



The Hellgate Static

August 2019



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

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Upcoming Events

- 12-13 October – Western Montana Dirt Derby
- 18-19 October – Boy Scout Jamboree on the Air
- 6-7 December – Skywarn Recognition Day
- 9 December – Christmas Dinner

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

Paul Shuey, N7PAS

August Meeting Program

The Bitterroot Musers (a non-profit organization of dog sled musers in the Bitterroot Valley), have requested HARC to provide communications support for their 2nd Annual Western Montana Dirt Derby, a dryland dog race.

This years race will be held at the Lubrecht State Experimental Forest, October 12-13.

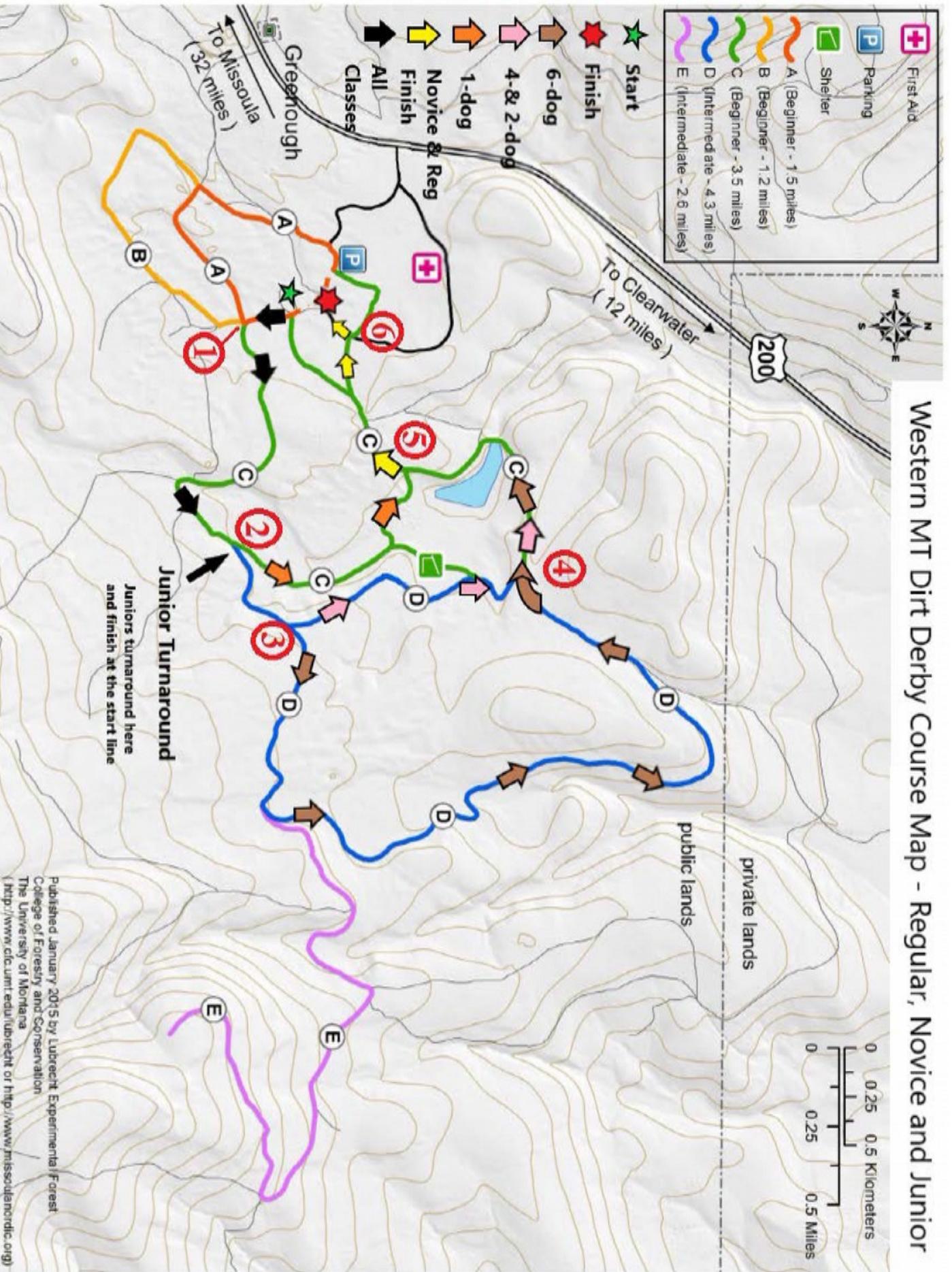
Last year they had 40 teams, from 1 dog canicross to 6 dog teams. Teams came from Idaho, Washington and Arizona as well as Canada. A great turnout for Montana's first dryland dog sled race.

Sonya McCloney, of Bitterroot Musers will be on hand at the August meeting to present a request for assistance.

If you have not ever attended a sled dog race, winter or dryland, it is quite an experience. There will be dogs, a lot of dogs. Excited dogs, ready to run!

See the 2019 Western Montana Dirt Derby Course on Page 2 of this newsletter.

Western MT Dirt Derby Course Map - Regular, Novice and Junior



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 College of Forestry and Conservation
 The University of Montana
<http://www.cfc.umt.edu/lutrecht> or <http://www.missoulanordic.org>

Point 6 VHF Repeater Status

Eric NZ7S and Paul N7PAS took a journey up to Point 6 to repair the damaged 147.040 repeater tower. The trip was successful and the repeater is back in operation. This is fortuitous because prior to the July 24th VHF net, it was discovered that the 146.900 repeater is off the air. The repeater committee will be assessing the situation.

47 CFR § 97.15 - Station antenna structures.

§ 97.15 Station antenna structures.

(a) Owners of certain antenna structures more than 60.96 meters (200 feet) above ground level at the site or located near or at a public use airport must notify the Federal Aviation Administration and register with the Commission as required by part 17 of this chapter.

(b) Except as otherwise provided herein, a station antenna structure may be erected at heights and dimensions sufficient to accommodate amateur service communications. (State and local regulation of a station antenna structure must not preclude amateur service communications. Rather, it must reasonably accommodate such communications and must constitute the minimum practicable regulation to accomplish the state or local authority's legitimate purpose. See PRB-1, 101 FCC 2d 952 (1985) for details.)

(c) Antennas used to transmit in the 2200 m and 630 m bands must not exceed 60 meters in height above ground level.

[64 FR 53242, Oct. 1, 1999, as amended at 82 FR 27214, June 14, 2017]

AMSAT and ARISS Designing Amateur Radio System for Lunar Gateway

08/06/2019 ARRL Newsletter

Details are still being fleshed out, but AMSAT and are working on the design of an Amateur Radio system for NASA's Lunar Gateway. As NASA explains, the Gateway "will be a small spaceship in orbit around the moon that will provide access to more of the lunar surface than ever before with living quarters for astronauts, a lab for science and research, ports for visiting spacecraft, and more." For NASA, the Lunar Gateway is "a spaceport for human and robotic exploration to the moon and beyond." For radio amateurs, the Lunar Gateway will represent the next step in moving ham radio out of low-Earth orbit and into deep space. Under the current timeline, initial sections of the Gateway are scheduled to launch in 2022, with the Gateway in lunar orbit by 2026.

"To make this happen, we are leveraging the work and expertise of the worldwide AMSAT organizations and the international ARISS community in this endeavor," ARISS-International Chair and AMSAT Vice President for Human Spaceflight Programs Frank Bauer, KA3HDO, said. "We have an international team working on this and are meeting twice a month to mature the concept." The ARISS concept was presented to NASA in May and got positive feedback, and was favorably received a few weeks later at the ARISS-International meeting in Montreal from the Canadian Space Agency's Gateway Program Manager.

(Lunar Gateway continued)

“The Amateur Radio Exploration (AREx) team has done some really good work,” Bauer continued. “The challenge for amateurs will be on the order of a 30 dB signal path loss as compared to LEO. But the link margins on our design seem to close [that gap].”

The Lunar Gateway will serve as a solar-powered communication hub, science lab, short-term habitation module, and a holding area for rovers and other robots that may be bound for the moon or for other planets. NASA is leading the project in collaboration with commercial and international partners, and all of the International Space Station partners. This includes the European Space Agency, Roscosmos (Russia), JAXA (Japan), and the Canadian Space Agency.

One of the project’s facets now under discussion within the AREx Working Group is a phased-array antenna that can be electronically directed. The Lunar Gateway group has told ARISS that it is important to get in on Phase 1 of the Lunar Gateway program and develop its system early on.

“We need to develop a block diagram of a system and subsystems and find team members who want to work on each, Bauer said when the ARISS-International team met in Montreal. “We must set up requirements and interface documentation. We need to solidify the frequencies to use, working with the International Space Frequency Coordination Group.”

ARRL Representative Rosalie White, K1STO, said that ARISS wants to spread the word about the new initiative. “Doing so will help bring in greatly needed new volunteers to join the team and assist with what unique things must be done,” she said. “When able, face-to-face meetings must be held with team leaders to define roles for team members and to develop hardware plans.”

White also hopes the new project may inspire the of the Amateur Radio community.

One Dead, One Injured in New Hampshire Ham Radio Tower Mishap

07/31/2019 ARRL newsletter

A tower dismantling turned tragic on Saturday, July 27, in Deerfield, New Hampshire, when two radio amateurs working some 40 feet up on the tower were carried to the ground when the structure collapsed. Joseph Areyzaga, K1JGA, 52, of Goffstown, New Hampshire, did not survive his injuries sustained in the fall, while the tower’s owner, Michael Rancourt, K1EEE, 65, was seriously injured and remains hospitalized. Rancourt was taking down the tower in preparation for selling his house, and the pair had nearly completed their work. They were tied into the tower and went down with it as it collapsed.

The tower, a tilt-over model said to be 40 to 50 feet, had been bolted to prevent it from tilting as it was being dismantled.

A law enforcement source said a number of people were at the site at the time for a social gathering as the tower was being taken down, and they witnessed the tragedy.

No official determination has been made regarding the cause of the structural failure, but a radio amateur who visited the scene afterward observed that two of the tower’s three legs were clearly compromised and split cleanly and the third leg bent, just above the fully intact tilt base.

The New Hampshire Amateur Radio tower-related fatality is the second such deadly incident in a little more than 6 weeks. In mid-June, a Pennsylvania radio amateur died when the tower he was installing collapsed as he was attempting to attach a guy line to the structure’s bottom section.

July 8th, 2019 Tentative Meeting Minutes

Attendance: Donna Pecastaing KC5WRA, Jackie Harrington KC7RBC, David Herzberg K7MTD, Terry Cook KF7BQ, Rich Kingdon K7QNZ, Bryce Nordgren AF7RQ, Tom McGinley K7QA, Tom Hellem K0SN, Dick Walton W7XT, Eric Sedgwick NZ7S, Mike Leary K7MSO, Jim Hofmann N5CY, Larry Stipe K7GIS, and Paul Shuey N7PAS.

Test results: Two tests administered, both were successful.

Approval of March meeting minutes: Approved. Moved by David and seconded by Donna.

Treasurer's Report: By David. Approved on a motion by Donna and second by Paul.

Repeater Report: 1.) Eric is anxious to get up to point 6. Bryce will be going up and will take some pictures of the damage, and then Paul and Eric intend to go up Saturday at 7:00 AM to see what can be done.

2.) Some discussion about retaining the Bird wattmeter slugs that the club obtained in the Barry Smith estate. They will remain in possession of the club.

HF Committee Report: 1.) Dick Walton explained procedure for selling club property and surplus equipment.

2.) The Clubs Icom 736 is in need of repair 3.) The clubs generator is in need of repair or replacement.

Recent Events: 1.) Missoula Marathon went very well. Trackers worked fine, and everything went smoothly.

2.) 4th of July event station went well, worked 44 stations. We may want to put up signs around the Fort Missoula area to increase traffic at our site next year.

Additional Discussions: 1.) Paul Shuey has foxhunt transmitter breadboard operational and expects to have it finished later this year or early next year.

2.) We will begin collecting E-mail addresses for use in promoting the Hellgate Amateur Radio Club.

Wednesday night VHF net control assignments:

July 10 David K7MTD
17 Mike K7MSO
24 Eric NZ7S
31 Jeri N7JGS
Aug. 7 Donna KC5WRA
14 Paul N7PAS

Next Meeting: Monday August 12th.