



# The Hellgate Static

## October 2018

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:** David Herzberg, K7MTD

**Secretary:** Donna Pecastaing, KC5WRA

### Standing Committees:

**Emergency Coordinator:** Jerry Ehli, N7GE

**QSLs, Awards:** Bob Henderson, N7MSU

**Webmaster:** Mike Leary, K7MSO

**Static Editor:** Terry Cook, KF7BQ

**Radio License Exams Contact VE:**

Paul Shuey, N7PAS

### Repeater Advisory Committee:

Eric Sedgwick NZ7S (Chair)

David Herzberg, K7MTD

Tom Mc Ginley, K7QA

Tom Hellem, K0SN (New / Re-elected)

Paul Shuey, N7PAS (New / Re-elected)

### Upcoming Events:

- 8 October – Meeting
- 19 / 21 October – JOTA
- 20 October – Argus Hamfest (Stevensville)
- 12 November – Meeting
- 1-2 December – Skywarn Recognition Day
- 10 December – Meeting / Christmas Party

### October Meeting Program



### Jamboree-on-the-Air

Eric, NZ7S will put on a short program about the Boy Scouts of America Jamboree on the Air and our participation in this years event. Eric will also fill us in on how he assists the scouts as a Radio Merit Badge Counselor.

For this years event Eric plans to have boy scouts at his house setting up antennas and getting ready for the event on Saturday the 19th at 10 am. He is expecting actually making contacts will be around 12-1 pm. Not sure what the end time will be. Probably when scout and amateur operator interest fades.

For those on DMR, JOTA talk groups are listed on page 5 of this newsletter.

## **Interference to Amateur Radio Satellites Reported**

With the advent of hotspots for digital modes such as the Sharkrf OpenSpot and DVMega, finding an open frequency has become an issue.

Many of the frequencies I've seen on the [brandmeister network](#) for hotspots are between 432-433MHz (the weak signal portion of the band) or between 435.0 and 438.0 MHz. In all three ITU regions, that slice of Amateur spectrum is allocated to the [Amateur Satellite Service](#) as a [secondary allocation](#) (see the table on page 3 and footnote 5.282), also [this document](#) (ITU International Amateur Radio Space Allocations.)

If at all possible, please choose an FM simplex frequency outside this band. You may not think that your 20mW hotspot or low power HT transmission could interfere, but remember that when a satellite passes overhead, there's a perfect line of sight to the satellites.

Many bandplans have sections specifically reserved for simplex frequencies such as the general one from the ARRL 445-447 MHz are prime territory. Check with your local coordination body first, of course.

Two Meter users should avoid satellite band-plan frequencies 144.300-144.500 MHz (APRS Frequency = 144.390 MHz) and 145.800-146.000 MHz.

## **ARRL Petitions for Technician Class HF Privileges**

ARRL has asked the FCC to expand HF privileges for Technician licensees to include limited phone privileges on 75, 40, and 15 meters, plus RTTY and digital mode privileges on 80, 40, 15, and 10 meters. The FCC has not yet invited public comment on the proposals, which stem from recommendations put forth by the ARRL Board of Directors' Entry-Level License Committee, which explored various initiatives and gauged member opinions in 2016 and 2017.

Specifically, ARRL proposes to provide Technician licensees, present and future, with phone privileges at 3.900 to 4.000 MHz, 7.225 to 7.300 MHz, and 21.350 to 21.450 MHz, plus RTTY and digital privileges in current Technician allocations on 80, 40, 15, and 10 meters. The ARRL petition points out the explosion in popularity of various digital modes over the past 2 decades. Under the ARRL plan, the maximum HF power level for Technician operators would remain at 200 W PEP. The few remaining Novice licensees would gain no new privileges under the League's proposal.

## **ArgusFest**

The annual Argus Ham/Swap-fest (sponsored by Argus Barker, W8QMD) will take place on Saturday, October 20<sup>th</sup> in Stevensville, MT. The day will start with breakfast at 8:00 AM at the Frontier Cafe. Test sessions for all classes will be administered after breakfast. The hamfest opens at 10:00 AM at the United Methodist Church, located at 215 College Street. You can set up a table to sell or trade off your surplus equipment or come and look for bargains on other hams surplus stuff.

## **FCC Issues Enforcement Advisory**

On September 24<sup>th</sup>, 2018, the Federal Communications Commission issued enforcement advisory 2018-03, relating to the importation and sale of VHF and UHF radios that do not comply with FCC Rules. The advisory states that the FCC has become aware of a number of VHF and/or UHF radios being imported into the United States, that do not meet FCC certification requirements. Among other things the enforcement advisory states that VHF and/or UHF radios that are capable of transmitting outside the amateur radio bands, must hold a type acceptance certification for those frequencies that the radios are capable of transmitting on. Here is the link to the advisory posted on the FCC website: <https://docs.fcc.gov/public/attachments/DA-18-980A1.pdf>

## Coming in December - Skywarn Recognition Day

SKYWARN™ Recognition Day was developed in 1999 by the National Weather Service and the American Radio Relay League. It celebrates the contributions that SKYWARN™ volunteers make to the NWS mission, the protection of life and property. Amateur radio operators comprise a large percentage of the SKYWARN™ volunteers across the country. The Amateur radio operators also provide vital communication between the NWS and emergency management if normal communications become inoperative. During the SKYWARN™ Special Event operators will visit NWS offices and contact other radio operators across the world.

HARC participates in this event every year.

### QST QST QST - The story of Q codes.

The original Q codes were created, circa 1909, by the British government as a "list of abbreviations... prepared for the use of British ships and coast stations licensed by the Postmaster General". The Q codes facilitated communication between maritime radio operators speaking different languages, so they were soon adopted internationally. A total of forty-five Q codes appeared in the "List of Abbreviations to be used in Radio Communications", which was included in the Service Regulations affixed to the Third International Radiotelegraph Convention in London (The Convention was signed on July 5, 1912, and became effective July 1, 1913.)

Over the years the original Q codes were modified to reflect changes in radio practice. For example, QSW/QSX originally stood for, "Shall I increase/decrease my spark frequency?", but in the 1920s, spark-gap transmitters were banned in the United States, rendering that meaning obsolete. By the 1970s, the Post Office Handbook for Radio Operators listed over a hundred Q codes, covering a wide range of subjects including radio procedures, meteorology, radio direction finding, and search and rescue.

#### Amateur Radio Q codes.

Amateur radio actually has adapted two different sets of Q codes for use in amateur communications. The first set come from the ITU civil series QRA through QUZ. Most of the meanings are identical to the ITU definitions, however, they must be looked at in the context of amateur communications. For example, QJ? asks what the charges are for sending the telegraph. Since amateur communications are without charge, this Q code would not make sense.

The second set is the set of QN Signals, used only in ARRL NTS nets. These operating signals generally have no equivalent in the ACP 131 publication or ITU publications, and are specifically defined only for use in ARRL NTS nets. They are not used in casual amateur radio communications.

Selected Q codes were soon adopted by amateur radio operators.

In amateur radio, the Q codes were originally used in Morse code transmissions to shorten lengthy phrases and were followed by a Morse code question mark (·— —·) if the phrase was a question.

In December 1915, the American Radio Relay League began publication of a magazine titled QST, named after the Q code for "General call to all stations".

**A bit of trivia:** *Q codes are used by the Miami-Dade County, Florida local government for law enforcement and fire rescue communications, one of the few instances where Q codes are used in ground voice communication outside amateur radio.*

**These Q signals are the ones used most often on the air. (Q abbreviations take the form of questions only when they are sent followed by a question mark.)**

- QRG Your exact frequency (or that of \_\_\_\_\_) is \_\_\_\_\_ kHz.  
Will you tell me my exact frequency (or that of \_\_\_\_\_)?
- QRL I am busy (or I am busy with \_\_\_\_\_). Are you busy? (Usually used to see if a frequency is busy.)
- QRM Your transmission is being interfered with \_\_\_\_ (1. Nil; 2. Slightly; 3. Moderately; 4. Severely; 5. Extremely.)  
Is my transmission being interfered with?
- QRN I am troubled by static \_\_\_\_\_. (1 to 5 as under QRM.) Are you troubled by static?
- QRO Increase power. Shall I increase power?
- QRP Decrease power. Shall I decrease power?
- QRQ Send faster (\_\_\_wpm). Shall I send faster?
- QRS Send more slowly (\_\_\_wpm). Shall I send more slowly?
- QRT Stop sending. Shall I stop sending?
- QRU I have nothing for you. Have you anything for me?
- QRV I am ready. Are you ready?
- QRX I will call you again at \_\_\_\_\_ hours (on \_\_\_\_\_ kHz).  
When will you call me again? Minutes are usually implied rather than hours.
- QRZ You are being called by \_\_\_\_\_ (on \_\_\_\_\_ kHz). Who is calling me?
- QSB Your signals are fading. Are my signals fading?
- QSK I can hear you between signals; break in on my transmission.  
Can you hear me between your signals and if so can I break in on your transmission?
- QSL I am acknowledging receipt.  
Can you acknowledge receipt (of a message or transmission)?
- QSO I can communicate with \_\_\_\_\_ direct (or relay through \_\_\_\_\_).  
Can you communicate with \_\_\_\_\_ direct or by relay?
- QSP I will relay to \_\_\_\_\_. Will you relay to \_\_\_\_\_?
- QST General call preceding a message addressed to all amateur radio operators.
- QSX I am listening to \_\_\_\_\_ on \_\_\_\_\_ kHz. Will you listen to \_\_\_\_\_ on \_\_\_\_\_ kHz?
- QSY Change to transmission on another frequency (or on \_\_\_\_\_ kHz).  
Shall I change to transmission on another frequency (or on \_\_\_\_\_ kHz)?
- QTC I have \_\_\_\_\_ messages for you (or for \_\_\_\_\_). How many messages have you to send?
- QTH My location is \_\_\_\_\_. What is your location?
- QTR The time is \_\_\_\_\_. What is the correct time

**At the last HARC meeting we discussed to possibility of getting Donna, KC5WRA an HF antenna at her QTH.**

The proposed antenna is a 80m dipole. The big parts of the job are planting the support post and setting up the 24' pole; building the antenna; driving the ground rod and attaching an SO-239 coax chassis connector; and running the coax. One end will be attached to the 24' pole and the other into a tree. Donna has someone who will climb the tree. The last step will include attaching some PL-259 connectors. When all that is done , someone familiar with her equipment will have to tune the antenna on 80, 40 and 20 and mark the tuner settings for her.

Dick is willing to be a partial planner/director for the project but we will need someone on site to manage the project. Dick W7XT has surveyed the site and has drawn up plans for the antenna and has done some rough modeling of it. He would go over these plans with anyone who wants to tackle the project. We really only need a few people to get the job done. There are a few people in the club who would profit from the experience of helping with this job.

Dick would supply enough wire and insulators; an 8' fence post that will work for the base of the pole support at the back of the lot and a balun/center insulator. We would need to come up with the following materials:

- Coax for the feedline, preferably RG-8;
- Coax couplers, including one barrel connector;
- a ground rod for outside the house at the entry point;
- rope for the antenna halyards and the guys at the back end;
- two pulleys;
- some kind of plate to connect an SO-239 to the ground rod.

If you would be willing to help with this project be it a donation or on scene help, Donna would appreciate it. Dick is will go over the project at the October 8th club meeting .

**JOTA Brandmeister 907<sub>v3</sub>**  
**2018 Talk Groups**

Please try and make sure you have the relevant  
Talk Groups below in your radio.

TG		
907	General Calling ( <i>Reflector 4907*</i> )	English
9071	Tactical Talk Group	Any Language
9072	Tactical Talk Group	Any Language
9073	Tactical Talk Group	Any Language
9074	Tactical Talk Group	Any Language
9075	Tactical Talk Group	Any Language
9076	Tactical Talk Group	Any Language
9077	Tactical Talk Group	Any Language
9078	Tactical Talk Group	Any Language

**\*Talk Group 907 is linked to Reflector 4907**  
**It is the Only Talk Group and Reflector Linked !!**  
(This means ones using Reflector 4907 can not move to another Talk Group)

## September 2018 Attendance and Tentative Meeting Minutes

**Attendance:** Donna Pecastaing KC5WRA, Jerri Shuey N7JGS, Bryce Nordgren AF7RQ, Mike Leary K7MSO, Dan Somerlott KC7HLW, Rich Kingdon K7QNZ, Jackie Harrington KC7RBC, Terry Cook KF7BQ, Eric Sedgewick NZ7S, Byce Rowe KI7LMV, Joe Geldrich AG7FW, Ken Bateman KF5QGD, David Herzberg K7MTD, Paul Shuey N7PAS, Dallas Erickson K7DDE.

**Approval of last months meeting minutes.** Moved by Donna KC5WRA, second by Bryce KI7LMV. Approved

**Approval of Treasurers Report.** Moved by Donna KC5WRA, second by Paul N7PAS. Approved

**Monthly Program:** “An introduction to the American Red Cross Disaster Shelter” by Dallas Erickson K7DDE and Jenny Erickson, from the Ravalli County American Red Cross. A brief history of the Red Cross, an explanation of its mission, when and how shelters are set up and how we as amateur radio operators can assist the Red Cross in fulfilling its mission.

**Repeater Committee Report.** Eric NZ7S reported that work visits to the Weather Bureau's building now require an escort. This is a new region wide policy. The 146.80 repeater at Blanchard needs a new home due to policies prohibiting co-location on their property and rental rate hikes. Montana Electronics is also moving off of the site and has offered to bring our repeater down along with with their equipment.

We are actively seeking a replacement site in the Swan Valley. Paul N7PAS knows of a couple of sites that may work.

**HF Committee Report.** Eric NZ7S reports that the Weather Bureau has purchased a new Shakespeare HF vertical antenna for use on the Skywarn HF transceiver at the Weather Service building. A HARC work party will install the antenna.

### Other Business:

**Upcoming Events.** None. The next meeting will be October 8<sup>th</sup> and the program will be about Skywarn.

### Suggestions / Discussion.

- 1.) The Ericksons informed us that the Salmon ID Amateur Radio Club has installed a new repeater on Lost Trail Pass. Their plan is to link it with several repeaters South and into Idaho Falls.
- 2.) Terry KF7BQ commented on changes to ARES that are being considered by the ARRL. These include required training and certification by FEMA and requiring background checks for those wishing to participate. You can read about the proposed changes here: [\*\*\*ARES Strategic Plan.\*\*\*](#)

Eric NZ7S will work with Jerry N7GE on a plan to rejuvenate our ares ARES or AUXCOMM participation. These will require some dedication and effort from those who participate.

- 3.) David has the club owned TS-520 as Dick W7XT has not had had time to convert power supply. Paul offered to work on it.
- 4.) David K7MTD would like us to consider updating the APRS node on point Six to allow it to handle messaging.
- 5.) David K7MTD commented on the ARRL Northwestern Director election

**VHF net control schedule.**

- 12 September – David K7MTD
- 19 September – Bryce KI7LMV
- 26 September – Paul N7PAS
- 5 October – Donna KC5WRA
- 10 October – Jerri N7JGS

**Adjournment.** Moved by Paul N7PAS, second by Bryce KI7LMV. Approved.

**Classified Advertisements**

**Collins HF 80xx Equipment for Sale**

Selling Vietnam war era portable radio set container contents.

Included are two each: HF8054A receiver, HF-8014A transmitter, HF-8064B preselector, HF-8023 1 KW solid state amplifier, HF 8032 power supply, HF 8040A antenna coupler. One each items: power control panel, jack field plug panel, monitor/switching panel, VOX/Control/Modem panel. set of 6 manuals.

Two antenna coupler control cables and other stuff are included

All transmitter and receiver functions and frequency selection can be controlled through an RS-232 port. I used a laptop computer and it worked great! The control codes are in the included manual set. The HF-8032 amplifier power supplies are for 3 phase. They also work just fine on single phase. This equipment is in Missoula, MT.

\$14,000 takes all . Call Dave at 406 543-73niner fiver K7PGY

