



# The Hellgate Static

## April 2022



Hellgate Amateur Radio Club  
P.O. Box 3811, Missoula, MT 59806-3811

### Inside this issue:

- POTA Activation and Visit to Shack With the U of M Film Crew
- 88<sup>th</sup> Annual Glacier Waterton Hamfest
- Did This Really Happen?
- FCC Sets Date for \$35 License Fee
- Missoula YMCA Riverbank Run
- UR8GX Ukrainian Silent Key
- Prospective Special Club Project
- March Testing Results
- March Meeting Minutes
- April Meeting Agenda
- April HARC calendar

### Officers:

**President:** Paul Shuey, N7PAS  
**Vice-President:** Eric Sedgwick, NZ7S  
**Treasurer:** Dick Walton W7XT  
**Secretary:** Joe Geldrich, AG7FH

### Standing Committees:

**Emergency Coordinator:** Jerry Ehli, N7GE

**QSLs, Awards:** Mike Leary, K7MSO

**Webmaster:** Mike Leary, K7MSO

**Radio License Exams Contact VE:**  
Paul Shuey, N7PAS

**Static Editor:** Terry Cook, KF7BQ  
Bluetooth\_one@hotmail.com

### Advisory Committee's:

Eric Sedgwick NZ7S (Chair)

HF-D Tom Hellem, K0SN Dec 2021 for (22/23)

HF-V Tom Mc Ginley, K7QA Dec 2020 for (21/22)

V/U-D David Herzberg K7MTD Dec 2021 for (22/23)

V/U-V Gary Duncan KG7WYQ Dec 2021 for (21/22)

This one will be a 1 yr term

### Coming Events

- April 11 Meeting
- April 30 Riverbank Run
- May 6 First Fox Hunt
- May 9 Meeting
- May 16 Fox Hunt
- June 3 Fox Hunt
- June 25-26 Field Day
- July 15-17 Glacier Waterton Hamfest

### HARC April Meeting

**Program:** Summits/Parks On The Air  
George McKee - KJ7OKW

We are back to having monthly meetings and license class testing in person. The meetings are on the 2<sup>nd</sup> Monday of each Month

Meetings will be held at The Church of Jesus Christ of Latter Day Saints, 3026 South Avenue West, across the street from Big Sky High School. Use the North entrance as all others will be locked.

Testing will begin promptly at 5:30PM, and end at 6:30PM.

Meeting area will be set up between 6:30-7:00PM and meeting will begin at 7:00PM (Business & Program).

Cleanup and Sanitizing will be done from 9:00-9:30. Volunteers may assist.

## A POTA ACTIVATION AND A VISIT TO MY SHACK WITH THE FILM CREW FROM THE UNIVERSITY OF MONTANA

By Dennis Lane March 20, 2022

Some of the students studying video and film production from the University of Montana are producing a documentary on Amateur Radio Operators in Montana. Their video most likely will be featured by MT PBS later this year. I found out about this production through Mike (K7MSO) who gave them my contact info.

The film crew have visited several hams in western Montana so far. They visited my shack here in Stevensville a few weeks ago. They also expressed interest in the SOTA and POTA programs. After my clumsy explanation of these programs, they asked if they could film one of my POTA activations. We originally were slated to do the activation at Traveler's Rest State Park. However, at the last minute, we found that a permit is required for filming in any MT state park or State Forests. We wound up at the Lee Metcalf Wild Life Reserve in Stevensville, just a few miles from my home. (K-0402)



Because this documentary is about Montana Hams, I wanted to get as many Montana Hams to make contact with me while the filming was being done as possible. The team appeared to be more focused on “human interest” in stead of the technical parts of Amateur Radio. So, I tried to focus on the relationships and personal value I have enjoyed from being ham for these past 45 years.

I usually don't work much FM (VHF) or SSB on my activations. I prefer CW. However, **this documentary is NOT about me. It's about Montana Hams.** (That's what is great about Ham Radio – there's something for every interest). So, after getting my HF antenna set up at the park, I started calling CQ POTA on 146.52. I was happy to contact 12 Montana stations on this band and frequency. I was only using the 5/8 mono band whip on my vehicle and about 40 watts from my IC-7000. Over all, with the multi-band MT contacts the number is 20 which included several who worked me on 3 or 4 bands.



I then moved to 60m SSB. My antenna is an End Fed linked antenna. By connecting and disconnecting various legs I can have a resonate antenna on 60, 30, 40, 20 17 & 15. The 30 & 17 Meter links are full wave while the other bands are half wave. I feed it with coax through a Home Brew 49:1 transformer. All of these links have less than 1:1.5 SWR, with out a tuner! (email me if you have any interest in this antenna for portable operation)

I have included a PDF file with the list of contacts we made while at the Metcalf park. I actually only had about an hour of combined operating time. We stopped several times to make adjustments for the camera angles and light as the sun scooted across the Bitterroot Valley sky.

After making 5 SSB contacts on 60M, I moved to 20M SSB where we made 19 contacts. This gave the film crew a sample of the pile up action possible when Montana hams activate from this great state. Finally, I made it to 15m CW where I made 10 more contacts. The band was in good shape, but the wind was really making it uncomfortable. My fingers were getting cold, so we called it a day. Most of the contacts on 15 were on the East coast.

**The Film Crew:** I really enjoyed the interaction with the film crew. During the POTA activation they had two video cameras running along with the sound being recorded by 2 audio technicians. Grace is the director and doubled as a camera operator, Kal is the main camera man. Jared and Karter handled the audio. Natalie is a coordinator and contact person for the project. She was a little “under the weather” so she was not present

for this activation. At my shack I was pleased to meet Julien who was manning the 2nd camera during that part of the project. About half way through the filming and interview at my shack, I told them, “ it’s time for a coffee break”. So, I fired up the espresso machine and made some lattes and americanos for them. After that they were super charged and ready to get back to work.

During their visit to my shack and on the POTA activation, all of the members of the film crew were **extremely courteous and respectful**. They always checked with me before filming anything in my shack or on my property.

Because I have been a still photographer for over 40 years, I really enjoyed talking about the technical aspects of their work. I have a growing interest in doing quality video work in addition to my still photography. With a 4k drone and Video/ still DSLR with great lenses now, I really appreciated their input on the video side of image making. But when you boil it all down, whether it’s video or still, it is still mandatory to understand light and how to use it. After all the old saying is true - Photography is “painting with Light”.

During both the POTA activation and their visit to my shack, I had my GOPRO running. I pulled some still images from the POTA activation clips. Here is the photo link from my web site. You can download any of these images: <https://www.montanaartqwerks.com/My-Ham-Radio-Page-de-KR7Q/PARKS-ON-THE-AIR-with-UM-Film-crew-for-MT-PBS>

Here’s the uncut video from part of the filming in my shack. You’ll have to fast forward through my droning on and babbling. I did not include any of the content from the interview. We’ll all see that when their work is published. Also ignore my mistake about where Jersey is.. I had hue “Senior Moment” on this one hi hi – Thanks Lance! <https://www.montanaartqwerks.com/My-Ham-Radio-Page-de-KR7Q/Mpbs>

A Go-pro video of University of Montana Students filming my POTA activation can be found here. [https://youtu.be/S\\_UBc-b-Nek](https://youtu.be/S_UBc-b-Nek)

FYI: I have a YouTube channel with most of my POTA & SOTA trips posted. Just search YouTube for my call: KR7Q. There are links to most of my ham radio media on my QRZ.com page also. Here’s the link to my ham radio web pages if you are interested. <https://www.montanaartqwerks.com/My-Ham-Radio-Page-de-KR7Q>

I publish my experiences in Ham Radio for the love of the hobby, not as an expert or braggart. I always enjoy seeing what others are doing this great hobby. I hope you find something interesting in my publications too.

Finally: a great big thank you to the students from UM who so patiently listened to this old man babble about this great hobby we (hams) share.

73

Dennis Lane

KR7Q KR7Q@OUTLOOK.COM

montanaartqwerks.com

<b>Call</b>	<b>State</b>	<b>Frequency</b>	<b>Mode</b>
K7GJ	MT	146.52	FM
K7SWS	MT	146.52	FM
K7VK	MT	146.52	FM
W7KNT	MT	146.52	FM
NE7R	MT	146.52	FM
W7LAG	MT	146.52	FM
N7BIO	MT	146.52	FM
KI7KYM	MT	146.52	FM
KK7AYZ	MT	146.52	FM
KF7ZLU	MT	146.52	FM
KD7TUF	MT	146.52	FM
K7MSO	MT	146.52	FM
W7GJ	MT	5.354	SSB
K7MTD	MT	5.354	SSB
KC7YTK	MT	5.354	SSB
NZ7S	MT	5.354	SSB
K7VK	MT	5.354	SSB
K7GJ	MT	14.279	SSB
AL7KC	AK	14.279	SSB
W5CTL	NM	14.279	SSB
K7VK	MT	14.279	SSB
KE6BGN	CA	14.279	SSB
KX6WTF	CA	14.279	SSB
KB0PAT	NE	14.279	SSB
K6REH	CA	14.279	SSB
N77V	AK	14.279	SSB
NZ7S	MT	14.279	SSB
KD2WLN	NY	14.279	SSB
AC6CA	CA	14.279	SSB
KJ6RCK	CA	14.279	SSB
W6VIP	CA	14.279	SSB
KD5EDL	TN	14.279	SSB

Call	State	Frequency	Mode
N7PIB	CA	14.279	SSB
W7WGC	AZ	14.279	SSB
N6UNH	CA	14.279	SSB
W2PAN	KS	14.279	SSB
W7GJ	MT	21.064	CW
KC1FUU	RI	21.064	CW
NR5N	WV	21.064	CW
WJ1B	CT	21.064	CW
KC1JD	NH	21.064	CW
WK1V	NH	21.064	CW
WB1JL	CT	21.064	CW
KI5LKS	TX	21.064	CW
K2QU	NJ	21.064	CW
K5LDL	TX	21.064	CW

### Glacier Waterton International Peace Park Hamfest

The 88th Annual Glacier Waterton Hamfest is coming up soon. July 15 - 17 at Glacier Meadows RV Park. Established in 1934, the longest continuous running annual hamfest in the world. Preregistration is now open. Activities include seminars, VE testing, tailgate swap meet, hidden transmitter hunts, children's activities and more. Visit [www.gwhamfest.org](http://www.gwhamfest.org) for more information.

### Did This Really Happen?

By Mike Leary

Last February someone asked on the Montana Ham Radio Facebook page how to contact ham radio operators in the Missoula area. I responded by posting the HARC club's web address, figuring that they could then contact one of the club officers for more information. However, I soon received an email asking to interview someone about numbers stations. I responded asking them to look at my [QRZ page](#), maybe I could help them, and they asked if they could interview me.

Before last Thanksgiving and again, before last Christmas my wife and I thoroughly cleaned most of the house in anticipation of guests arriving. As a result, lots of stuff got piled on and around my radio shack way back in the master bedroom. Now that I had a documentary crew and cameras coming to my "sanctum sanctorum", it was time to shove stuff into closets, drawers and the garbage can.



The Director of Production, Grace, first asked about [Numbers stations](#), how and what I have heard from Montana in the past, including the Morse Code numbers stations transmitting from Cuba. I responded that now days there are not very many numbers stations active since the end of the Cold War. There are still some around, including the station from Cuba, just very hard to hear in Montana. How are numbers stations used? Well, as an example, in the late 1990's, The [Wasp Network](#) of spies in the U.S. used a Cuban numbers station to receive orders from Havana.

Today numbers stations are very predictable. They almost always use the same frequencies and keep the same schedules for years. I was able to demonstrate that some numbers stations aficionados have even made a website with a daily schedule for these broadcasts from all over the world, it is at [pryom.org](#). This makes it much easier to park an HF receiver on a frequency before the start of each numbers transmission. Unfortunately, none were heard during the interview.

Next, we talked about Oddities on HF, specifically The [Buzzer](#), a station transmitting for decades out of Russia, rumored to be used by the military. The station has been intermittently jammed in recent months due to Russia's military buildup and invasion of Ukraine.

Numbers and oddities station are usually pretty weak signals intended for a specific geographic area. It is very hard to nearly impossible to hear most of them in Montana. I was able to demonstrate the use of a remote receiver ( Web SDR ) to listen to The Buzzer, however.

Another user of HF that has been very busy lately is the U.S. Air Force, specifically the *High Frequency Global Communications System transmitting Emergency Action Messages*. Unfortunately, on the day that the

UM students showed up at my house the Air Force stayed completely quiet, even for a Saturday, so we could not listen to them during the interview.

For the interview I was able to make an HF contact with a POTA station on 20 meters and demonstrate the WSPR mode with WSPRNet map. For CW, however, no one came back to my CQs on 30 meters.

I was surprisingly relaxed during the interview, like talking with friends. The students were professional and polite. I still cannot believe it all happened.

## **FCC Sets Date For New \$35 Licensing Fee**

From ARRL News

The new Amateur Radio license application fees will take effect on April 19, 2022. The Federal Communications Commission's authority to impose and collect fees is mandated by Congress.

The \$35 application fee, when it becomes effective on April 19, will apply to new, modification (upgrade and sequential call sign change), renewal, and vanity call sign applications. The fee will be per application.

Administrative updates, such as a change of name, mailing or email address, will be exempt from fees.

VECs and Volunteer Examiner (VE) teams will not have to collect the \$35 fee at exam sessions. Once the FCC application fee takes effect, new and upgrade applicants will pay the \$15 exam session fee to the ARRL VE team as usual, and pay the \$35 application fee directly to the FCC by using the CORES FRN Registration system (CORES – Login).

When the FCC receives the examination information from the VEC, it will email a link with payment instructions to each successful candidate who then will have 10 calendar days from the date of the email to pay. After the fee is paid and the FCC has processed an application, examinees will receive a second email from the FCC with a link to their official license. The link will be good for 30 days.

Additionally, the FCC stated that applications processed and dismissed will not be entitled to a refund. This includes vanity requests where the applicant does not receive the requested call sign.

The FCC published the notice in the Federal Register on March 23, 2022, stating that the amateur radio application fees, including those associated with Form 605 application filings, would become effective on April 19, 2022.

**Now is the time to renew your license if you are eligible.**

## **The 50th Annual Missoula YMCA Riverbank Run**

Save the date! The 50th Annual YMCA Riverbank Run returns on Saturday, April 30, 2022. This is a fun event for amateur radio operators to assist the Missoula YMCA and the local community. We have provided communications along the race routes for many years and this year should be special, being the event's 50th anniversary and return from COVID virtual races.

## Prolific Ukrainian Amateur Radio Dxr UR8GX Silent Key

Sadly news that Ivan Lysenko, UR8GX, has become a silent key. Not many details are known at this point beyond that he was killed in action defending his home city of Kherson, Ukraine from Russian ground forces. Undoubtedly we all send our thoughts, prayers and wishes to his family, friends, and brothers in arms.

May he rest in eternal peace.

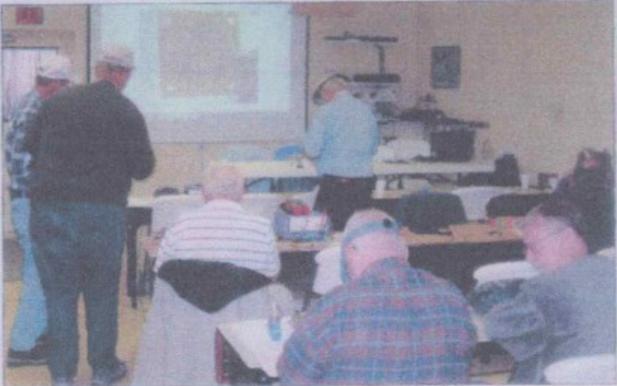
## Prospective Special Club Projects

To be discussed at the April Meeting

### A Club Project — Automatic Mobile Power Control

**Avoid power-up transients on your mobile rig.**

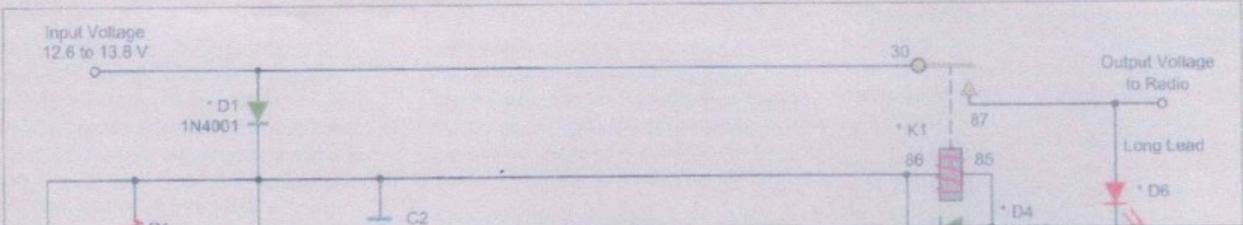
I live in a large senior mobile home and recreational vehicle park in South Texas. We have a very active radio club in the winter months that meets every Friday morning. Several of our members are new to ham radio and received their license after they retired. Many of them have no experience in radio or electronics but are interested in learning.



Most years the club picks a construction project to work on together. Several years ago, I designed and built a circuit to turn on my mobile APRS (automatic position reporting system) equipment when I started the car and turn it off when I shut off the car. This will work with a radio connected directly to the battery or a cigarette lighter outlet that is on all of the

time. A total of 15 members decided to build similar units as a group project.

They decided they wanted to have an off delay of several minutes so they could finish a contact or get another APRS message sent before the equipment turned off. They also wanted a bypass switch so they could use their radio with the engine stopped. I redesigned the circuit to meet these requirements. The circuit is based on the change in voltage from about 12.6 V when the engine is off to about 13.8 V while the engine is running. We set all of the units to turn on at about 13.2 V.



## **April HARC Meeting Program**

The April HARC meeting will feature a program by George McKee, KJ7OKW. George lives in Plains, MT, and is very active in POTA (Parks On The Air) and SOTA (Summits On The Air.) They are quickly becoming extremely popular activities that combine amateur radio and recreation in the great outdoors. Living in Montana provides many opportunities to “activate” summits or parks and George’s program will give attendees all the information and tips on how to participate in both activities.

## **March Meeting Testing Results**

Congratulations to two new amateur radio operators who passed their Technician exams at the March 14<sup>th</sup> testing session, as well to an upgrade to General Class. We hope to see you at future meetings and events.

Dale Baldwin passed his Technician exam, his new callsign is KK7EKG

Grover Barr passed his Technician exam, his new callsign is KK7EKH

Hal Reichart Jr. passed his General exam, his new vanity callsign is N7HHR

## **HARC 3/14/22 Meeting Minutes**

**Attendance:** Paul Shuey N7PAS, Joe Geldrich AG7FH, Dick Walton W7XT, Dave Herzberg K7MT, Mike Leary K7MSO, Aaron Nelson N7BIO, Tom Hellem K0SN, Tom McGinley K7QA, Bennett Wright KK7DZZ, Steve Wright KC7MDS, Jerri Shuey N7JGS, Gary Duncan KG7WYQ, Mel Hiscock W7MH, Jackie Harrington KC7RBC, Terry Cook KF7BQ, Jim Ramsey K5YHG, Allen Levie KH7AL, Eric Sedgwick NZ7S, Grover Barr (soon to be KK7EKH)

President Paul N7PAS, opened the meeting at 7pm.

**Approval of last months minutes:** Gary KG7WYQ moved to approve, Aaron N7BIO 2nd after corrections, motion passed.

**Treasurer report:** from Dick W7XT, Tom K0SN, moved to approve, Tom K7QA, 2nd, motion passed.

**Repeater Committee:** Eric NZ7S, retracts his motion for a new repeater.

**Up coming events;** Grizzly Triathlon 4/23/22 -Club not needed due to changes they made in their program, River Bank Run 4/30/22-Status update will be provided at next month’s meeting, Missoula Marathon 6/26/22. Same day as Field Day – Club will not be participating in the marathon this year.

**New Business:** Dave K7MTD, Wanted to schedule a meeting for DMR radio members to discuss programming and other DMR matters. Dave also said the Sat. morning 147.04 social net at 9 AM is going well.

**Program:** Mike K7MSO Had an informative program on D-STAR radio information.

**Additional items:** There was some discussion about field day (6/25-26/22) coming up.

**Net control Assignments:**

Mar. 16th Eric NZ7S	Mike K7MSO
23rd Mike K7MSO	Paul N7PAS
30th Paul N7PAS	Eric NZ7S
April 6th Eric NZ7S	Aaron N7BIO
13th Aaron N7BIO	Mike K7MSO
20th Mike K7MSO	Paul N7PAS
27th Paul N7PAS	TBD

The meeting closed at 8:40 pm.

Sec. Joe AG7FH

# HELLGATE AMATEUR RADIO CLUB

## AGENDA – 11 Apr 2022 meeting

Introductions.            Make sure you sign the attendance sheet

last meeting minutes: \_\_\_\_\_  
Approval of last meeting minutes:    1<sup>st</sup> \_\_\_\_\_ 2<sup>nd</sup> \_\_\_\_\_ Discussion P/F/T \_\_\_\_\_

Treasurer's report: \_\_\_\_\_  
Approval of Treasurer's report:    1<sup>st</sup> \_\_\_\_\_ 2<sup>nd</sup> \_\_\_\_\_ Discussion P/F/T \_\_\_\_\_

Repeater Advisory Committee Report: \_\_\_\_\_  
\_\_\_\_\_

Approval of Committee report: 1<sup>st</sup> \_\_\_\_\_ 2<sup>nd</sup> \_\_\_\_\_ Discussion P/F/T \_\_\_\_\_

### Events for 2022:

11 Apr – Meeting	9 May – Meeting
23 Apr – Grizzly Duathlon (Club not needed)	16 May – Fox Hunt
30 Apr – Riverbank Run	3 Jun – Fox Hunt
6 May – Fox Hunt – 1st	

### HARC Discussion List

1. Special meeting for kit building – Automatic Model radio delay on/off kit. See Static  
\_\_\_\_\_
2. Power Point Programs for Emerg. Resp. Comm. will be used if we have nothing else.  
\_\_\_\_\_
3. Preamble update: Dick said it's been 6/7 years, Eric said delete the odd/even night stuff.  
\_\_\_\_\_
4. \_\_\_\_\_  
\_\_\_\_\_

### VHF Net NCS assignments:

Apr. 6 NZ7S	Backup N7BIO	May 4 _____	Backup
Apr. 13 N7BIO	Backup K7MSO	May 11 _____	Backup
Apr. 20 K7MSO	Backup N7PAS	May 18 _____	Backup
Apr. 27 N7PAS	Backup _____	Mat 25 _____	Backup
_____	Backup _____	_____	Backup

Good and Welfare.    1.Membership Drive–Year Long

**\*\*\* Next Club meeting: April 11.**

Adjournment:    1<sup>st</sup> \_\_\_\_\_ 2<sup>nd</sup> \_\_\_\_\_ P/F/T \_\_\_\_\_

**Program:** Summits/Parks On The Air - George McKee - KJ7OKW

# >>> April 2022

Goal of the month: ...SOTA/POTA fun on the air...

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
27	28	29	30	31	<b>1</b>	<b>2</b> HARC Social Net 9:00 Am on 147.040 Repeater
<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b> ERC NET 7:30 on 146.900-88.5T BARC NET 8:15 on 146.720-203.5T HARC NET 9:00	<b>7</b>	<b>8</b>	<b>9</b> HARC Social Net 9:00 Am on 147.040 Repeater
<b>10</b>	<b>11</b> HARC Test 5:30 & Mtg 7:00  Program - How To SOTA/POTA Activation	<b>12</b>	<b>13</b> ERC NET 7:30 on 146.900-88.5T BARC NET 8:15 on 146.720-203.5T HARC NET 9:00	<b>14</b>	<b>15</b> <i>Good Friday</i>	<b>16</b> HARC Social Net 9:00 Am on 147.040 Repeater
<b>17</b> <i>Easter Sunday</i>	<b>18</b> <i>Tax Day</i>	<b>19</b>	<b>20</b> ERC NET 7:30 on 146.900-88.5T BARC NET 8:15 on 146.720-203.5T HARC NET 9:00	<b>21</b>	<b>22</b>	<b>23</b> HARC Social Net 9:00 Am on 147.040 Repeater Grizzly Duathlon
<b>24</b>	<b>25</b>	<b>26</b>	<b>27</b> ERC NET 7:30 on 146.900-88.5T BARC NET 8:15 on 146.720-203.5T HARC NET 9:00	<b>28</b>	<b>29</b>	<b>30</b> HARC Social Net 9:00 Am on 147.040 Repeater  Riverbank Run