

Enhance Nomadic Operations with 3 Wireless Insights



Aviat Networks provides dependable solutions for communication with nomadic or portable assets. Their industry-leading technology offers these key advantages:

- Reliable communication in harsh natural environments or EMF noise
- Self-aligning radios without the need for on-site telecom personnel
- Dependable connectivity for multiple applications over large spaces

Here are three cases showing how Aviat has enhanced nomadic operations in ways that could benefit your own business...

Enduring Oil & Gas Rig Connectivity in Harsh Environments

Client Need – Dependable communication with easy re-deployment

For a leading American oil & gas company, radio linking was required out in the field amidst temperature extremes, tornadoes, high altitude terrain, and corrosive marine environments.

This was to support collaboration between office and field, with real-time drilling and seismic applications, live video, and wi-fi over hundreds of miles without fail.

And they wanted to achieve all this with minimal radio technical skills on-site.



Solution – Resilient, double-life, self-provisioning radio equipment

Aviat RDL-3000 RAS Elite Virtual Fibre and RDL 6000 Private LTE equipment were chosen for their resilience against extreme heat, cold, dust, and salt. The RAS Elite solid-state antenna system was key, with its self-alignment for instant connectivity to moving assets anywhere in the coverage area, without any field telecom personnel required.

The normal five-year life cycle of equipment has been doubled, supporting ten years of field operations so far.

Portable Traffic Management Connectivity in Noisy RF Conditions



Client Need – Easy reliable connection to temporary roadside assets

The New Jersey Turnpike authority needs to monitor and control temporary roadside assets from its operations center. These include signs for road closures and lane changes, live video monitors, along with fog and wildlife sensors.

This is all needed in built-up areas with prolific RF activity from wi-fi and other sources, making reliable communications difficult with a high noise floor.

Solution – Re-deployable radios with high-gain, self-aiming, antennas

The RDL3000 RAS Elite nomadic technology has been used with 'touchless' connection by self-aligning solid-state antennas requiring no technical personnel, saving operational costs.

Unlike omni antennas, the focused beam cuts through interference, supported by encryption, to deliver dependable communication.

Maintaining Tugboat Communications With a 27ft Tide Movement

Client Need – Stop employee turnover from communication isolation

Atlantic Towing personnel lived and worked on tugboats 24/7 for weeks on end, but pretty much cut off from the outside world. This was due to poor cellular coverage in the area.

So they couldn't reach family, friends, or entertainment, causing much discontent and an exodus from their jobs.



Solution – Flexible wide-beam antennas keep employees in touch

An RDL-3000 Ellipse base station was deployed with a 90 degree sector antenna with large vertical beamwidth, and low-cost omni antennas were used on the boats with enterprise RF radios.

The system supported VoIP phone service, Zoom sessions, movies, shows, and live video streaming. This proved to keep employees happy, and they stayed on with their employer.

For more information about Aviat solutions, or to discuss your needs, go to aviatnetworks.com

