

### ROBOT INTEGRATION SOLUTIONS

- In-house engineering expertise to support custom product development and integration.
- Manufacturing and assembly of electronics and components with access to ISO 9001 and AS 9100 Certified facilities.
- Technical and applications support available from product development through system testing.

## Mesh Network

### ROBOTIC SYSTEMS

Wireless Communications  
Robot Integration  
Common OCU



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Systems Engineering and Integration Division, Advanced Programs Group, is committed to delivering a quality product in a timely manner to our customers at an affordable price. We strive for consistency in our products and our services.

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Wireless Communication  
Mesh Network (WiCM)

CONNECTIVITY • INTEROPERABILITY • AFFORDABILITY

# Mobile Mesh Network solutions for robots

CONNECTIVITY • INTEROPERABILITY • AFFORDABILITY

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## OCU SOLUTIONS

Situational awareness software is operable on a Windows XP laptop or other computer to allow operators to interact with robotics, airborne vehicles, and sensors networks.



## NETWORK SOLUTIONS

A mobile ad hoc mesh network open architecture supports interoperability by providing a common radio, waveform, and data protocol that allows different platforms to operate together and exchange all forms of digital data.



## ROBOT SOLUTIONS

Ruggedized commercial off the shelf (COTS) electronics and radios packaged in compact enclosures or in OEM configurations with proprietary embedded Linux OS software.

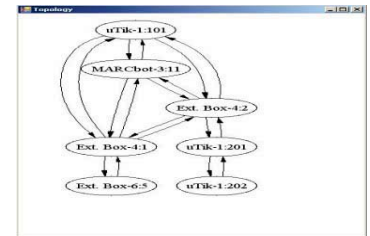
## flexible, interoperable solutions for your tactical communication needs

### SITUATIONAL AWARENESS SOFTWARE SUPPORTS MULTIPLE MISSIONS AND PLATFORMS

- Enhanced Intelligence, Surveillance And Reconnaissance (ISR) Capability
- Perimeter Surveillance And Tracking With Autonomous Behavior
- Relay/Repeater Extends NLOS And Robot Recovery Operations
- Interoperability Among UGV And UAS Platforms
- Control Multiple Robots From One Common OCU
- Real-Time Video, Force Tracker Displays And Data File Exchange

### GRAPHICAL USER INTERFACE AND TOOLS MONITOR NETWORK COMMUNICATIONS AND USERS

- Real-Time Network Topology, Quality Of Service, Node Status
- Bridge Between Tactical Radio Networks And Legacy Equipment
- Real-Time Video, Instant Messaging, VOIP, Data File Exchange
- Force Tracker Map Display With Icons And JPEG Images



## video, voice, data and situational awareness in a low-cost ruggedized modular package

### MESH NETWORK PRODUCTS

- Ruggedized COTS Electronics And WiFi Radios
- Multiple Wavebands: 2.4, 5.8 GHz, Others
- 802.11 Based Architecture, IPv4
- UDP Multicast Video And Data
- AES 128 Bit And WEP Layer 2 Encryption
- OpenVPN/OpenSSL Layer 3 Encryption
- Embedded Linux OS With Windows XP Display

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WE'VE WORKED WITH A DIVERSE CUSTOMER BASE, HOW CAN WE HELP YOU?

Contact Schafer - Advanced Programs to discuss your specific application and how we can support your product.