

## Mission Planning; Navigating the Iditarod

*by Doug Adomatis*

In the old days, mushers needed a sense of direction akin to that of migrating geese. Now with a little help from Lowrance Electronics, Inc., the first-ever crossing of the Iditarod by an ATV will be attempted with the aid of the Global Positioning System. The ATV Illustrated expedition is set to navigate from Nome to Anchorage on specially equipped Bombardier Traxters in February 2003.

When Bob Davis, the editor of ATV Illustrated magazine, contacted me looking for GPS waypoints on the Iditarod trail, the famous dogsled route graduated from my to-do list and became an intensive project. Creating GPS maps is something I do every day, being a part of ATV Illustrated's maiden voyage across Alaska's Norton Bay elevated the everyday to the once-in-a-lifetime.

After some surfing around on the Internet and a dozen or so emails, I was corresponding with Jake Schlapfer, Outdoor Recreation Planner for the Alaska Bureau of Land Management. It turns out that the BLM had recently done a GPS survey of the trail and now publishes a GPS Users Guide for Iditarod trail races. The guide is a paper map that includes a list of waypoints. This BLM GPS data would serve as a navigational yardstick for Bob and his trail riding partner – Mike O'Day.

Separately, Korey Cronquist, Iron Dog (snowmobile) racer sent me GPS waypoints acquired during his run of the trail riding event, which follows the northern route of the Iditarod before turning east to Fairbanks. Korey's waypoints correlated well with the BLM data, but Korey's also included some important off-trail waypoints for the mechanical mushers, like gas stations.

Lowrance Electronics loaned the expedition team two GlobalMap 2400 GPS receivers, and it was my job to preload the units with the trail data.

The first task was to get all the data in proper form. Since the BLM data was only available in print, I had to manually enter the data in a spreadsheet. Korey's data was easy to import since it came to me as a text file attached to email. However, the two waypoint lists could not be combined without some translation because the BLM data used the NAD27 map datum and Korey's data was based on the WGS84 datum. Even though the differences were small, the trail rider's safety and welfare are at stake. Since Lowrance MapCreate software would be instrumental in programming the GPS Units, I got some help from their engineering department to combine the waypoints in the proper format. Thanks guys!

Lowrance has also supplied a custom, digital Alaska base map for this expedition. As the riders progress along the trail, the GlobalMap 2400 will show details on surrounding rivers, lakes, roads, and small towns. And, like blips on a radar screen, the waypoints will signal significant trail features and changes in the direction of travel.

The display screen on the GlobalMap 2400 is a generous 5-inch diagonal and a lot of navigation information can be displayed. In addition to map position, the rider's can choose from digital reads on speed, bearing, distance-traveled and even distance off-course(!).

With all the useful navigational data available to the riders, I was challenged to come up with descriptive waypoint names that didn't clutter the screen or distract the riders. The last thing I wanted was for Bob and Mike to come flying down the backside of the Alaska Range, trying to figure out that "wpt059a" means BRIDGE OUT.

My part of the mission planning is complete. When they crank-up the Traxters in Nome, the GlobalMap 2400's will be pointing the way to Anchorage. All that's left is for me to say, "Bon Voyage, Bob and Mike!"

## **Web References**

ATV Illustrated

[www.atvillustrated.com](http://www.atvillustrated.com)

Alaska BLM, Iditarod Trail

[www.anchorage.ak.blm.gov/inhthome.html](http://www.anchorage.ak.blm.gov/inhthome.html)

Bombardier ATV

[www.bombardier-atv.com](http://www.bombardier-atv.com)

LiteFoot ATV Conversions

[www.litefootatv.com](http://www.litefootatv.com)

Lowrance Electronics

[www.lowrance.com](http://www.lowrance.com)

Travel by GPS

[www.travelbygps.com](http://www.travelbygps.com)

GPS Map of the Iditarod

<http://www.travelbygps.com/premium/iditarod/iditarod.htm>