

Ariz. technology part of Alaska's Iron Dog race

by Jane Larson - Mar. 10, 2009 02:17 PM
The Arizona Republic

What do desert rats know about improving Alaska's longest and toughest snowmobile race?

Turns out, a lot.

Three small businesses from Scottsdale, Chandler and Phoenix combined to create the [tracking devices](#) that monitored competitors in last month's Tesoro Iron Dog snowmobile race.

Using the Iridium satellite network, the devices added a measure of safety, reducing search time in case racers wandered off course or got hurt in the freezing wilderness. Iron Dog officials also used them to give fans a way to follow the race in real time via the Internet.

Jeff McFarland, president of Applied Satellite Engineering in Scottsdale, said the companies were thrilled that the [system](#) performed well this year.

"The equipment has to work in a horrible environment," he said. "It has to be installed correctly, and it all reported correctly."

The Iron Dog, which started in 1984, covers 1,971 miles from Big Lake, Alaska, to Nome and on to Fairbanks. Snowmobilers compete in two-man teams, racing from checkpoint to checkpoint in often-freezing, sometimes-stormy conditions during what is typically a weeklong contest in mid-February.

The race gained name recognition last year

from its connection with Alaska governor and vice presidential candidate Sarah Palin. Palin's husband, Todd, is a four-time winner of the Iron Dog.

The race counts on volunteers along the route to phone or fax results to headquarters so it can post the times that teams pass through various checkpoints. The drawbacks to that system, though, were the delays and the potential for human error.

"Information is in such demand these days," said Laura Bedard, executive director of Iron Dog. "People want it, and they want it now."

Given the scarcity of cellphone service in the wilderness, [satellite tracking](#) is the only way to transmit the racers' positions, Bedard said.

The latest results didn't happen overnight.

World Communication Center of Chandler started working with the race four years ago when it tested a combination [modem](#) and Global Positioning System device on four snowmobiles, said Teri Petram, director of sales and marketing for WCC.

Advertisement

Mom Dilemma #36:
Your daughter insists on wearing her princess costume to the grocery store. Allow it or not?

YES, at least she's dressed!

NO, I have some rules!

momslike.me.com
where Local moms meet

Print Powered By FormatDynamics™

The device was heavy and shoebox-sized, and racers didn't like the extra weight and bulk.

The device got smaller the next year, Petram said, but it came back beaten up due to the brutal conditions.

So WCC got Applied Satellite Engineering involved. ASE shrunk the device to one-fourth the size and encased it in a rugged box, and race organizers had them installed on all of the 40 snowmobiles.

The technology successfully reported racers' coordinates along the course that year. But it downloaded them all at once at the end of the day, which limited the data's usefulness during race time.

This year, Ontec Technologies of Phoenix tweaked the [software](#) so it would report racers' positions every five minutes and in real time. The companies used a technique called geo-fencing, which puts virtual fences around locations, such as checkpoints, and transmits the times users passed through.

This year also was the first time spectators could get automatic notifications of racers' positions. Assuming the technology worked with their cellphone carriers' technology, fans could sign up to get text messages or e-mails whenever their favorite teams passed a checkpoint.

The improvements sent hits to the Iron Dog's Web site soaring. The site got 13.7 million hits in February, nearly triple the 5 million hits in the same month three years ago.

Snowmobile races admittedly are a limited market. But the Arizona companies say they like testing the product in such a tough

environment and are using the technology in many other industries.

"It's one thing to track snowmobiles in the wilderness, and it's another to apply this in the business world," Petram said.

WCC customers use satellite tracking to get status reports on their freight trucks. Universities use it to measure ocean temperatures or rain in South American deserts. Others are considering using satellites to track vehicles in dangerous border areas or snowplows in remote locations.

ASE-built units are used to gather data from remote locations. The energy industry is one of ASE's biggest targets, McFarland said, since the devices can help customers use windmills and solar batteries more efficiently.

Copyright © 2010, azcentral.com. All rights reserved. Users of this site agree to the [Terms of Service](#) and [Privacy Policy/Your California Privacy Rights](#)

Advertisement



Mom Dilemma #36:
Your daughter insists on wearing her princess costume to the grocery store. Allow it or not?

YES, at least she's dressed!

NO, I have some rules!

momslike.me.com
where Local moms meet

Print Powered By  FormatDynamics™