



The Hellgate Static

July 2021



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

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Officers:

President: Mike Leary, K7MSO
Vice-President: Eric Sedgwick, NZ7S
Treasurer: Dick Walton W7XT
Secretary: Donna Pecastaing, KC5WRA

Standing Committees:

Emergency Coordinator: Jerry Ehli, N7GE
QSLs, Awards: Bob Henderson, N7MSU
Webmaster: Mike Leary, K7MSO
Radio License Exams Contact VE:
Paul Shuey, N7PAS
Static Editor: Terry Cook, KF7BQ
Bluetooth_one@hotmail.com

Repeater Advisory Committee:

Eric Sedgwick NZ7S (Chair)
Tom Hellem, K0SN
Paul Shuey, N7PAS
Tom Mc Ginley, K7QA (Re-elected)

Upcoming Events

- **July 2, 2 Meter Foxhunt 7PM**
- **July 4, [Club Special Event Station](#)**
- **July 16th – 18th [Glacier Waterton Hamfest](#)**
- **July 19th, 2 Meter Foxhunt 7PM**
- **October 15 – 16, [JOTA](#)**
- **October 21, [The Great Montana Shakeout Drill](#)**
- **October ??, 2021 Dirt Dash**
- **December 4 – 5, [Sky Warn Recognition Day](#)**
- **December 13, Christmas Dinner Party**

July HARC Meeting

We are back to having monthly meetings and license class testing in person. The meetings are on the 2nd Monday of each Month (July 12th.)

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 began promptly at 5:30PM, and end at 6:30PM.

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

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

HARC FIELD DAY 2021

FD 2021 for HARC and W7PX turned out better than expected. We possibly set a new scoring record for class 1A in Montana and maybe even the entire ARRL NW Division, although ARRL does not publish records for FD. Your HF Committee decided to set up 2 separate stations this year, one using W7PX for a serious competitive scoring effort and the other using the call K7BG for new members and others wanting to get FD operating experience.

We were hoping to enlist as many operators and help for setup and teardown as possible. This year's crew included team leader Tom K0SN, Pat, N9RV, Tom, K7QA, Rich, K7QNZ and new member John, W7KRZ. Bill KJ7PCR came up Saturday afternoon to observe the action.



Tom K0SN at K7BG

Dick, W7XT had planned to participate but had to spend the weekend dealing with a few health challenges. We are happy to hear Dick is back to full speed again. Those of you who could not attend and participate really missed out enjoying this traditional major ham radio club event of the year.

The W7PX setup consisted of an Elecraft K3S with full N1MM logging and control laptop integration, set up inside the comfort of K0SN's camper trailer. Antennas used were the excellent 3 element 20/15 meter yagi (custom built by K0SN) on the HARC trailer and 40 foot crankup mast. Two zepp dipoles with ladder feedlines were strung up between fir trees at 60 feet up, one for 40 meters and the other for 40 and 80 meters that was shared with the K7BG station. K0SN's tennis ball cannon with

fishing line established the rope pull-up anchor points on the support trees.

The K7BG station setup consisted of the club's new Elecraft K3S, also with full N1MM laptop PC integration set up in the KGVO/KYSS camper trailer provided by Townsquare Media. Unfortunately the K3S developed a nasty intermittent Saturday evening and had to be replaced by the club's Elecraft K2 backup transceiver. It performed well for the remainder of the event. Antennas used were K0SN's custom 2 element 20/15 meter yagi on a custom 25 ft "teeter-totter" mast and the 40/80 zepp dipole shared with W7PX. See all the attached pictures.

N9RV and K0SN alternated roughly 2 hour shifts on the W7PX station from 12N until 11PM when K7QA pulled the graveyard shift. Then back to N9RV and K0SN Sunday morning until FD ended at 12N. Watching both Pat and Tom carve through the pileups calling W7PX with QSO rates of 100 per hour and greater was a real treat.

John, W7KRZ operated most of the event using SSB with the K7BG call sign. Since John is a General class, we decided to borrow the K7BG Extra class call from Matt Trott with his blessing to have full use of all bands. Matt was a longtime Great Falls area contester who recently moved to South Dakota.

John pitched his tent Friday and stayed for the entire 3 day event along with K0SN onsite. He really got in the groove racking up Qs and was a great help during set up and tear down. During break times for John, K7QA rattled off some CW and SSB Qs on K7BG. It sure would have been nice to have more members join the action on that station.



Pat N9RV at W7PX



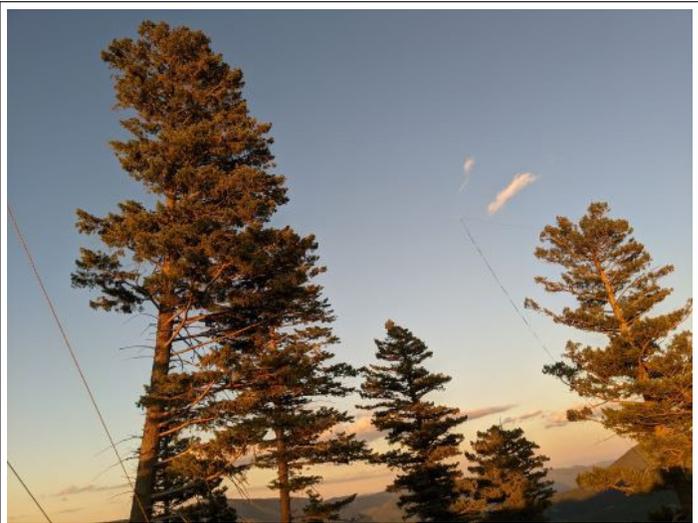
John W7KRZ at K7BG

Rich, K7QNZ came up Sunday morning with a box of delicious donuts and helped tear down. We got the entire setup dismantled and loaded in 2 hours. And then we enjoyed cold beers trading previous FD war stories and chatter about various logging programs.

Propagation conditions on 20, 40 and 80 meters were superb with a very quiet sun and rising solar indexes. We were hoping 15 meters would perform well but it sadly disappointed, especially on Saturday. Sunday perked up a bit but we'll have to wait til next year for 15 and maybe even 10 to open up as solar cycle 25 gets more active.



80 and 40 Zepp dipole at 60 feet



40 meter Zepp dipole at 60 feet

FD team leader K0SN already has more ideas and plans on how to improve next year's FD. This site is near perfect for its down sloping terrain and wide open look to the horizon in all important directions for propagating a big signal with only 100 watts. We know that the Mount Sentinel location might pose an access problem for some members, but the road is pretty decently maintained and can be easily driven with front wheel drive and 4x4 vehicles.

You can see many of the early posted FD scores on 3830scores.com. W7PX is still leading the class 1A category nationwide with 2262 total QSOs and a 7840 score. K7BG added 260 Qs with a 730 score. It will take ARRL many more months to compile and publish all the entries for FD 2021.

Make early plans now to participate in FD 2022!

Helena Club Launches APRS Balloon



Launch from Helena field day site

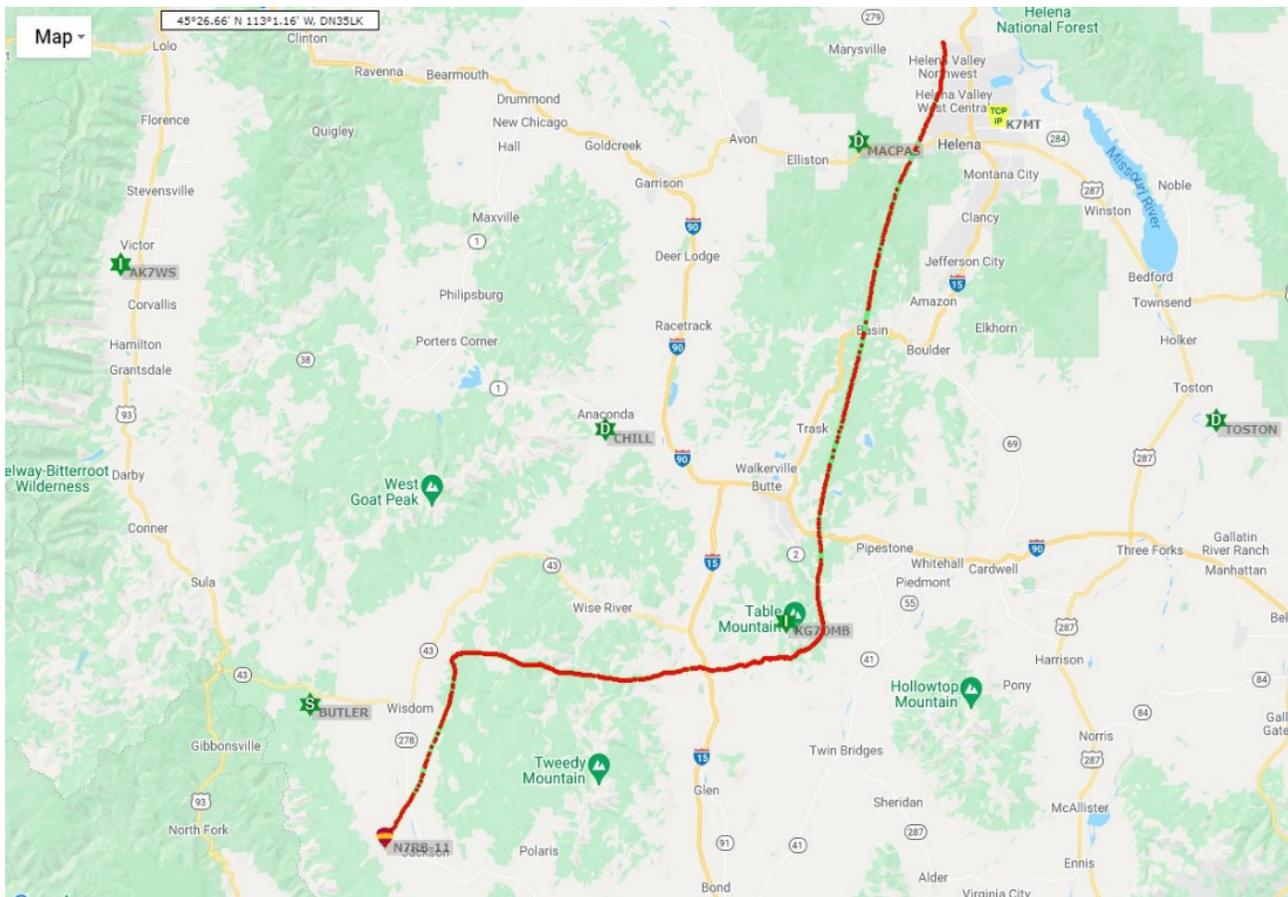


Recovery near Jackson, MT

The Helena Amateur Radio Club successfully launched a weather balloon operating a radio before Field Day began. Complete with GPS and a 70 cm simplex repeater.. Despite some wind on launch it was a success. The balloon package was tracked using APRS, and reached an altitude of over 115,000 feet.

Chasers monitoring the flight on APRS and using the onboard simplex repeater, were able to recover the balloon package at its landing site on the a ranch near Jackson, in the Big Hole Valley.

[You can find more info and photos here.](#)



June 21st Transmitter Hunt Results

For the June 21st hunt, Joe AG7FH was the fox, and was using the club transmitter hunt controller. The hunters finding him behind the Emma Dickinson School, were: Terry KF7BQ at 7:40, Eric NZ7S at 8:22 and Aaron N7BIO at 8:25.. We are hoping to have more hunters show up at the July 2nd and July 19th hunts. Have fun and bring a friend .

If you are interested in being the “fox” at one of our hunts, contact Terry KF7BQ.

Participants may check in prior to the hunt on the 146.90 repeater. Unlicensed persons are welcome to participate without checking in.

- For this hunt, the fox’s callsign will be W7PX.
- The hunt will be held on the simplex frequency of: 146.560 MHz
- The transmissions will begin at: 7:00 PM Local Time
- The hunt may continue for 2 Hrs, longer at the fox’s option.
- The fox will transmit for approximately two minutes and then be silent for 1- 4 minutes.
- The fox will not significantly change transmitted power levels during the hunt.
- The fox will be in a location accessible by the public, without charge and will not be inside of a building.
- For this hunt the fox will be within the Missoula Valley, and in a place accessible by vehicle.
- For this hunt, participants can begin the hunt from anywhere he or she prefers.
- After the first hour of the hunt, the fox may at his or her discretion, provide hunters with clues to the fox’s location.
- We would like the hunt to be fun for all. If you have suggestions on how we can improve this or future hunts please let us know.
- Drive carefully and observe all traffic statutes during this hunt, for everyone’s safety.
- Have fun, we are all novices at this and the object is to have a good time.

KC5WRA is in the Hospital

Jackie KC7RBC was informed that Donna Pecastaing, our club secretary, has taken ill and is in St. Patrick's Hospital. She is only being allowed very limited visitors at this time. Donna has our thoughts and prayers for a quick recovery.

Ken Kopp K0PP SK

It is with great sadness that we hear, former HARC member, Kenneth Kopp K0PP of Anaconda MT is now a silent key. Ken was instrumental in setting up the first 2 meter fox hunts in Missoula back in the mid 1980's. He held an Extra class license and was a mentor and friend to amateur radio operators who knew him. No services are planned at this time.

THE CHARLIE WIGGLY BULLSHEET

News and Views from HARC's CW ops

CW enjoys an admirable reputation for efficiency, both in its use of the radio spectrum and the economy of its expression. The popular new digital modes are often celebrated for the small amount of spectrum they require, but CW requires even less, sometimes, depending on the digital mode, much less. CW's economy of expression is achieved primarily by the use of certain systems of codes, the best known of which are the famous "Q signals."

All hams use some of these signals, even those operating exclusively in voice or digital modes. Some of them have become virtually universal in ham radio. As a result, the meaning of some of the codes now departs from their original definition. For example, according to the book, 'QRM' means 'Is my signal being interfered with?' It is a question. Usage over the years has turned it into a noun, a name for interference from other radio signals, like the infamous Russian Woodpecker of years past.

The ARRL used to publish a nicely printed sheet listing all the Q signals and their definitions. It was pink and printed on card stock, meant to be taped to the operating desk. Some of us old-timers have a copy on the desk yet. Mine is a good 50 years old, rather tattered and stained, but still serviceable. You can get a much expanded version for yourself free just by downloading it from the Radio Relay International website.

The Q signals fall into four groups, QN_, QR_, QS_ and QT_, with one outlier, QUA. The QN signals are meant for use by the Net Control Station (NCS) of a traffic net. For example, NCS will tell a station that he is free to leave the net simply by saying QNX to him. He will tell a station that the net has traffic he is to take by saying QNU, etc. When conditions are poor NCS will want to be sure that two stations he wants to pass traffic can copy each other adequately by asking each if he can copy the other, using QNJ. For example, "AJ7B QNJ WB6N?"

The Q signals in common, everyday use are all drawn from the QR_, QS_ and QT_ sets. Notice that the common conversational meaning of some of these, as with QRN, has changed. One that should be better known and more widely used is QRS, whose colloquial meaning is "Slow down! You're sending too fast for me." One does hear it from time to time in contests. Incidentally, CW QSOs usually earn double the points of phone QSOs in contests, like Field Day.

Finally, we note that there are many abbreviations in common use on the ham bands, in all the modes. CW was the pioneer, of course; consider the letter 'C' as a substitute for 'YES'. Then there are the prosigns, i.e., procedural signs, such as AR (printed with a bar over it to indicate that the two letters are to be sent as one), and SK. And we would be remiss if we did not mention '73', '88', 'HI', 'ditdit' and other such expressions that more or less elude classification. For the most part these make up CW's phatic language, i.e., expressions not meant to convey or elicit information, but indicating good will, friendship, etc. "How are you?" upon meeting an acquaintance on the street is misinterpreted when it produces a catalog of ailments, what a clever friend calls "an organ recital." The scene in Robin Williams' film "Good Morning Vietnam!" in which he takes over an English class for Vietnamese, teaching them some big city street slang, offers an amusing example of the grammarians' phatic language. We hams have our own such talk, even in CW, though not nearly so hip, perhaps.

Welcome to Our New Amateur Radio Operators

The following candidates successfully passed their Technician Class exams at the June testing session:

Tim Jacobs KJ7ZJC

Gerard Gaddy KJ7ZJD

Meeting Notes – June 2021 meeting

Attendance: Paul N7PAS, Eric NZ7S, Mike K7MSO, Aaron N7BIO, Rich K7QNZ, Joe AG7FH, Terry KF7BQ, John W7KRZ, Bill KJ7PCR, David K7NTD, Tom K7QA, Tom K0SN
Visitors: Jim Adelt and Ken Meyers

Correction for minutes of May meeting: N7PAS was not in the May attendance. Net Schedule was incorrect.

Treasurer Report: None

Discussion about whether or not to have a Zoom meeting along with the physical meeting.

Discussion about Field Day plans and setup for June 25-27 on Mt. Sentinel.

Trail Rain event report: Mike K7MSO reported that it was a well run event. Approx. 200 runners.
Communications handled on the 147.02 repeater.

Eric NZ7S reported on MARS interoperability exercise first week of each month 60 meter channel 1.

Fox Hunt Report: Hunt dates: June 21, July 2, July 19th. Start time 7:00 PM, check in on 146.90 MHz.

Hunt frequency 146.560 MHz.

- 16 June ???
- 23 June ???
- 30 June Terry KF7BQ
- 07 July Jerri N7JGS
- 14 July Mike K7MSO

*** Next Club meeting: 12 July