

Hughes and Alaska Satellite Keep 1,000 Mile International Yukon Quest Sled Dog Race Connected to the Internet

Since 1984, the Yukon Quest has celebrated the northern lifestyle and spirit with a 1,000 mile sled dog race between Fairbanks, Alaska and Whitehorse, Yukon, Canada. Dog teams brave the snowed-over mail trails and frozen rivers of the Yukon in temperatures as low as minus 50 degrees, just as their forbearers did in the Gold Rush days.

The race route takes mushers hundreds of miles from the nearest settlement. Accidents, injured dogs, and freak storms are constant hazards. As in the old days, the mushers are alone with their dogs and whatever they can carry on their sleds. They are unable to receive any outside assistance along the trail.

Internet access enables the Yukon Quest staff, logistics team, race officials, veterinarians, and volunteers to coordinate operations along the trail. They use email, social media, and Internet telephony to check on supply drops and facility statuses and to coordinate personnel movement via ground or small plane. Because the race spans an international border, a customs agent is flown into Eagle, Alaska to check passports and the dogs' health records. Internet access is vital for filing flight plans because filing them manually takes too long and can hold up the race.



Journalists use the same satellite broadband infrastructure to file stories and images from the checkpoints, and race teams blog live from the race route. Thousands of fans watch the mushers' progress on the web.

"We have people constantly following the race through social media and our website," said Yukon Quest Executive Director Marti Steury. "In 2012, our website got 1.7 million hits and we're also posting on Facebook. In 2011, during a very bad storm we had 30,000 people watching the race on Valentine's Day evening when a musher was lost on a mountainside in high winds and minus 45 degree temperatures."

Communication on the Canadian half of the Quest is fairly routine because the Yukon has an extensive cell phone network. The Alaskan half is another story. There is no cell phone infrastructure for voice calls or Internet access. With no permanent infrastructure to rely on, the Yukon Quest turned to HughesNet® satellite broadband for high-performance Internet connectivity on the U.S. leg of the race.

"The U.S. side is a total dead zone," Steury said. "Northern Alaska has no cellphone coverage more than 10 minutes outside of Fairbanks. Our headquarters is in an historic log cabin in the center of Fairbanks. If you go the edge of town, there's very limited cell service. After that, all communication has to be by satellite. Alaska Satellite Internet and Hughes have been critical for providing connectivity at the checkpoints."

Alaska Satellite Internet, a Hughes reseller, provided Yukon Quest with Hughes satellite broadband service for six years. In 2013, Hughes donated four Hughes satellite terminals and HughesNet Gen4 Business Internet service for checkpoints

between Eagle and Fairbanks; Alaska Satellite owner Will Johnson donated the installation and maintenance service. He also maintains a full-time Hughes account for the Yukon Quest's website.

"The Internet is our lifeline. We start at the same spot then leapfrog from one checkpoint to another during the race. We have personnel and material spread over 500 or 600 miles, so it's vital that we know where everyone is and what they're doing," Steury said. "It's especially important for us to be able to track our people and make sure everyone is accounted for. We had a race judge sleep in his truck on the side of a mountain this year because of blizzard conditions, but we knew he was okay. It's an extreme environment and things like that happen a lot."

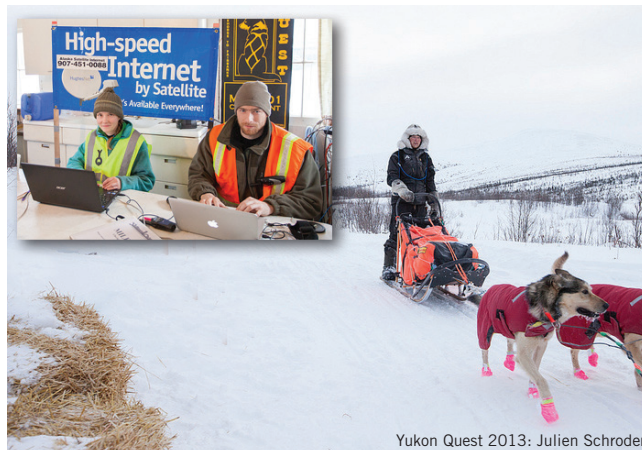
To get the Hughes service set up at the checkpoints, Johnson flew his small plane to each location carrying Hughes satellite broadband equipment including antennas, radios, and the modems that hook up to computers. He landed on a roadway at one checkpoint that lacked an airstrip and navigated unpredictable winds at another checkpoint located between two mountains. One site had no electric grid, so Johnson had to connect the satellite broadband equipment to generators.

The distances and extreme conditions gave Johnson very small margins of error for getting the Hughes systems up and running.

"It's important to have as few glitches with the service as possible. The sites are remote and there are so many things that can go wrong, the less trouble with the service itself the better," Johnson said. "The HughesNet Gen4 service worked beautifully. We had a small glitch when we lost access to service tokens, but we got good support from Hughes and got them back. It's a pretty darn powerful service with good customer support."

About Hughes

Hughes Network Systems, LLC (Hughes) is the world's leading provider of satellite broadband for home and office, delivering innovative network technologies, managed services, and solutions for enterprises and governments globally. HughesNet® is the #1 high-speed satellite Internet service in the marketplace, with offerings to suit every budget. To date, Hughes has shipped more than 3.3 million systems to customers in over 100 countries, representing over 50 percent market share. Its products employ global standards approved by the TIA, ETSI, and ITU organizations, including IPoS/DVB-S2, RSM-A, and GMR-1. Headquartered outside Washington, D.C., in Germantown, Maryland, USA, Hughes operates sales and support offices worldwide and is a wholly owned subsidiary of EchoStar Corporation (NASDAQ: SATS), a premier global provider of satellite operations and digital TV solutions. For additional information about Hughes, please visit www.hughes.com.



Growing interest in the race means an increasing demand for high-capacity Internet, Steury said. In previous years, high demand for bandwidth at the checkpoints had crashed the Internet connections. This year, however, the checkpoints had more than enough bandwidth. The higher capacity service provided the Yukon Quest with a tool for promoting itself, as well as for coordinating its operations.

"Because we're operating on a lineal, 1,000 mile long playing field, it's hard to get direct fan participation in the race. What Hughes has done is opened us up to a global fan base," Steury said. "We do something very unique here. We and the Iditarod are the only 1,000 mile sled dog races in the world."

"HughesNet opens up more possibilities with social media and the news media. They need a lot of bandwidth for images, text, voice, and video. With HughesNet support, more bandwidth is available for media," added Steury.

**For additional information about HughesNet Gen4, please call 1-866-293-8945
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