

Sled Dogs and Ham Radio in the North Maine Woods

Derrick Ouellette, KW1A

The Can-Am Crown International Sled Dog Race is a 250-mile journey through the North Maine Woods, held on the first weekend of March in Fort Kent, Maine. Race participants stop at four checkpoints (two of which are off the grid) where mushers can eat, rest, and warm up. During this time of year, the landscape can range from below-zero temperatures with wind chills as low as -40°F , to sun and calm winds with a mild temperature of 20°F .

Aroostook County, Maine, is made up of small towns and villages, unorganized territories, lakes and rivers, and the vast woodland distances between them. It's the largest county east of the Mississippi and is filled with friendly, hardworking people. There are many log trucks and wood mills, and the area is full of opportunities for outdoor recreation. However, it lacks good cell phone coverage and reliable internet (some areas don't have any).

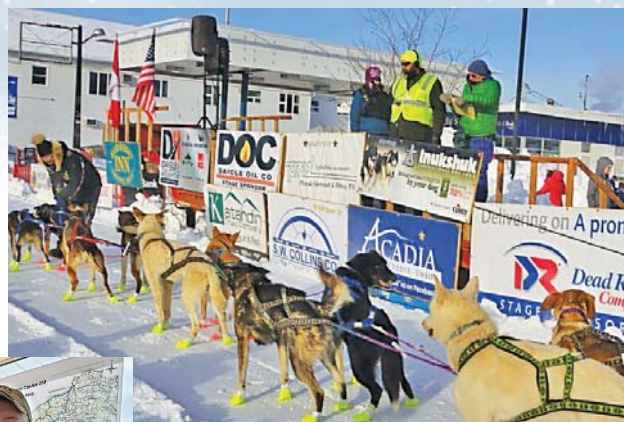
A Need for Ham Radio

Some of the race checkpoints are so remote, the only effective way to communicate race times and supply checkpoint needs, attend to medical emergencies, or handle any other message traffic is via ham radio. This is possible by using both of the Saint John Valley Amateur Radio Association's (N1SJV) repeaters, various HF modes, cross-banding, and simplex for inter-checkpoint communications. It takes tons of ham radio equipment and the dedication of over 20 hams dispersed throughout race locations. The event requires year-round planning.

Race Logistics

The event begins in the early morning on the first Saturday in March, along Main Street in Fort Kent, which runs parallel to the Saint John River that marks the border between the US and Canada. The race usually

A 250-mile remote sled dog race has a critical need for amateur radio.



▲ Jack Caron, W1AYX, and Bob Brooks, W1AGC, at the start of the race. [Janice Kasper, photo]

◀ Rob Hoey, W1EBA; Marty Baker, K1MJB, and Derrick Ouellette, KW1A, operated net control. [Jennifer Ouellette, photo]

lasts until late Monday evening, but it depends on the weather and how fast the dogs are running.

It takes four hams to run net control (NC) — two during the day and two at night. These hams take 12-hour shifts logging official times and delivering messages to and from the event command center. NC is set up at the bottom of the ski slope at Lonesome Pine Trails in Fort Kent, and is the race finish line. The NC location is great for exposing ham radio to the public. Those who enter the building can easily see ham radio in action. Some people come into the "shack" to ask questions and look around. As an ARRL Volunteer Examiner (VE) and instructor, I enjoy opportunities to share our great hobby with others. Sometimes we broadcast on local TV and radio stations during the event.

As the race begins, hams at the start line relay their start times, bib numbers, and the number of dogs each sled has, for tracking purposes. The start location is down the road from NC and can be relayed via handheld transceiver simplex. A half a mile from the finish line, there are hams waiting in vehicles to give a warning that a team is coming, as sometimes it can be hours before another team comes. Although it's only half a mile away, it's on the other side of a hill, and a handheld transceiver won't get through to NC.

Checkpoint Components

The first checkpoint is in the small town of Portage Lake, about 65 miles from the start line. At this location, a mast is in the air supporting the VHF antenna and an HF dipole with the help of a huge snow pile. This spot is an official spectator checkpoint, so the public is welcome to enjoy the races firsthand.

The next two checkpoints are at remote logging camps. The first logging camp is about 55 miles from Portage Lake, and the next is about 35 miles from there. These roads are plowed specifically for this event, and someone has to open the camps by starting generators and getting fuel. These checkpoints aren't open to the public, and have just the supplies needed for the race. Because these checkpoints have no landline or cell phone coverage, ham radio is critical. VHF repeaters and HF voice is used as backup, and Winlink is also used. These two checkpoints can talk to each other via VHF simplex due to a river running between them, cutting out the hills and mountains that would normally prohibit this in the area. The mushers stay at these checkpoints for a mandatory rest time while veterinarians check the dogs and the sleds get restocked, before travelling about 52 miles to the last checkpoint.

The last checkpoint before the finish line is in Allagash. It opens Sunday afternoon at Two Rivers Lunch restaurant and runs into late Monday or Tuesday morning, depending on team speeds. The radio "shack" is the center of attention because it's placed on a table in the middle of the restaurant. This checkpoint uses mainly VHF, but has HF as backup. It's another great location to promote ham radio. There's an official time-tracking board near the ham setup that's updated every time a team arrives and departs. Spectators can see the ham operators in action, relaying information back and forth to NC. It's busy here, and the hams do an awesome job in a hectic environment. The finish line is 45 miles from this checkpoint in Fort Kent, where NC watches the teams finish the race after having travelled a total distance of about 250 miles.

Additionally, there's at least one safety station between each checkpoint where non-hams use public safety radio to communicate back to the checkpoint, and to help track where the teams are. Some of these stations include snowmobiles with mobile radios attached to them.

Additional Races

During the Can-Am Crown International Sled Dog Race, there are also 30- and 100-mile races that take place.



▲ Supplies and antennas at one of the logging-camp checkpoints. [Brit Rothrock, AB1KI, and Ann Rothrock, KB1PYV, photo]

◀ After a heavy snowfall, Derrick Ouellette, KW1A, cleaned snow off of the solar panels just before the races. [Derrick Ouellette, KW1A, photo]

The 30-mile race has a checkpoint similar to the safety station on a snowmobile, is manned by a few hams, and is set up at Black Lake. Mushers participating in the 100-mile race travel to Allagash and back to Fort Kent. A checkpoint with hams is set up at the old Allagash school, and requires a mandatory rest time.

Conclusion

These races wouldn't be successful without the dedication of amateur radio volunteers from all over Maine (some have even come from out of state). We're thankful to be able to use the Saint John Valley Amateur Radio Association's repeaters for the event. I hope every ham has a chance to do something like this at least once during their ham radio journey.

Derrick Ouellette, KW1A, obtained his Technician-class license during his senior year of high school and earned his Amateur Extra-class license soon after. Derrick has had several elected positions in his local radio club, most notably President. Being a firefighter EMT, his favorite part of ham radio is public service. Derrick also enjoys making rare DX contacts as well as extended contacts. He can be reached at kw1a@arrl.net.

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