



# THE HELLGATE STATIC



## ***Prepare for the Perseids!***

From <http://www.arrl.org>

On the night of August 11 and well into the next day, Earth will make its annual passage through the bulk of the debris shed by a comet known as Swift-Tuttle. Much of the debris is composed of dust-sized grains, but when these fragments come plunging into our atmosphere they can create a dazzling meteor display. Not only are the meteors fascinating to watch, they also leave short-lived streams of ionized gas in their wake. As hams have known for years, these meteor trails are excellent reflectors of radio waves.

The Swift-Tuttle meteor showers are known as the Perseids because they appear to come from a point in the sky that lies within the constellation Perseus. This year's shower is forecast to be especially active because we're about to pass through a somewhat thicker filament of dust that boiled off Swift-Tuttle in 1862.

If you own a 6 or 2 meter SSB/CW transceiver, you can get in on the action, bouncing your signals off Perseid meteor trails and making quick meteor scatter contacts over hundreds of miles, and possibly even as much as 1200 miles. Meteor scatter operation is particularly easy on 6 meters where 100 W and an omnidirectional antenna will do the job. On 2 meters a directional antenna (such as a multielement Yagi) usually yields better results.

Some meteor scatter operators prefer to use SSB, making rapid exchanges of signal reports and grid squares. In recent years digital meteor scatter has been increasing in popularity. With the free sound-card-based WSJT software suite by Joe Taylor, K1JT, it is possible to make digital meteor scatter contacts almost any time of the day or night, not just during annual showers. Most WSJT scatter operators use a mode known as FSK441 and center their activities on calling frequencies at 50.260 and 144.140 MHz. They also announce their availability by using Web sites just as N0UK's Ping Jockey Central.

So turn on your radio late Tuesday night and start listening. As the shower intensifies, you'll begin hearing bursts of signals. That's the time to grab the microphone (or keyboard) and get on the air!

## ***July 4th at the Fort***

By Bob, N7MSU

Independence Day saw HARC busy celebrating again at the Historical Museum at Fort Missoula. Setting up at the Old Chapel, hams assembled the Hustler vertical and connected it to the club's IC-736. Craig KE7NO and Lewis AC7UZ brought some of their vintage radios for display. The public should have lots of interest in the history of the Old Chapel and ham radio.

Unfortunately, propagation was poor throughout the day. So, various operators got lots of practice "CQing", but not too much experience at giving reports. Nevertheless, everyone had fun, enjoyed helping with the celebration of our country's Independence and provided good PR for ham radio. Many thanks to Craig KE7NO, Lewis AC7UZ, Elmer WG7P, Liz WG7E, Mike KE7IZG, Mike AE7MH, Steve K7PX, Eric NZ7S, Larry K7GIS and Bob N7MSU.

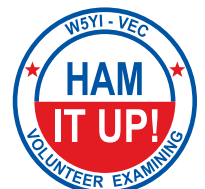
## ***Congratulations License Examinees!***

### **New Licenses:**

Ron Olfert, KF7DUG and Jeff Kitsmiller, KF7DUH both earned their Technician licenses on July 13th. Congratulations and welcome to the world of Amateur Radio.

Thank you for the following VE's for participating in the test session:

Liz, W7GE  
Jerry, N7GE  
Lewis, AC7UZ  
Michael, AE7MH



The next VE exam session will be held at 5:30 pm August 10<sup>th</sup> before the meeting.

Monthly Newsletter of the  
Hellgate Amateur Radio Club  
PO Box 3811  
Missoula, MT 59806-3811

Meetings: Held 2nd Monday of each  
month at

HARC members have a chance to win the  
Door Prize. You must be present to win!

### **Club Officers**

Elmer, WG7P ..... elmerm@hughes.net  
**President**

Bill, W4YMA ..... billfarrell@hotmail.com  
**Vice President**

Mike, KE7IZG .. michael.leary@umontana.edu  
**Secretary**

Jerry, N7GE ..... n7ge@bresnan.net  
**Treasurer**

Liz, WG7E ..... lizm@montana.com  
**Membership**

Bob, N7MSU ..... n7msu@arrl.net  
**Awards**

Vick, K7VK ..... k7vk@arrl.net  
**Exams VE Contact**

Mike, AE7MH. .... ae7mh@arrl.net  
**August Newsletter** (rotates monthly)

Mike, KE7IZG .. michael.leary@umontana.edu  
**Webmaster**

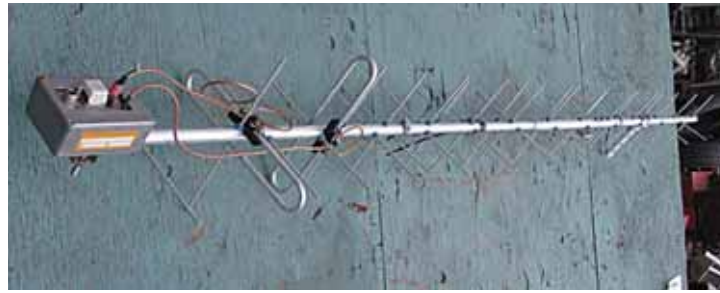
### **Repeater Committee**

Bill, W4YMA ..... billfarrell@hotmail.com  
Eric, NZ7S ..... nz7s@msn.com  
Byron, NN8A ..... arl3051@wildblue.net  
Paul, N7PAS ..... n7pas@bresnan.net  
Donnie, W7XY ..... fort@montana.com

## ***Events Calendar***

August 7-9 <sup>th</sup>	54th Annual Pacific Northwest DX Convention. Mirabeau Park Hotel, Spokane, WA. <a href="http://www.sdx.org">http://www.sdx.org</a>
August 10 <sup>th</sup>	HARC Meeting at 7 pm. VE Amateur Radio exam session at 5:30 pm. Both are to be held at Missoula Firestation No. 4, 3011 Latimer St.
August 10 <sup>th</sup>	VE exam session at 5:30 pm, before the HARC meeting.
September 11-13 <sup>th</sup>	Northwest Automatic Position Reporting System (NWAPRS) Summer Gathering. Contact Dave/K7GPS at k7gps@arrl.net or (509)244-8484.
September 26 <sup>th</sup>	Spokane Hamfest, See page 7 for more information
October 3 <sup>rd</sup>	Bozeman Hamfest. Gallatin Ham Radio Club, Bozeman, MT. <a href="http://www.gallatinhamradio.com">http://www.gallatinhamradio.com</a> Contact: Bob Leo, W7LR, w7lr@aol.com
October 17-18 <sup>th</sup>	Boy Scout Jamboree on the Air, for more information contact Frank, W7PAQ fkissel@centric.net
1 <sup>st</sup> & 3 <sup>rd</sup> Sundays	Montana Races Net, 3.947 MHz at 8:00 am
Saturday	Montana QCWA net, 3.935 MHz at 8:30 am
Daily	Montana Traffic Net, 3910 kHz at 6:30 pm MDT (00:30 GMT)
Every Sunday	ARRL Montana Section HF Information Net, 3880 kHz at 8:00 am
Every Tuesday	Coffee at Arby's South, 2:00 pm, give a shout on 147.04 MHz to see if we are meeting.
Every Wednesday	VHF Net meets at 147.04 MHz (+offset) at 9 pm
Every Saturday	"Ham" breakfast, Lucky Strike Casino Restaurant, 7:00 am

# Hellgate ARC August 10<sup>th</sup> Auction



Antennas and other hardware from Jim O'Neill WA7OPE

Aluminum Create CR30 Tower  
Bob Myers Parabolic Antenna  
Crushcraft 4 Bay 440 Mhz Antenna  
KLM 6 Meter Antenna

KLM 2M-22C 2 Meter Downlink Antenna  
KLM 435-40CX 440 Mhz Uplink Antenna  
KLM 440-10X Pair of Yagi for link to 2 Meter repeater  
Crushcraft 13B2 13 Element 2 Meter Antenna  
Hard line with connectors



# Amateur Radio Quiz: I Knew That!

Originally Published on the ARRL website

By H. Ward Silver, NOAX - ARRL Contributing Editor - n0ax@arrl.org

There's so much to know in an activity with a long history like Amateur Radio. Both newcomers and old-timers find it easy to be flummoxed if they're not "in the know" when confronted with an on-the-air mystery -- like the ones below! The ARRL Operating Manual is a good source of information about what takes place on the ham bands.

1) A warbling signal around 14.230 MHz is probably...

- a. RTTY
- b. AMTOR
- c. SSTV
- d. HF Fax

2) Slow Morse code "O" characters sent on 144.015 MHz band are likely...

- a. EME
- b. ATV
- c. Meteor Scatter
- d. Intruders

3) You've just worked a station on 13.995 by calling them on 14.025. What day is it?

- 4) A station calling "CQ CHN" is looking for what?
  - a. Chinese hams
  - b. Canadian Ham Night participants
  - c. County Hunters Net members
  - d. CNN field reporters on the shared 30 meter band

5) What operating event takes place on New Year's Eve?

- a. Rag Chew Night
- b. Straight Key Night
- c. Hootowl Sprint
- d. Moonlight Ramble

6) The All Asian contests permit YLs to send part of their exchange as "00". What does this represent?

- a. Age
- b. Serial number
- c. Zone
- d. Marital status

7) On which HF band would you find FM signals?

- a. 75 meters
- b. 30 meters
- c. 12 meters
- d. 10 meters

8) Which of these is not a digital mode?

- a. SSB-SC
- b. Olivia
- c. PSK31
- d. THROB

9) You hear a signal ID in CW on 14.100 MHz followed by tones that slowly get weaker, and then a different ID is transmitted followed by tones. What are you hearing?

- a. An antenna test competition
- b. WWV
- c. Northern California DX Foundation beacons
- d. 20 meter ionospheric sounders

10) What is the only amateur band on which phone transmissions are not allowed?

- a. 30 meters
- b. 17 meters
- c. 12 meters
- d. 902 MHz

11) What is the only amateur band on which CW transmissions are not allowed?

- a. 60 meters
- b. 12 meters
- c. 902 MHz
- d. 10.7 GHz

12) 56 kbps data signals are permitted on ham bands above what frequency?

- a. 30 MHz
- b. 50 MHz
- c. 144 MHz
- d. 222 MHz

Bonus: Which 2 meter repeater output frequency can the input be offset either +600 kHz or -600 kHz?

Answers

1) c -- This is the SSTV calling frequency.  
2) a -- EME (Earth-Moon-Earth or "moonbounce") stations send "O"  
to listen for their own echoes and alert others to their presence.  
3) Armed Forces Day when hams make crossband QSOs with  
stations on US Military bases. With call signs of WAR, AIR, NAV and  
such, they have memorable QSLs.  
4) c -- The county hunters pursue the USA-CA Award.  
5) b -- Dust off that brass and pound away before heading out to  
that midnight gala.  
6) a -- Who said chivalry was dead?  
7) d -- Tune up to 29.600 -- the FM simplex calling frequency -- or  
try some of the repeaters between 29.5 and 29.7 MHz.  
8) a -- Single Sideband-Suppressed Carrier is the name of the pri-  
mary analog HF voice mode.  
9) c -- This organization supports a worldwide beacon network on  
20 through 10 meters - very handy! See their Web site for details  
and schedules.  
10) a -- 30 meters is a refuge for the CW and digital operator, al-  
though still a secondary allocation to amateurs.  
11) a -- 60 meters consists of five fixed-frequency channels where  
only USB voice is permitted.  
12) d -- The lower the band, the lower maximum data rate becomes,  
down to 1200 bps in the HF bands.  
Bonus: Repeater outputs on 147.00 MHz comply with both -600 kHz  
and +600 kHz offset planning.

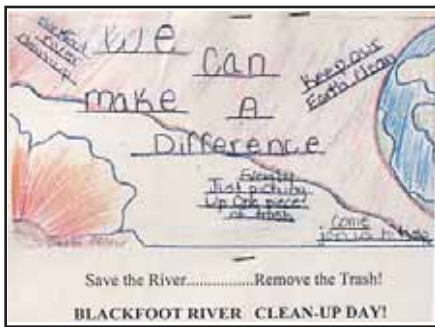
# HARC participates in Blackfoot River Cleanup

Pictures by Bryan Spellman, mtbearded1@aol.com

Thank you to the following operators who participated in the Blackfoot River Cleanup:

Bill, W4YMA; Lewis, AC7UZ; Elmer, WG7P; Liz, WG7E

Kevin, W1K GK; Michael, AE7MH



The following information was taken from an article published in the Missoulian by Reporter Joe Nickell. For the complete article, please visit <http://www.missoulian.com/articles/2009/07/25/bnews/br54.txt>.

The sixth annual Blackfoot River Cleanup took place July 25th. Approximately 140 people participated in the event. Scuba divers, floaters, walkers and a few radio operators all came together with a common purpose; help beautify one of western Montana's most beautiful river corridors.

Indeed, this year's cleanup was a meticulously organized affair. Volunteers signed in at the residence of Robert and Marietta Pfister at Rainbow's Bend, where they were divvied up and assigned to cover various sections of the river, some on the banks, some on the water, some under the water. The Blackfoot Home and Community Club provided a lunch of hamburgers and pop, as well as mesh bags for trash collection.

Montana Fish, Wildlife & Parks provided plastic bags. Numerous area businesses provided rafts and river safety equipment. Even the Hellgate Amateur Radio Club pitched in, setting up repeaters and radio stations along the Blackfoot Recreation Corridor, where cell phone coverage is lacking.

"For us, this is fun," said Bill Farrell, vice president of the ham radio club. "We get to get out all of our toys, get set up, and then it's like sitting around watching paint dry for the rest of the day. That's what we want; we don't want people calling in with trouble. So far, every year, we've gotten what we want in that way."



# **HELLGATE AMATEUR RADIO CLUB**

## **MINUTES JULY 13, 2009 MEETING**

**MEETING** called to order at 7:00 PM by ELMER WG7P

**INTRODUCTIONS** were made with 17 present

**SECRETARIES REPORT**—MIKE KE7IZG — Motion-Donnie W7XY, 2nd Lewis AC7UZ to approve June 8, 2009 minutes as presented-- Motion passed

**TREASURERS REPORT**—JERRY N7GE—Motion Liz WG7E, 2nd Donnie W7XY to approve the Treasurer's report as presented—Motion passed

### **COMMITTEE REPORTS**

REPEATER—Bill W4YMA stated nothing new to report

NET OPERATORS—7/15 Mike AE7MH, 7/22 Eric NZ7S, 7/29 Bill W4PMA, 8/5 Elmer WG7P, 8/12 Lewis AC7UZ/Kevin W1KGK

### **OLD BUSINESS**

STATIC—MONTHLY EDITOR, August= Mike AE7MH SEPTEMBER? THANKS Bob N7MSE for July Static, NO ONE WOULD VOLUNTEER to write August "Getting to Know" article

FIELD DAY— Elmer WG7P stated the entry form was submitted via the internet and supporting documents were sent via mail, a copy of what was submitted was circulated for viewing. Elmer thanked all for making Field Day fun and a success with a potluck and operating the full 24 hours.

MISSOULA MARATHON—Lewis AC7UZ stated things went well and thanked Mike AE7MH, Greg NL7WB, and Mike N7WKR for helping the last runner pass the finish line. Also thanked other who helped.

4th JULY SPECIAL EVENT STATION REPORT—Bob N7MSU stated event went well although there were only 46 contacts, Steve K7PX did some CW that caught the attention of visitor to the station.

**OTHER ITEMS**—Bill W4YMA indicated he submitted a receipt for \$ 15 for camp ground expense for TOSRV, but Jerry N7GE wouldn't pay, as the only item the club agreed to pay for was gas with receipts. Lewis AC7UZ moved and Kevin W1KGK 2nd a motion to pay Bill's expense for camp fees but not for any motel expenses incurred by other members. Discussion—Bill W4YMA stated Byron NN8A stated he should submit his camp ground expense and the club would pay, it was stated Byron had no authority to make such a statement. Bill also stated he felt he needed the space to set up his radio station, that no one came to see. He agreed that it was his decision to set up his rig and was not requested to do so by the club. It was pointed out that neither the chairman of the event, Bob N7MSU, nor the club president, Elmer WG7P, who were both at TOSRV, was asked if such expense would be approved. Elmer WG7P stated that he felt that any approved expense other than gas should have been approved prior to the event so all would be able to take advantage of approved expenses. Lewis AC7UZ stated that next year it might be good to take the total amount donated by TOSRV and divided by those participating and give everyone an equal share. Bob N7MSU stated there were plenty of free camping spaces available where TOSRV participants were camped. Motion did not pass, but some members donated a total of \$ 12 that was given to Bill.

### **NEW BUSINESS**

BLACKFOOT RIVER CLEANUP—Bill W4YMA stated those helping would meet at 7:30 AM at Rainbow Bend at the Pfisters. A sign up sheet was circulated. No reimbursement for expenses for those helping.

**DISPOSAL OF O'NEALS ANTENNAS**—Jerry N7GE moved and Eric NZ7S 2nd to sell the antennas at the August 10th meeting via a live auction. Motion passed Bob N7MSU suggested that the antenna information be posted at the Glacier Ham Fest. Jerry stated he would get the info to Jackie KC7RBC who would post the info.

**OTHER ITEMS**—Lewis AC7UZ suggested the club purchase APRS kits and put together to use at the Missoula Marathon next year. Eric stated he thought units already put together with a GPS might be a better choice. There was other discussion and questions such as would a license be required to operate APRS, etc. Lewis stated he would gather information such as units available, cost, and other related information, etc. for the next meeting.

Donnie W7XY stated that more help was needed when NOAA asked the club to help with a Weather Alert. Members might be asked to go the Weather Service or perhaps help at his house to man the program he has available from the Weather Service. Elmer WG7P stated he would send an email out to all members (who he has an email address for) asking for volunteers to help during a Weather Alert, and advising them of the antennas to be auctioned off at the next meeting.

### **ANNOUNCEMENTS**

Lewis AC7UZ was thanked for donating his screen room to the club for their use.

Elmer stated he sent thank you notes to TOSRV and Missoula Marathon for their donation to the club.

Montana Club will no longer do banquets, thus Elmer will get information as to the Christmas Party and submit to the club.

Mike McCrackins equipment has been donated to the club. An inventory is being compiled and there will be a recommendation of equipment that the club consider retaining for their use at Field Day and other events. There will be list of equipment the club consider selling.

Mark George W7LEQ also donated a Swan 350 and a few other items.

**GOOD OF THE ORDER**—Mike N7WKR announced that Mike K7DER had passed away.

**DOOR PRIZE DRAWING**—Jackie KC7RBC won the pocket size multitester—it was not Radio Shack

**MOTION TO ADJOURN**—Motion Donnie W7XY, 2nd Bob N7MSU to adjourn—motion passed

# SPOKANE HAMFEST

and

## American Radio Relay League Washington State Convention



**September 26, 2009**  
**University High School**  
**12420 E 32nd Ave, Spokane Valley WA 99216**

Hosted by 8 Amateur Radio Clubs:



**Kamiak Butte  
Amateur  
Repeater Assoc.**



**Panoramaland  
ARC**



**NW Tri-State  
ARO**



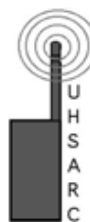
**Inland Empire  
VHF Radio  
Amateurs**



**Palouse Hills  
ARC**



**Spokane DX  
Association**



**University High  
School ARC**

### And Lilac City ARC

\*\*\*\*\*

**Raffle prizes:** 1<sup>st</sup> prize, a Kenwood TS-2000 HF/6M/2M/UHF radio, 2<sup>nd</sup> prize an ICOM IC-718 compact HF radio, 3<sup>rd</sup> prize an ICOM IC-2200H 65W 2M mobile radio, along with many door prizes

**Seminars & displays:** "HF Contesting/QRP" by Dan, K7MM ~ "All About PSK31 & a Little About RTTY" by Bob, AC7GP ~ "Building a 2 Meter Quad Antenna" by Pete, W7OW ~ "IRLP" by Roy & Jan, VE7IS & VE7QE ~ "Junque" Auction by Wilse & Gimmie, WX7P & AL7LB ~ "Doug, KR2Q's 'When Giants Walked the Bands'" by LaMar, WA7LT ~ "Radio Test Gear" Table with Jack, AD7FO License Exam ~ ARRL NW Division Director Jim, K9JF ~ Commercial & non-commercial vendors Non-stop food ~ and much, much more

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### Admission \$5

Age 18 and under FREE

### Commercial tables \$15

\$12 if paid before September 5<sup>th</sup>

### Swap tables \$7.50

\$5.00 if paid before September 5<sup>th</sup>  
Admission not included in the price of table space

**Free off-street parking for cars & RV's**

### Friday, September 25<sup>th</sup>

Vendor Setup: 7-9 PM

### Saturday, September 26<sup>th</sup>

Vendor Setup: 8 AM  
Open to Public: 9 AM – 5 PM  
License Exam: 11:00AM  
"Junque" Auction: 3:00PM  
Raffle: 4:30 PM  
Post Hamfest Dinner: 5PM  
Timber Creek Grill Buffet  
9211 E Montgomery Dr.  
Spokane Valley

**Program advertising available:** ¼ page for \$40 to full page ad for \$120

**License exam info:** Mary, AA7RT at (509)991-2192 or aa7rt@arrl.net

# HARC Field Day Pictures

*Thanks Liz, WG7E for sharing!*



Is amateur Radio important to you? Do you know the threats to our hobby?  
**JOIN and SUPPORT the ARRL**, our greatest advocate for amateur radio.  
Become a member today, for more information visit <http://www.arrl.org>

**Hellgate Amateur Radio Club**  
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**Missoula, MT 59806-3811**