

ABOUT PKMM

PKMM Inc., a privately held service disabled veteran owned business (SDVOB), founded in 1988, is a diverse technology and innovation leader providing balanced, vertically integrated solutions to U.S. agencies, Allied nation governments and commercial markets. Our personnel, technical resources and depth of experiences provide a competitive advantage both as a supplier and as a prime contractor. Regardless of scale, scope, geographical location, technology or complexity we are committed to ensuring feasible, affordable and operationally suitable solutions are developed and deployed for world-class mission systems integration and mission critical requirements.

PKMM has over 200,000 square feet of positioned professional, engineering, manufacturing, prototyping and warehousing space. Our production and test facilities reflect our commitment to defense and commercial operational environments and enable continuous advancements and exposure to new and emerging technologies and processes. We continue to develop and expand our product lines, anticipating the needs of our customer. This "Thought Leadership" has ensured we continue to offer world class solutions, meeting or exceeding the mission critical requirements of our customers.

OUR DELIVERABLES

- ▶ Program Management
- ▶ Telecommunications & Network Construction
- ▶ Specialized Construction & Management
- ▶ Technical Services & Solutions
- ▶ Installation Fulfillment Services
- ▶ Systems Engineering
- ▶ Logistics & Warehousing
- ▶ Fiber Optics Certified Engineers
- ▶ Environmental & Energy Services
- ▶ Research & Development (R&D)
- ▶ Certified Tower Climbing & Rescue
- ▶ Information Technology
- ▶ Premise & Outside Plant (OSP) Design and Installation
- ▶ Help Desk (24/7) Support
- ▶ Software Design & Development
- ▶ Design & Design-Build
- ▶ Force Protection Systems
- ▶ Field Service Representatives (FSR)
- ▶ Cyber-Security
- ▶ Exploration Services
- ▶ Prototype & Integration Facility (PIF)
- ▶ Certified Fiber Optics Association Training



LIGHTWEIGHT SOLDIER GATEWAY (LWSG)

technology
integration
support

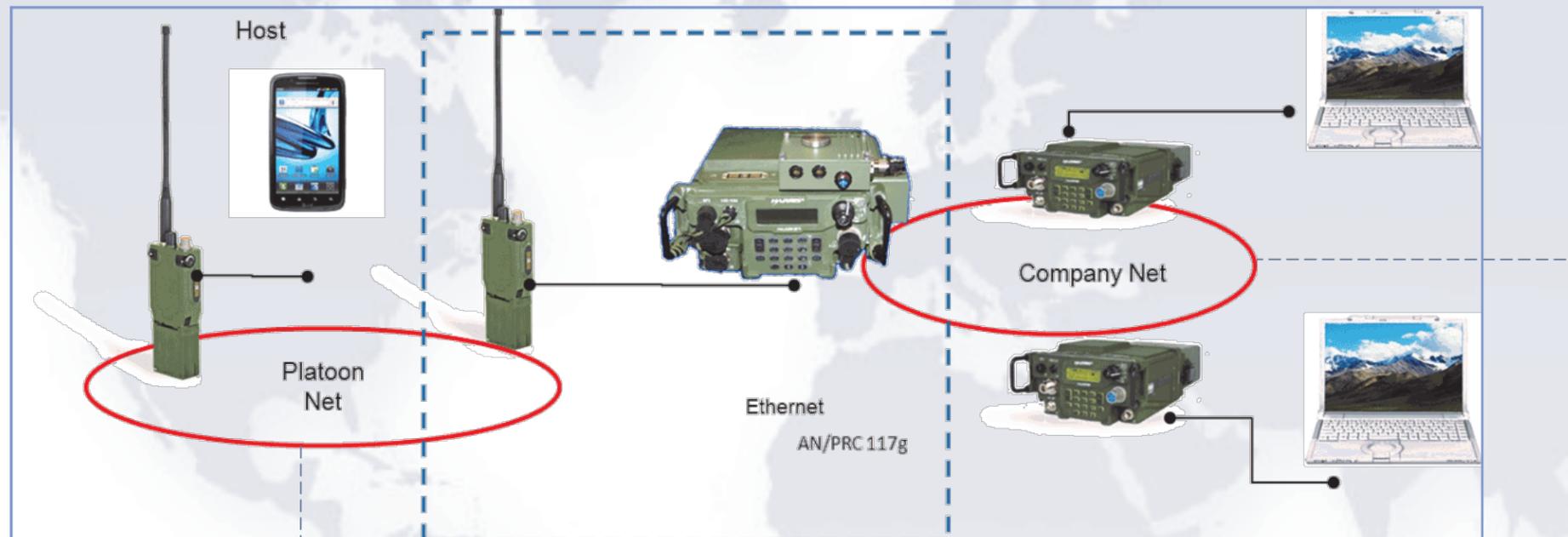
Lightweight Soldier Gateway (LWSG)

PROVIDING COMMUNICATION SOLUTIONS TODAY FOR TOMORROW'S DIGITAL BATTLEFIELD

CHALLENGE

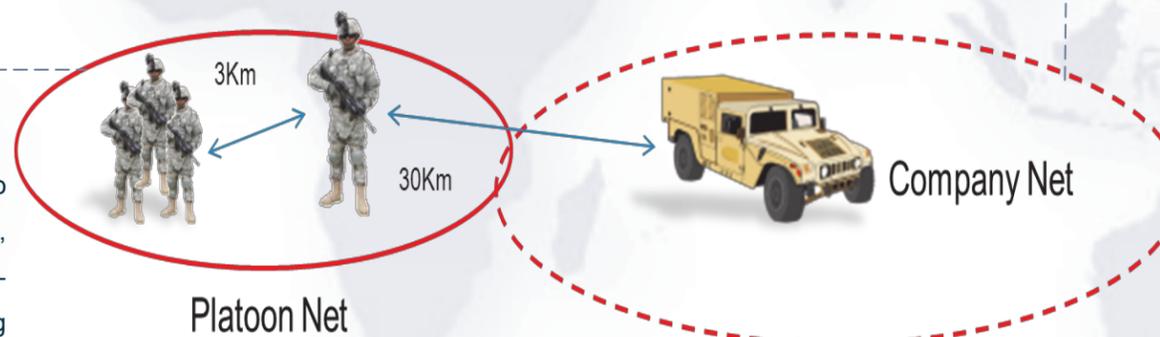
Units in the field are presented with both unique and challenging communications with vast amount of tactical data that is now, and in the future, shared between echelons. This tactical data can provide a decisive combat multiplier to small unit formations, platoons and companies, and allow the fast exchange of orders, graphics, photographs and position beacons throughout the battle space. The challenge is to distribute the information across all echelons

safely at realistic operational ranges. In order to face these challenges PKMM has developed the Light Weight Soldier Gateway or LWSG. The LWSG answers both questions; how to transmit data across multiple wave-forms and how to extend the range of handheld data radios to realistic operational company ranges.



SPECIFICATIONS

The LWSG is a cell phone sized device that is specifically designed as an accessory to the ubiquitous PRC- 117G voice and data radio found in today's operational units. Its small size, low weight and ruggedness, along with the very low power consumption are designed to add almost no extra load to the dismounted soldier while providing a sophisticated cross banding solution to tactical communications. The LWSG's powerful Atom based processor, running an ingenious Linux based software package, goes beyond simple package routing and actually analyzes the messages crossing the network allowing precise control of what messages travel between the Platoon and Company networks with unparalleled security. By only routing messages that fit a precise predefined criteria, the LWSG makes it impossible for rogue messages or unauthorized users to Access secure networks. The LWSG also provides flexible Quality of Service capabilities that allow the unit S-6 to determine what messages will pass across networks while keeping unnecessary traffic from clogging the spectrum. The LWSG physically attaches to the PRC-117G radio and a handheld data radio (PRC-154 Rifleman Radio, the PRC-152/a or the RT-1922 EPLRS radio)



and manages messages across the platoon handheld network and the company PRC-117G based data network. This allows the platoon handheld radios to transparently transfer data from the platoon network to the company network, far increasing the operational range of hand held radios, regardless of the RF waveform. All of this while requiring about the same size, weight and power of a cell phone.

BENEFITS

- Small size, low weight
- Ruggedness
- Low power consumption
- No extra load to dismounted soldier
- Provides sophisticated cross banding solution to tactical communications
- This tactical data can provide a decisive combat multiplier to small unit formations, platoons and companies
- Allow the fast exchange of orders, graphics, photographs
- Position beacons throughout the battle space.