

AFS 550 Ballast Foundation and 30' Self-Raising Pole **Kotzebue, AK**



CHALLENGES

- Develop complete system to fit within USAF Pallet Dimensions
- Remote Arctic location
- Small foot print of foundation
- Easy installation and maintenance thanks to the self-raising pole

OVERVIEW

ARE Telecom was contracted by Dayton Univ/USAF to install 2 of our AFS 550 ballasted foundation system with a rugged self-raising monopole. Our customer needed a foundation and self-raising pole system that could be quickly deployed with few tools and fit onto a conventional military pallet for shipping on a US Military C130 Cargo Plane.

SOLUTION

ARE designed our AFS 550 foundation with ballast tanks to support 3kw of Solar PV's and a 6kw Wind Turbine. All foundation and pole components were designed to fit within a custom racking system that fit military pallet dims.

Designed for temporary or permanent installations, the pole can be raised and lowered with a motorized screw jack eliminating the need for a crane or heavy equipment. Ballast tanks using local soil eliminates the need for concrete.

Project benchmarks:

- Designing system to fully meet all USAF Specifications
- ARE's installation crew traveled to remote arctic location to install both systems within days with limited tools and equipment.
- Construction and installation of pad to level and insulate systems from permafrost
- Successful install of AFS 550 and self-raising monopole to support wind generators

Project Resources:

4 Man Crew, 16 Hours, Skid Steer, telehandler



Foundation & pole on custom pallet



Foundation assembly



Prep site with styrofoam for permafrost



Foundation moved to site



Foundation with ballast tank filled with dirt



Tower installation



Tower raised with screw jack



Tower raised with screw jack



AFS 550 foundations & 30' self-raising poles installed