

# WIRELESS MILES

## ENGAGEMENT SIMULATION SYSTEM

PAN: An Innovative Wireless Solution for Laser-Based Training

Cubic's next-generation MILES manworn system – the wireless Personal Area Network (PAN) – maximizes soldiers' ergonomics during force-on-force exercises. Designed with independent, small, lightweight components, the wireless PAN system can be universally configured to soldiers' tactical equipment.

### Key Features

- Industry-standard wireless link replaces traditional harnesses and cables
- Elimination of cables, connectors and fabrics significantly reduces cost of ownership
- Fully integrates with Instrumentation Systems, both fixed CTC sites and mobile / homestation training systems
- Interoperable with urban operations / MOUT systems
- SAT is aligned to the weapons, eliminating need for external alignment devices
- Transit case provides convenient battery recharge and transportation capabilities

PAN incorporates the latest wireless technologies while retaining Cubic's proven methodologies gained from fielding over 140,000 MILES Systems around the world.



### Wireless Technology

- PAN network utilizes IEEE802.15.4 standard, in license exempt 2.4GHz band
- Modules directly mount to soldier's battle dress/role-player's garb. Ease of mounting with negligible clutter/surface coverage
- Future proof upgrade path via addition of module

### Maintenance

- Modules have integral batteries
- Equipment issued from and received into Smart Transit Case
- Batteries charged with Smart Transit Case returned from field to Stores; no equipment double-handling
- Diagnostics conducted and reported to Smart Transit Case; automatic "quality control" of manworn equipment for next exercise

## Major Components

- PAN Manworn Halo
  - Laser and RF capability enabling reception of mine, grenade and IED threats, plus association to vehicle and building instrumentation
- PAN Manworn Detector Module
  - Laser and RF capability enabling combat medical treatments
  - Mount to front and back torso; optional on backpack and limbs
- PAN Manworn Display Module
  - Visual and audio (sound effects) interface to soldier
- Small Arms Transmitter (SAT)
  - Dual IR (for initial directional association) and RF link
  - Weapon simulation
- Player Unit Instrumentation
  - GPS and RF Link to CTC / MOUT Exercise Control Systems
  - RF Link into Manworn PAN



*Pan Manworn  
Detector module*



*Pan Manworn  
Display Module*



*Small Arms  
Trnsmitter (SAT)*



*Player Unit  
Instrumentation*