

CUSTOMER SUCCESS STORY

Redline's Rugged Wireless System Extends Coverage for Oil & Gas Applications in Arctic

CUSTOMER



GCI Industrial Telecom Group

INDUSTRY

Oil & Gas

THE CHALLENGE

- Establish communications links in extremely harsh temperatures and remote locations.
- Enable unattended operation capability.

THE SOLUTION

• Redline's AN-80i in 5.4 GHz and 3.5 GHz.

THE RESULTS

- Flawless operation of a wireless network in temperatures down to -40 degree Fahrenheit.
- Reliable operation and over-theair management eliminated the time, risk, and expense of traveling to remote sites.

Redline's partner GCI Industrial Telecom knows how to do business in one of the coldest places on earth.

GCI designs, installs and supports telecommunications systems for the oil and gas industry, specializing in solving complex voice and data issues in the cold temperatures and widespread remote geography of the state of Alaska. Customers rely on their expertise to keep their communication costs low and find the best solution for their application.

When one of GCI's oil and gas customers expanded their upstream operations into Alaska's North Slope they needed high capacity communications links to connect remote well heads and aggregation sites. Expensive satellite communications was a proven but costly option. Instead GCI elected to install a more economical broadband wireless network.

The challenge was to pick a vendor whose products would reliably provide voice, data and video services in this harsh arctic environment.

The wireless network had to operate when temperatures drop to -40 degrees Fahrenheit. Installation time had to be short because crews can only work outdoors for a short period of time due to the extreme cold. It needed to be highly reliable as travelling to the remote locations for maintenance is difficult, dangerous and expensive. It also must operate over long distances and consume little power.

REDLINE DELIVERS RESULTS IN ALASKA'S NORTH SLOPE

GCI selected several wireless vendors to undergo trials in these challenging conditions and extreme temperatures. At the end of the initial trials only Redline's rugged AN-80i broadband wireless system was still operating.

To ensure the AN-80i would work in a real-life scenario and deliver the performance and reliability GCI's customers demand, GCI set up a winter-long test using several AN-80i systems operating in point-to-point (PTP) mode in key areas across the North Slope. Again, the AN-80i performed flawlessly.

In addition to withstanding extreme temperatures, Redline's AN-80i is also perfectly suited for this application because of its ability to cover the expansive 1200 square mile area easily and at little cost. Its very long range

(over 80 kilometers) and low power consumption keep costs low by requiring little infrastructure. The small, weatherproof design offers a quick and easy installation. All these features combine to deliver greater functionality and lower infrastructure costs than satellite or any other broadband wireless systems.

Redline's AN-80i supports full over-the-air management and software upgrades which eliminates the need to physically access it. With Redline's industry-proven reliability, GCI is not concerned about replacing this system in the near future. These low maintenance features mean crews rarely need to be sent on-site, a huge cost savings for GCI, and one they can pass on to their customers.

As a result of Redline's rugged design, long range, and high reliability, GCI can offer a broadband wireless system which helps their customers reduce communication costs by avoiding expensive satellite communications. GCI has continued to expand in the North Slope and is now deploying similar systems to serve many customers. With Redline, GCI is now connecting hundreds of users over 1200 square miles throughout the Arctic tundra.

ABOUT GCI INDUSTRIAL TELECOM GROUP

GCI's mission is to provide customer-driven, safety-focused, oil and gas communication expertise to industrial communication infrastructure projects and operations. GCI leverages their proven, safe practices, and cost-effective professional services into profitable results. Based in Prudhoe Bay, Anchorage and Houston, Texas, GCI is ready to bring value to your project.

Learn more: www.gci-industrialtelecom.com

"We tested several radios systems and Redline's AN-80i radio was the only radio to operate under the severe environmental conditions our networks experience. Operating in remote, unpopulated areas at temperatures down to -40 degrees Fahrenheit is tough. You can't send people out to repair or upgrade radios in those conditions. We needed reliable unattended operation and Redline performed flawlessly."

> Rick Hansen Director of Engineering GCI Industrial Telecom



ABOUT REDLINE COMMUNICATIONS

Redline Communications (www.rdlcom.com) is the creator of powerful wide-area wireless networks for the world's most challenging applications and locations. Used by oil and gas companies, militaries, municipalities and telecom service providers, Redline's powerful and versatile networks securely and reliably deliver M2M, voice, data and video communications.







