipment:

Icom IC-7100 All band radio 100w

Icom IC-705 for QRP

Chameleon MPAS Lite antenna with 17' whip, this can be configured as a Delta loop

Wolf River Coils – Mini with 102" whip

15m, 20m, and 40m hamsticks with mag mount

Bioenno 12v 12ah battery (btw this is the largest battery that can be carried in carry-on luggage on a plane, NO batteries in the cargo hold, carry-on only. You can carry more than one, but this is at the watt hour limit for domestic flights)

iPad for logging with HAMRS software



Parks on the Air—POTA (continued)

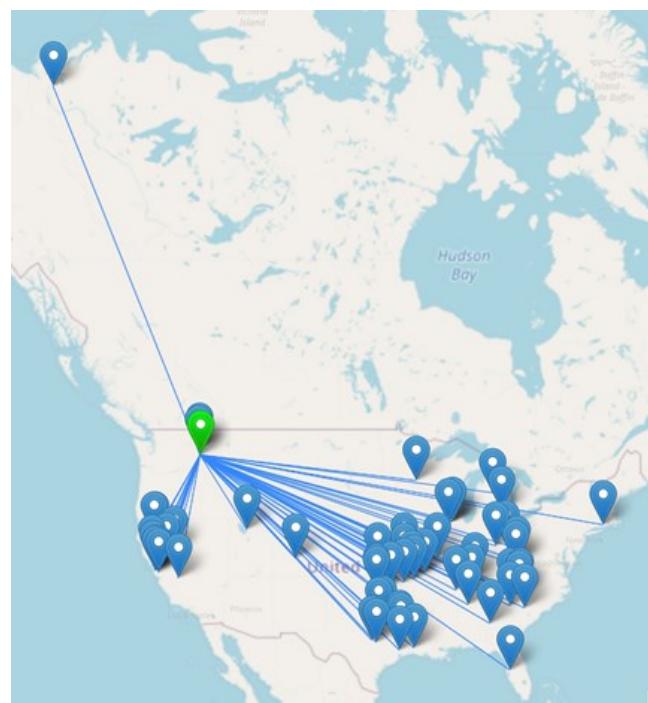
By Jim, WA7VFQ

Pictures:

Icom IC-705 setup with iPad in North Carolina



Map with contacts from last outing using a 20m hamstick.





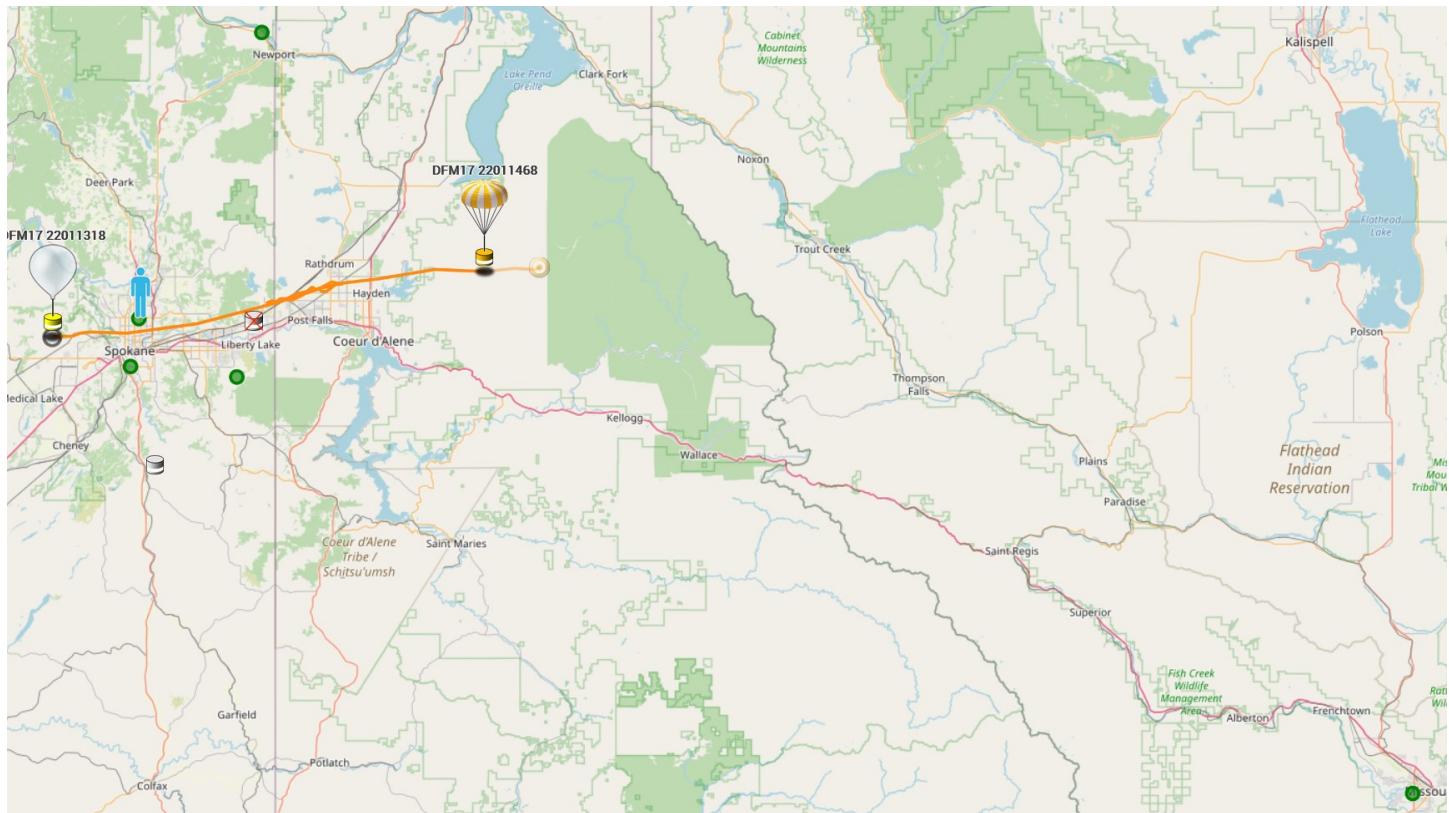
Monitoring and Recovering Weather Balloons

by Scott, KA7FVV

There have been more of us in the area that have jumped on the hobby of watching the weather balloons. These are launched twice a day from all of the National Weather Service offices nationwide. Our local office is located in Airway Heights on Rambo Road. More of us have receivers setup to receive the balloons. Myself at my QTH in northeast Spokane, Chuck, WB7NNF in the Spokane Valley, Duff, WA7BFN on the South Hill of Spokane, Dave, K7MTD in Missoula, MT and Dale, W7HLO in Newport, WA. Dave is able to receive the Spokane balloons above about 50,000 feet and even occasionally receives the Great Falls, MT balloons.

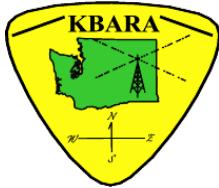
If you are interesting in hearing the balloons launched in Spokane tune your radio to 403.210 MHz FM. Monitor the [Https://sondehub.org](https://sondehub.org) for the location and data from the balloon.

Note on the map below the circle is the NWS office in Spokane and the green dots are the receive stations noted above. The track of a balloon



Notice the symbol south of Spokane. This indicates one of the balloons I recovered. Notice the same symbol in the valley with a red X on it. This is one that Chuck, WB7NNF tried to recover and was unable to. If you run the SondeHub Tracker mobile, there is a chase mode that can be turned on.

I have recently recovered two from wheat fields south of Spokane. One between Pine City and Rock Lake. The second just northeast of Spangle. On both of these they would have been hard to recover without MySondy Go receiver that interfaces with an android app of the same name and displays the radiosonde's location on a map since it is receiving latitude and longitude information in the data stream from the radiosonde. Neither one was visible from the road.



Monitoring and Recovering Weather Balloons (continued)

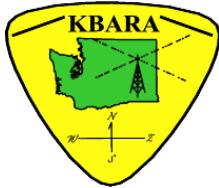
by Scott, KA7FVV

This was my first recovery of two. It was on the other side of a hill from the road. It was 1000 feet due south of me. I was able to spot it from the top of the hill, laid out on top of the wheat. There was a track in the field that was about dead center of the line connecting the radiosonde and the parachute.



This recovery had the most balloon left of any of the five I have recovered so far. Usually they are totally shredded.





Monitoring and Recovering Weather Balloons (continued) by Scott, KA7FVV



The second recovery in as many days was only about 150 feet off the road but was not visible. I had to take the MySondy Go with me to track it down. My data had shown this one was descending at 1200 fpm and it had buried itself in the wheat. Everything was sitting within an arms length area.



Here is my trophy curtain rod. Of the five that I have recovered, I have four. Chuck, WB7NNF and I did a recovery one by the Coeur d' Alene Airport noted in the last issue where we saw it land. My XYL and I recovered one west of Spokane where we saw that one land as well.



67th Annual Pacific Northwest DX Convention

Presented by the Spokane DX Association



5 – 7 AUGUST 2022
SPOKANE, WASHINGTON

At the Centennial Hotel
303 W North River Drive
Spokane, WA
(636) 736-4071

<https://pacificnwdxconvention.com/centennial-hotel-2/>
Special Convention Rates

Seminars – Saturday Banquet – Sunday Brunch
Commercial Displays – Door Prizes
Raffles – Hospitality Room – DXCC Card Checking

For more information, registration, paypal,
cancellation, refund, and mask policy, visit:
<http://www.pacificnwdxconvention.com>

Note: We must follow the state of Washington Mask
Policy and hotel policy in effect at the time of the
convention. We expect that every convention attendee
will do likewise.

SPOKANE HAMFEST



**September 24, 2022
from 9 a.m. to 4 p.m.
at University High School**

12420 East 32nd Avenue, Spokane Valley, 99216
Use east entrance on 32nd Avenue
Talk in frequency 147.38 MHz



Admission \$5 (18 & under - FREE)

- Our 45th Hamfest
- Host of the ARRL Washington State Convention

- Sat Seminars
- Sat Exhibitors
 - Swap Tables
 - Commercial Tables
- Sat Door Prizes
- Sat Fox Hunt for Youth and Adults
- Sat License Exam
- Sat Refreshments and Food Available
- Fri Vendor Setup 6-7:30 p.m.
- Sat Vendor Setup 7-9 a.m.

Registration Form (Clip & send; add sheet if needed)

Name _____ Call Sign _____

Address _____
_____ Phone number _____

E-mail address _____

Registrations @ \$5.00 each \$ _____

Age 18 & under free

Commercial-size tables

@ \$15.00 each \$ _____

Admission is not included in the price of table space.

Reserve before 9/10/20.

Swap tables @ \$15.00 each \$ _____

Admission is not included in the price of table space

Total \$ _____

Make checks payable to: Spokane Hamfest

9/23/22; they will not be mailed out.

Mail your registration to:
Spokane Hamfest
2910 E. 57th Ave., Ste. 5
PMB 255
Spokane WA 99223

For more information:
Jason Bond, KJ7QEX-
treasurer@vhfclub.org

or
David Carleton, K7DSR
Spokane Hamfest

Coordinator
davcarleton@gmail.com
(702) 862-0329

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

4/11/22

KBARA INCOME & EXPENSES 7/01/2021 to 6/30/2022

DATE	DESCRIPTION	DONATIONS	MICA PEAK	STENSGAR	STENSGAR	LOOKOUT	PIKES PEAK	WEST TWIN	IRLP	PAYPAL	OTHER	ENDING
			147.38 Mhz	147.36 Mhz	223.9 Mhz	147.02 Mhz	147.28 Mhz	147.32 Mhz	Echolink	FEES		BALANCE
07/21/21	Surge protector					(75.47)						
07/29/21	Echolink interface									(146.24)		
08/04/21	Donation	\$10.00									(0.59)	
08/09/21	Connectors, antenna clamps					(\$47.78)						
08/16/21	USPS po box rent (1 year)										(\$134.00)	
08/16/21	Spokane Hamfest seed \$										(\$200.00)	
08/21/21	Donations	\$220.00										
08/22/21	Echolink cable									(\$71.00)		
08/30/21	WA State filing										(\$10.00)	
09/07/21	Donations	\$15.00										
09/11/21	DNR site rent					(\$100.00)						
09/14/21	Donations	\$130.00										
09/15/21	Donations	\$35.00									(1.71)	
09/28/21	Donations	\$240.00										
10/06/21	Donations	\$230.00									(10.06)	
11/03/21	Donations	\$165.00									(6.41)	
11/15/21	DNR site rent					(\$100.00)						
12/04/21	Donations	\$20.00										
12/08/21	Donations	\$85.00									(5.41)	
12/20/21	Donations	\$515.00										
12/27/21	Donations	\$340.00										
12/28/21	ARRL Insurance										(\$300.00)	
01/06/22	Donations	\$150.00									(7.87)	
01/10/22	Site rent										(360.00)	
01/11/22	Donations	\$400.00										
01/17/22	Donations	\$235.00										
01/24/22	Donations	\$20.00										
01/31/22	Repeater/antenna repairs					(\$1,709.23)						
02/01/22	Donations	\$435.00									(15.68)	
02/01/22	Donations	\$50.00										
02/08/22	Donations	\$20.00										
02/09/22	Postage stamps										(\$57.75)	
02/16/22	Domain name (2 years)										(\$46.15)	
02/22/22	Donations	\$5.00										
03/01/22	Donations	\$50.00									(\$3.66)	
03/21/22	Donations	\$115.00										

04/06/22	Donations	\$40.00									(\$2.22)	
04/08/22	void Hamfest: not cashed										(4.74)	\$200.00
04/27/22	Donations	\$80.00										
05/09/22	Donations	\$80.00										
06/01/22	Donations	\$70.00									(4.16)	
06/07/22	void check #1799: not cashed											\$46.15
06/30/22	Donations (in Paypal account)	\$50.00									(2.72)	
	BEGINNING	DONATIONS	MICA PEAK	STENSGAR	STENSGAR	LOOKOUT	PIKES PEAK	WEST TWIN	IRLP/Echolink	PAYPAL	OTHER	ENDING
	BALANCE		147.38 Mhz	147.36 Mhz	223.9 Mhz	147.02 Mhz	147.28 Mhz	145.32 Mhz		FEES		BALANCE
	\$7,566.07	\$3,805.00	\$0.00	(\$1,809.23)	(\$100.00)	(\$123.25)	(\$360.00)	\$0.00	(\$217.24)	(\$59.35)	(\$507.63)	\$8,194.37

Memberships	\$775.00	Total Income	\$3,805.00
Extra Donations	\$2,030.00	Total Expenses	(\$3,176.70)



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



KBARA is a support group for several privately and club 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 and IRLP. 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 AK2O hub repeater on Stensgar (Stranger) Mt. near Chewelah, WA, owned by Karl, AK2O
IRLP Node #3638 in Spokane WA owned by Glen, K1RR
IRLP Node #3636 on East Tiger Mt, near Issaquah, WA owned by KBARA
EchoLink KB7ARA-R (947272) in Reardan, WA owned KBARA

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

Check the above page for cancelation as events get closer.

July 23. Chehalis Valley ARC Ham Radio Tailgate Swapmeet. Southwest Washington Fairgrounds, Chehalis, WA. <http://www.cvars.org/> [Flyer in PDF](#). (108K) Contact: Chuck Tifft W7TU, chuckw6rd@yahoo.com Cell (209)247-2952.

July 30. Yakima Radio Club N7YRC tailgate Swap Meet, Union Gap, WA. *This is an ARRL sanctioned event.* [Flyer in PDF](#) (150K)

July 30. Kootenai Amateur Radio Society Hamfest. Post Falls, ID. *This is an ARRL sanctioned event* <https://www.arrl.org/hamfests/kars-hamfest-4> [Flyer in PDF](#). (90K) (Contact: Edward Stuckey, AI7H, (208) 699-7743.

August 5-7. 65th Pacific NW DX Convention. Spokane, WA. <https://pacificnwdxconvention.com/> [Flyer in PDF](#). (170K)

August 21. Puget Sound Antique Radio Association Swapmeet. <https://www.pugetsoundantiqueradio.com/> [Flyer in PDF](#). (617K)

September 24. Spokane Hamfair. University High School in the Spokane Valley. *This is an ARRL sanctioned event.* <http://www.arrl.org/hamfests/spokane-hamfest-arl-washington-state-convention> Contact Dave, K7DSR, davcarleton@gmail.com .

October 1. High Desert Amateur Radio Group 1st Annual High Desert Ham Fest, Redmond, Oregon. Deschutes County Fairgrounds. *This is an ARRL sanctioned event.* [Flyer in PDF](#) (336K) www.hidarg.org contact kf7max@arrl.net

October 7-8. Pacific Northwest VHF Society Conference. Salem Oregon. *This is an ARRL sanctioned event.* <http://pnwvhfs.org/>

October 8. Kitsap County ARC Hamfest. Bremerton, WA. <https://kcarc.org/hamfest/> [Flyer in PDF](#). (1.2MB)

October 15. Swaptoberfest. Rickreall, OR. Contact: info@swaptoberfest.org [Flyer in PDF](#) (576K)

~~~~~2023~~~~~

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

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

**April. Comm Academy.** Seattle, WA. <http://commacademy.org/>

**May. Stanwood Camano Hamfest,** Stanwood, WA. [https://scarcwa.org/ham\\_fest.shtm](https://scarcwa.org/ham_fest.shtm) .

**May. River Radio Campout.** Pateros WA.

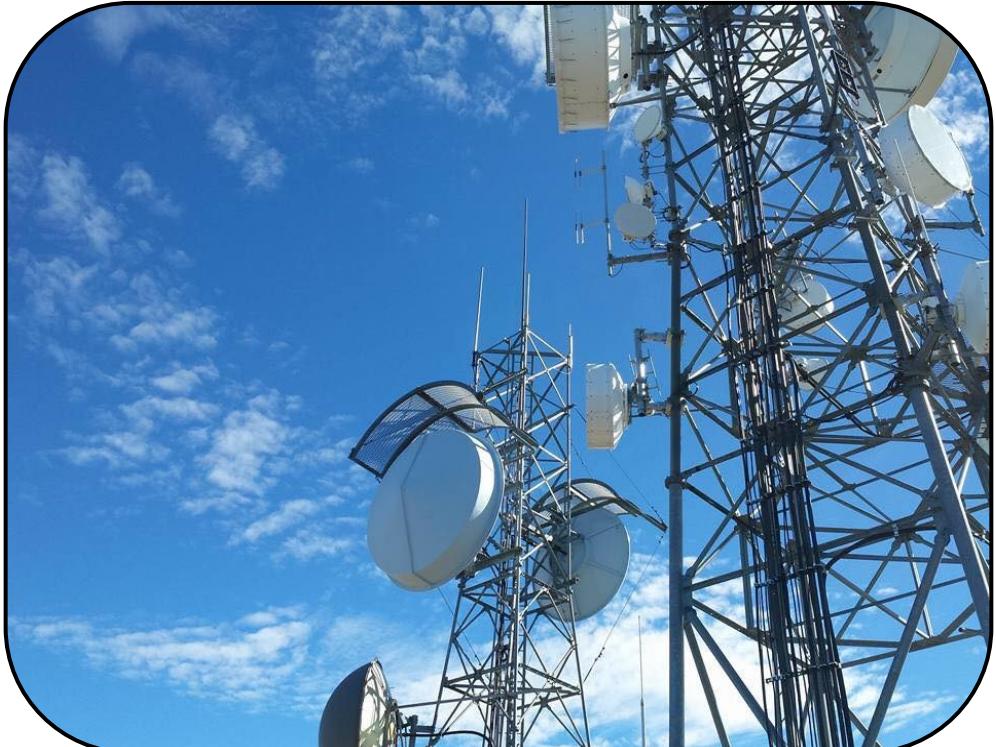
**May. Winston Tail Gate Swap Meet, Winston Oregon.** Contact: Dennis, AG7K. [mroencontact@gmail.com](mailto:mroencontact@gmail.com), (541) 733-9850.

**June 2-3-4, 2023. 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/) .

## Area Repeaters

# KBARA Repeaters and Echolink/IRLP Nodes

| Frequency         | CTCSS Tone | Location          | Call sign | RF Link                |
|-------------------|------------|-------------------|-----------|------------------------|
| <b>Repeaters</b>  |            |                   |           |                        |
| 223.90 MHz        | None       | Stensgar Mtn      | AK2O      | Hub                    |
| 147.38 MHz        | None       | Mica Peak         | N7WRQ     | AK2O—223.90            |
| 147.36 MHz        | None       | Stensgar Mtn      | N7WRR     | Hard wired Hub         |
| 147.02 MHz        | None       | Lookout Pass      | KB7ARA    | W7OE—147.38            |
| 147.28 MHz        | None       | Pikes Peak        | KB7ARA    | AK2O—223.90            |
| 147.32 MHz        | 103.5      | West Twin, Moscow | KA7FVV    | IRLP                   |
| <b>Links</b>      |            |                   |           |                        |
| Echolink KB7ARA-R | N/A        | Spokane, WA       | KB7ARA-R  | AK2O - 223.90          |
| IRLP Node 3636    | None       | East Tiger Mt     | KB7ARA    | 145.33 & Ref 9075      |
| IRLP Node 3638    | None       | Spokane, WA       | K1RR      | AK2O—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.**

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**