



Kore-Tek Turns-up a 100g Rural Broadband Network in Alaska

Project at a glance

Client: Nushagak COOP, a rural telecommunications cooperative

Location: Levelok, Alaska

Industry: Telecommunications – Fiber, Voice, Video, Data Services

OEM: Ribbon Communications

Technologies Used: Apollo 9603, Neptune 1100, OTDR Functionality

Day 1 & 2 Staging & Prep

- Area orientation in Dillingham, Levelok, and the surrounding areas
- Physical equipment staged at the Dillingham central office
- Worked with OEM and operator engineers to simulate network provisioning on a table-top setup, confirming all devices were operational before field deployment

Day 3+ Site Visits

- Traveled via small aircraft to remote villages with locals — carrying 30 pounds of equipment plus tools in a backpack
- Installed Ribbon Apollo 9603 and Neptune 1100 systems with OTDR capability
- Completed all power and fiber connections

Overview

When the rural telecom cooperative serving Dillingham, Levelok, and surrounding Alaskan villages received government funding to modernize their network, they turned to Ribbon for the technology and Ribbon's professional engineering services firm Kore-Tek for the field expertise to make it happen.

The challenge wasn't just about delivering 100G services to remote communities. It was about doing so in a harsh, unpredictable environment where logistics, timing, and preparation mean everything.

Kore-Tek, acting as an extension of Ribbon, brought not just technical know-how but also the character, adaptability, and resilience to get the job done, no matter what Alaska's tundra threw their way.

Challenges

Building and upgrading telecom networks in rural Alaska is no ordinary project. Many area telco sites are accessible only by plane or boat, and the weather can dictate travel schedules. Once in the field, the team might face situations like a

broken-down side-by-sides miles from the site or a pilot deciding to depart before the crew returns.

On top of these logistical challenges, the cooperative's existing network was built years ago using SONET technology. The new government grant meant it was time to modernize the infrastructure to meet growing demand for high-speed data, video, and voice services for area residents and businesses. This required installing and provisioning Ribbon's next-generation equipment while minimizing disruptions to service.

Why Kore-Tek

Kore-Tek with their experienced staff was the perfect professional services team for three main reasons.

1. **Multi-Faceted Expertise**

Kore-Tek is the "Swiss Army knife" of professional networking services, with skills spanning OEM equipment installation, Network Operations Center (NOC) services, provisioning, and physical infrastructure work.

2. **Proven Preparation**

Kore-Tek's culture emphasizes readiness. With a team of tenured professionals, they know better than others what to anticipate and arrive fully resourced after thoughtful preparation, working closely with the design and on-site operational staff.

3. **Alignment with Ribbon's Standards**

Acting as a seamless extension of Ribbon, Kore-Tek mirrors Ribbon's high-touch customer engagement, thorough communication, and teamwork to ensure field operations align with broader project goals.

In this rugged and unforgiving environment, preparation was critical. There was only one flight to the remote sites each day, which meant the team had one shot at getting the installation right. This work demands preparation as it also promises to surprise.

When the side-by-side broke down and the journey to the site needed to be completed on foot, the team pivoted. Every tool carried needed to justify its weight. The team downsized equipment on the fly, leaving some tools along the extraordinarily muddy trail to lighten the load for a long walk to the site in the difficult terrain.

Despite obstacles, the job was done

1. Seamless coordination between Ribbon engineers, Kore-Tek field crews, and cooperative operations ensured an on-time, in-scope delivery.
2. The on-site team got it done. Zero return trips were required. Work was completed per the original schedule despite remote and challenging conditions.
3. Now, network modernization has positioned the cooperative for the next generation of telecommunications needs.
4. And 100G services were successfully turned up for Levelok and the surrounding villages.

Key Takeaways

This project demonstrates that in rural telecom deployments, success depends as much on adaptability and grit as on technical skill. Kore-Tek's ability to anticipate needs, prepare thoroughly, and respond to the unexpected made them the right choice for Ribbon and the cooperative.

In the words of the cooperative's Operations Director, Mike Timmerman, "Out here, there's no 'we'll just come back tomorrow.' Kore-Tek came in fully prepared, fully aligned with Ribbon, and got the job done right the first time."

For More Information

To find out more about what Kore-Tek solutions and services and do for your company, please visit kore-tek.com

About Kore-Tek

Founded by optical network specialists, Kore-Tek is widely recognized for their unparalleled expertise in critical network infrastructure, providing everything from fiber network architectures to multi-technology optical networking, routing and switching implementations.

Trusted and credentialed by major equipment manufacturers and technology service providers — and backed by decades of experience — Kore-Tek engineers have planned, designed, and managed some of the most relied-upon public and private networks in use today, improving network operations and making complex, next generation digital transformations, simple.

Businesses depend on networks. Network professionals depend on Kore-Tek.

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