

SPECIAL OPERATIONS FORCES INDUSTRY CONFERENCE



Ms. Deb Woods
PROGRAM EXECUTIVE OFFICER

COMMAND, CONTROL, COMMUNICATIONS, AND COMPUTERS



Program Executive Office Command, Control, Communications, and Computers (PEO-C4)

PEO-C4 Mission

Manage the development, acquisition, fielding, new equipment training, and sustainment of command, control, communications, computers, Military Information Support Operations (MISO), and Civil Affairs systems in support of garrisoned headquarters elements and the deployed warfighter

** Non-Developmental Item Emphasis*

** Leverage Others' Resources*

FUNDING

	<u>FY17</u>	<u>FY18</u>
• RDT&E:	\$21M	\$18M
• PROC:	\$220M	\$209M



PEO-C4 Portfolio

TACTICAL COMMUNICATIONS



SOF Tactical Communications



Radio Integration System



Special Operations Mission Planning and Execution

Airborne Mission Network



SOF Deployable Nodes / Mobile SOF Strategic Entry Point



Tactical Local Area Network

ENTERPRISE NETWORKS & MISO SYSTEMS



SCAMPI (not an acronym)

SOF Information Technology Enterprise Operations and Maintenance Services



C4 Intelligence Automation Systems



Special Operations Command Research, Analysis, and Threat Evaluation System



Long Range Broadcast System



Media Production Center

MISO-Print



Next Generation Loudspeaker System



Fly-Away Broadcast System



C4 Acquisition Perspectives

- **Global Operations**

- Agile Networks
- Logistics



- **Technology Evolution**

- Digitizing the Battlefield
- Intelligent, Adaptive Systems



- **Dynamic / Uncertain Resource Future**

- Experimentation and Evaluations
- Strategic Sourcing



Focus on mission threads first, not technology, with emphasis on agility, speed, and reduced overhead.

Industry Engagement

- SOF AT&L-Science & Technology
Technical Experimentation Events
<http://www.socom.mil/SOF-ATL/Pages/submit-your-idea.aspx>
- Technology & Industry Liaison
Office Submissions
<http://www.socom.mil/SOF-ATL/Pages/submit-your-idea.aspx>
- SOFWERX Events
<http://www.sofwerx.org>

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Mr. Scott Brown
PROGRAM MANAGER,
TACTICAL COMMUNICATIONS



COMMAND, CONTROL, COMMUNICATIONS, AND COMPUTERS



Tactical Communications



Radio Integration System



SOF Tactical Communications



**SOF Deployable Nodes /
Mobile SOF Strategic Entry Point**



Tactical Local Area Network



SOF Tactical Communications (STC)

- Provides Next Generation SOF Communication Systems
- Capabilities Include: Real Time, Hostile and Friendly Force Information; Line of Sight (LOS) and Beyond LOS (BLOS) Communications; and Access to Situational Awareness in the Form of Intelligence Inputs, Broadcasts, and Networks
- Consists of Three Form Factors: 1) Manpack, 2) High Frequency, and 3) Handheld



ACQUISITION STRATEGY

- Operational System in Sustainment with Evolutionary Technology Insertions

PERIOD OF PERFORMANCE

- Variable, dependent on variant

MILESTONES

- Post Milestone C, Sustainment & Capital Equipment Replacement

POINT OF CONTACT

- 813.826.9482 (TILO)

FUNDING

	<u>FY17</u>	<u>FY18</u>
• RDT&E	\$3.8M	\$12.9M
• PROC	\$49.5M	\$50.2M

CURRENT CONTRACT/OEM

- Harris Corp
- Thales Communications Inc

STC

Areas of Interest

- **Radio Modernization (COMSEC, Waveforms, Capability)**
 - NGHH, NGMP, HHL-16, HF
- **Low Probability of Intercept / Low Probability of Detection for LOS & Beyond LOS**
- **Jam Resistant Waveforms**
- **Non RF Communications**
- **High Bandwidth Technologies**
 - ISR Receive / Distribution, Sensor Feeds, Wideband HF
- **Broadband BLOS (SATCOM)**
 - INMARSAT / MUOS / Man-pack L/S-Bands
- **Antenna Profile Reduction**
 - Retain Performance of Current Antennas, Multi-band Support, Better Fit on the Body, Reduced Visual Signature

SOF Deployable Nodes (SDN)

- Family of deployable, super high frequency, multi-band, SATCOM systems providing deployed SOF users with the transport path for access to the SOF Information Environment
- Provides high-capacity voice, data, VTC, and video at all levels of classification
- Consists of heavy, medium, light, SATCOM on-the-move, airborne ISR transport, and intelligence variants



ACQUISITION STRATEGY

- Operational System in Sustainment with Evolutionary Technology Insertions

PERIOD OF PERFORMANCE

- Variable, dependent on variant

MILESTONES

- Post Milestone C, Sustainment & Capital Equipment Replacement

POINT OF CONTACT

- 813.826.9482 (TILO)

FUNDING

	<u>FY17</u>	<u>FY18</u>
• RDT&E	\$2.9M	\$3.0M
• PROC	\$77.5M	\$75.3M

CURRENT CONTRACT/OEM

- L3 Global Comm Solutions
- GATR Technologies
- ViaSat, Inc

SDN

Areas of Interest

- **SDN-L Competitive Contract**
 - SDN-L MICROSAT Terminal
 - Draft Request for Proposal Release Planned May 2017
- **Size, Weight, and Power Reduction**
 - Commonality of Systems, Modularity / Flexibility, Reduced Complexity of Operation and Maintenance
- **Multi-band, Capable of Access to Available Architectures**
 - C, X, Ku, Ka, AEHF, Commercial Ka, Out-of-Band Ku
- **Cryptographic Modernization**
 - Embedded, Multi-level Security
- **SATCOM On-The-Move Antennas**
 - Ground, Airborne, and Maritime Platforms; Reduced Profile, Non-Invasive, Modem Agnostic

Tactical Local Area Network (TACLAN)

- Family of systems provides SOF operational commanders and forward-deployed forces advanced automated data processing and display capabilities through a common deployed local area network infrastructure and end user devices
- Provides specialized and common software applications to support a wide range of SOF mission sets from the individual and small team level to larger Special Operations Task Force (SOTF) contingents
- Seamless connectivity to multi-level secure networks to facilitate information exchange between the SOF Warfighter, the SIE, and DoD information networks.
- Improves SOF tactical situational awareness, command and control, mission planning and execution activities, and intelligence analysis and reporting



ACQUISITION STRATEGY

- Operational System in Sustainment with Evolutionary Technology Insertions

PERIOD OF PERFORMANCE

- February 2013 – 2018 (Ext.)

MILESTONES

- Post Milestone C, Sustainment & Capital Equipment Replacement

POINT OF CONTACT

- 813.826.9482 (TILO)

FUNDING

	<u>FY17</u>	<u>FY18</u>
• RDT&E:	\$2.6M	\$2.4M
• PROC:	\$9.8M	\$14.4M

CURRENT CONTRACT/OEM

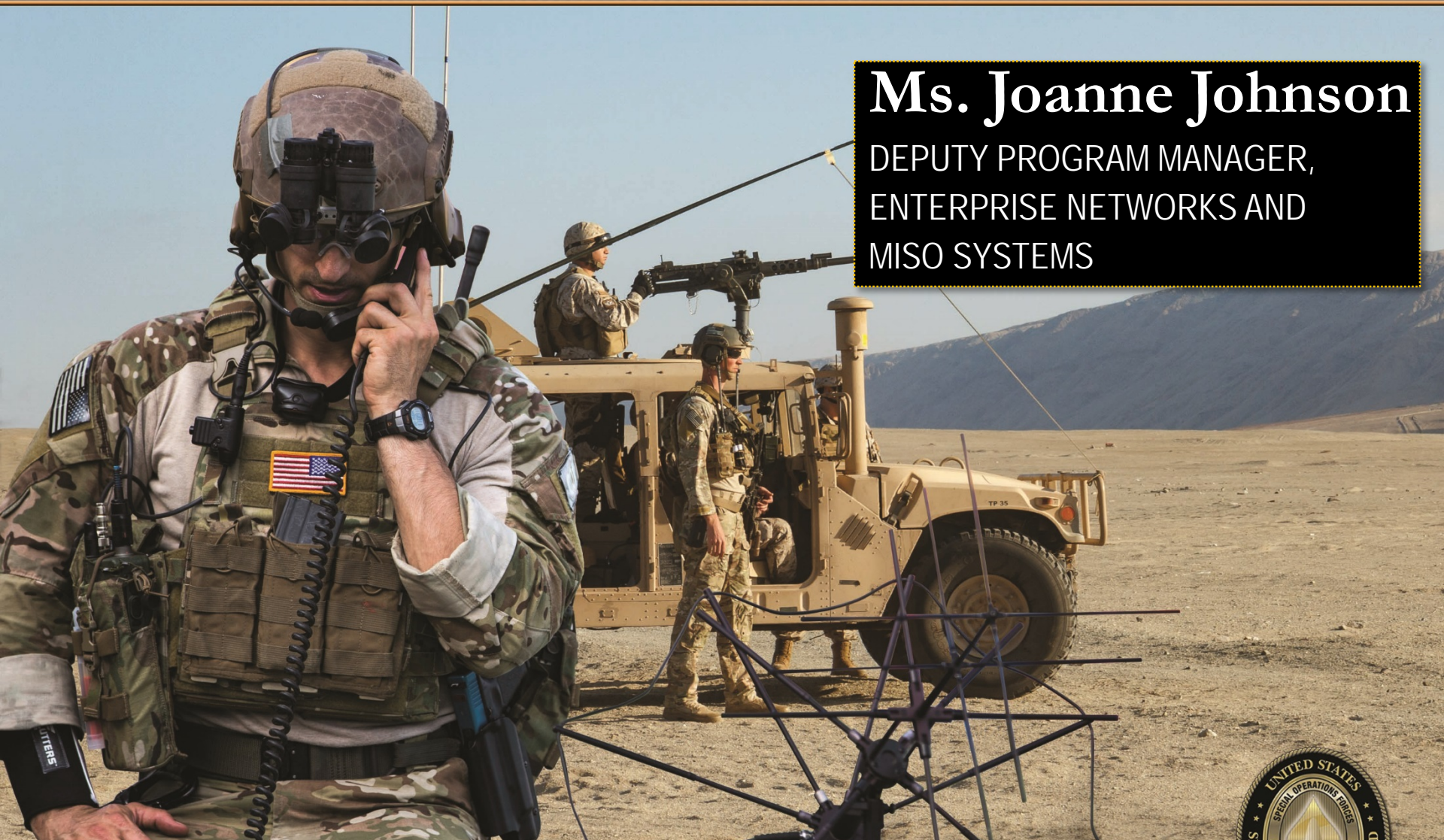
- iGov Technologies
- Various COTS/GOTS Partners

TACLAN

Areas of Interest

- **Modular/Scalable Network Infrastructure**
 - Virtual Storage Area Network solutions
- **Lightweight/Portable End User Devices**
 - Commercial Solutions for Classified (NIAP)
- **Trusted Virtual Environment Solutions**
 - Multi-Level Security and Cross Domain
- **Personal Area Network**
 - Wireless and Tethered
- **Cybersecurity**
 - Secure tactical network and mobile communications
- **Military Battery Powered Computing Options**

SPECIAL OPERATIONS FORCES INDUSTRY CONFERENCE



Ms. Joanne Johnson
DEPUTY PROGRAM MANAGER,
ENTERPRISE NETWORKS AND
MISO SYSTEMS

COMMAND, CONTROL, COMMUNICATIONS, AND COMPUTERS



Enterprise Networks & MISO Systems

ENTERPRISE NETWORKS



SCAMPI



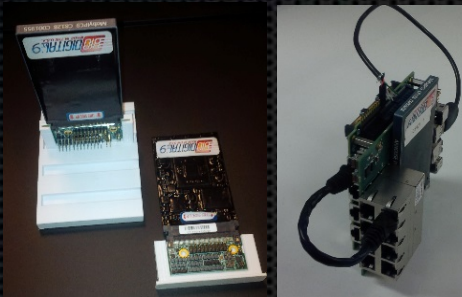
C4IAS



SOCRATES



Mobile Comms



Airborne Mission Network



Civil Information Management Data Processing System

MILITARY INFORMATION SUPPORT TO OPERATIONS (MISO) SYSTEMS



Fly-Away Broadcast System



Media Production Center



Military Information Support Operations - Print



Next Generation Loudspeaker System



Military Information Support Operations - Enterprise



Multi-Mission Payload



Enterprise Networks - Garrison

- Provides garrison infrastructure for unclassified and classified networks and services
- Provides a variety of capabilities / tools for command and control, collaboration, planning, analysis, processing, and dissemination



ACQUISITION STRATEGY

- Operational System in Sustainment with Evolutionary Technology Insertions

FUNDING

	<u>FY17</u>	<u>FY18</u>
• RDT&E	\$1.8M	\$0.2M
• PROC:	\$64.0M	\$59.1M

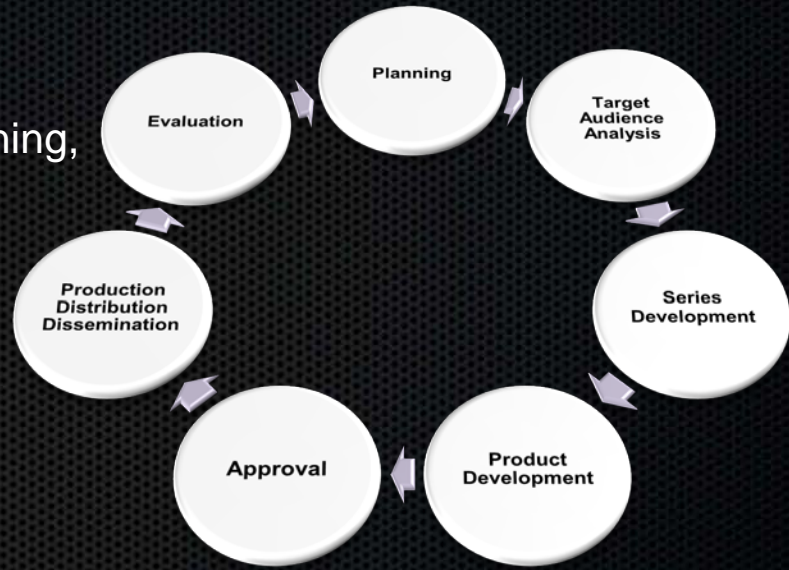
FY17/18 Priority Efforts

- Blanket Purchase Agreement Sustainment Contract
- Life Cycle Replacements for mobility
- Data Center relocations
- SCAMPI Capability Production Document
- Transition to Software Encryption
- Advanced analytics

MISO Capability Insertion Opportunities

Special Operations Core Activity

Military information support operations are planned to convey selected information and indicators to foreign audiences to influence their emotions, motives, reasoning, and ultimately the behavior of foreign governments, organizations, groups, and individuals in a manner favorable to the originator's objectives.



Key Capabilities Researched

- Advanced analytic capabilities
- Radio/TV/cellular production / broadcast
- Highly directional audio
- Advanced functional print

ACQUISITION STRATEGY

- Advanced Technology Development

FUNDING

	<u>FY17</u>	<u>FY18</u>
• RDT&E:	\$9.9M	\$8.8M
• PROC:	\$3.3M	\$3.4M

FY17/18 Priority Efforts

- Functional electronic print
- Narrative descriptive tool, interactive analysis tool, COP
- Social network analysis
- Measures of effectiveness/performance graphic modeling
- Advanced analytics
- Distributed audio-video media

Airborne Mission Network

SOF Enterprise Level Issues

- Chat Protocol Interoperability
- IP Configuration Management
- Cyber and Threat Assessments
- Standards “Playbook”
- SOCOM AFSIT Test Equivalent
- AbMN Comms PACE Plan
- AbMN Compliance Cert

R&D efforts

- Non RF Comms
- Enhanced Micro Processing
- Enhanced Waveforms: AEHF, WBHF
- DIRTYWERX: Monster Garage
- FOSOV C4 integration
- Comms on the Move
- Phased Array Antennas
- Surface Systems C4 Integration
- Subsurface specific Non RF Comms
- A2/AD

Enhancing Initiatives

- Expanded SIL integration and capability
- AbMN Database: interoperability and CM



Enterprise Networks and MISO

Areas of Interest

- **Mobility**
 - Commercial Solutions for Classified, Data at Rest Encryption
 - Unified Communications
 - Handheld Devices
- **Virtualization**
 - Reduced Footprint, Centralized Support, Software Defined Network, Cloud Collaboration
- **Next Generation Infrastructure Capabilities**
 - Software Centric Hardware, Co-existence With Legacy Infrastructure, Cross Domain Solutions, Multi-Level Security, Application Performance Management, Next Gen Firewall
- **Network and Service Assurance**
 - Redundancy with Reduced Footprint, Self Healing
 - Reliable and Timely Service Delivery Over Distance while Minimizing Duplicate Infrastructure
 - Cyber Security
- **Intelligence Capabilities**
 - Big Data/Application in Support of Data Center Operations
 - Geospatial, Analyst Software, Web-based and Collaborative Computing, Enhanced Imagery Workstations/Laptops, Geospatial Pattern Analysis and Intelligence Fusion, Compressed Data Search

THANK YOU

