

# Yukon Quest

## Hughes Keeps Yukon Quest Sled Dog Race Connected Over 1,000 Miles of Arctic Terrain

**The Yukon Quest trail challenges sled dog racers—“mushers”—with a thousand miles of Arctic wilderness, four mountains, and some of the most treacherous weather on the planet.**

Race organizers face those same challenges, plus the logistics of making the race run safely and smoothly. Most of that burden falls on the Yukon Quest’s race manager, race marshal, and head veterinarian.

These three officials need reliable communications to get as many as 50 mushers and 700 dogs over the frozen landscape between Fairbanks, Alaska, and Whitehorse in the Canadian Yukon. Hughes Network Systems, provider of the HughesNet satellite Internet service, and partner Alaska Satellite Internet provide the Yukon Quest with satellite broadband that supports voice and data communications service on the Alaskan half of the Yukon Quest.

HughesNet® Voice connects each checkpoint and Quest headquarters in Fairbanks by telephone. Internet service enables the reporters and photographers who cover the race to file stories and images from the trail and also provides an alternative communication channel for race staff and volunteers.

“To be able to pick up a phone at a checkpoint and talk like we were in Fairbanks has been game-changing for us,” said Race Marshal Doug Grilliot, who has overall decision-making responsibility and supervises the race judges. “We pick up, dial, and get outstanding call quality. We couldn’t ask for anything better.”



### Technology rises to the Arctic challenge

Doug Grilliot, Race Manager Alex Olesen, and Head Veterinarian Dr. Nina Hansen shoulder most of the responsibility for operations during the Yukon Quest. They coordinate teams of volunteers and paid staff who do everything from breaking and marking trails, to setting up checkpoints, to scheduling flights for people and supplies. They collaborate to evacuate sick dogs and whole teams stranded by weather or random mishaps. They decide when to send volunteers onto the trail to warn mushers around hazardous conditions.

After months of preparation, they spend the 10–15 days of the race staying just ahead of the leaders, using the Hughes service to help troubleshoot all the way. Despite meticulous planning, last-minute problems are inevitable.

“We try to stick to our plan, but it changes a lot during the race,” said Dr. Hansen, who supervises a staff of 12 volunteer veterinarians and their support staffs. “We have two to three vets on every team, and we’re constantly swapping assistants in and out. I have to make sure I don’t have someone scheduled in the same place twice or on duty for three days straight. Sleep is a big challenge because we’re always moving, so we have to constantly factor in downtime for the crews.”

In previous years, Yukon Quest officials relied on volunteer ham radio operators to stay in touch with the checkpoints and each other. The ham operators were a dedicated crew, according to Alex Olesen, but ham radio technology wasn’t ideally suited to moving around and relaying messages among many different people. Instead of communicating directly, race officials had to pass messages through ham operators—with varied results.

“It was like a game of telephone. I’d pass a message to a ham operator, who would radio it to another ham operator at headquarters,” said Olesen. He is responsible for overall logistics, which includes moving race staff and judges and equipment—tables, chairs, cooking gear, etc.—between checkpoints by road and air. “Now, I push a button and talk directly to whomever I need to.”

## Faster decisions, less guesswork

Hughes provides satellite connectivity at the Yukon Quest checkpoints, some of which are little more than a mining claim or a gravel pit hundreds of miles from a town with an electrical grid. Despite the distances between the checkpoints, the Yukon Quest officials have very little time to ponder decisions when faced with a new challenge. The Hughes system helps them collaborate and resolve situations quickly.

“We don’t have time for committee meetings. We have to decide and go,” Grilliot said. “The Hughes system helps us knock hours off the decision-making process. That increases safety levels and our team’s productivity.”

In addition to keeping the race officials in touch with each other, Internet access enables them to track the mushers through



Yukon Quest photos courtesy of Julien Schroeder

their GPS units. That helps them accurately forecast when the dogsled teams will arrive at the checkpoints so staff can take breaks instead of spending hours on watch outside in the cold.

“When you’re in a checkpoint and able to see that the next team won’t be in for four hours, you know you have time to get something done, or have something to eat, or take a nap before you go outside,” Olesen said. “That’s just huge on relieving stress and reducing sleep deprivation. That part of having the Hughes system has been really transformative for us.”

## About Hughes

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