



# SPECIAL OPERATIONS FORCES ACQUISITION, TECHNOLOGY, & LOGISTICS **EXPANDING THE COMPETITIVE SPACE**

**Mr. David Breede**, Program Executive Officer  
**SPECIAL RECONNAISSANCE OVERVIEW**



# Program Executive Office Special Reconnaissance

## Mission Statement

**“Lead the rapid and focused acquisition of state-of-the-art sensors and associated C2, emplacement, recovery, and specialized communication systems across all domains to enable total situational awareness for the SOF Warfighter”**





# Program Executive Office Special Reconnaissance

## TECHNICAL COLLECTION & COMMUNICATION



Hostile Forces-TTL



Blue Force Tracking

Special Comms



TVS/RSTA



Remote Advise & Assist  
Virtual Accompany Kit

## INTEGRATED SENSOR SYSTEMS



AIR



Maritime

Ground

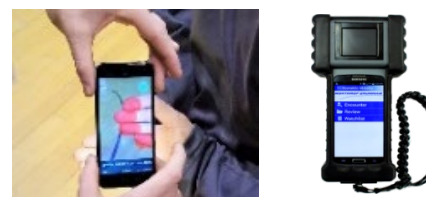


UAS



SIGINT PED

## SENSITIVE SITE EXPLOITATION



Biometrics



Forensics



Exploitation Analysis Center

## REMOTE CAPABILITIES

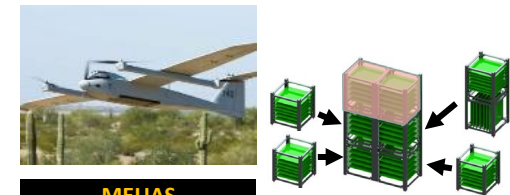


EOTACS/SAFC

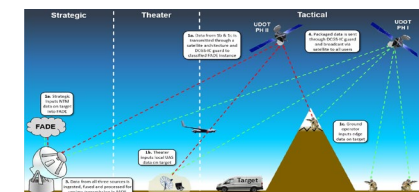


MTUAS

G3UAS

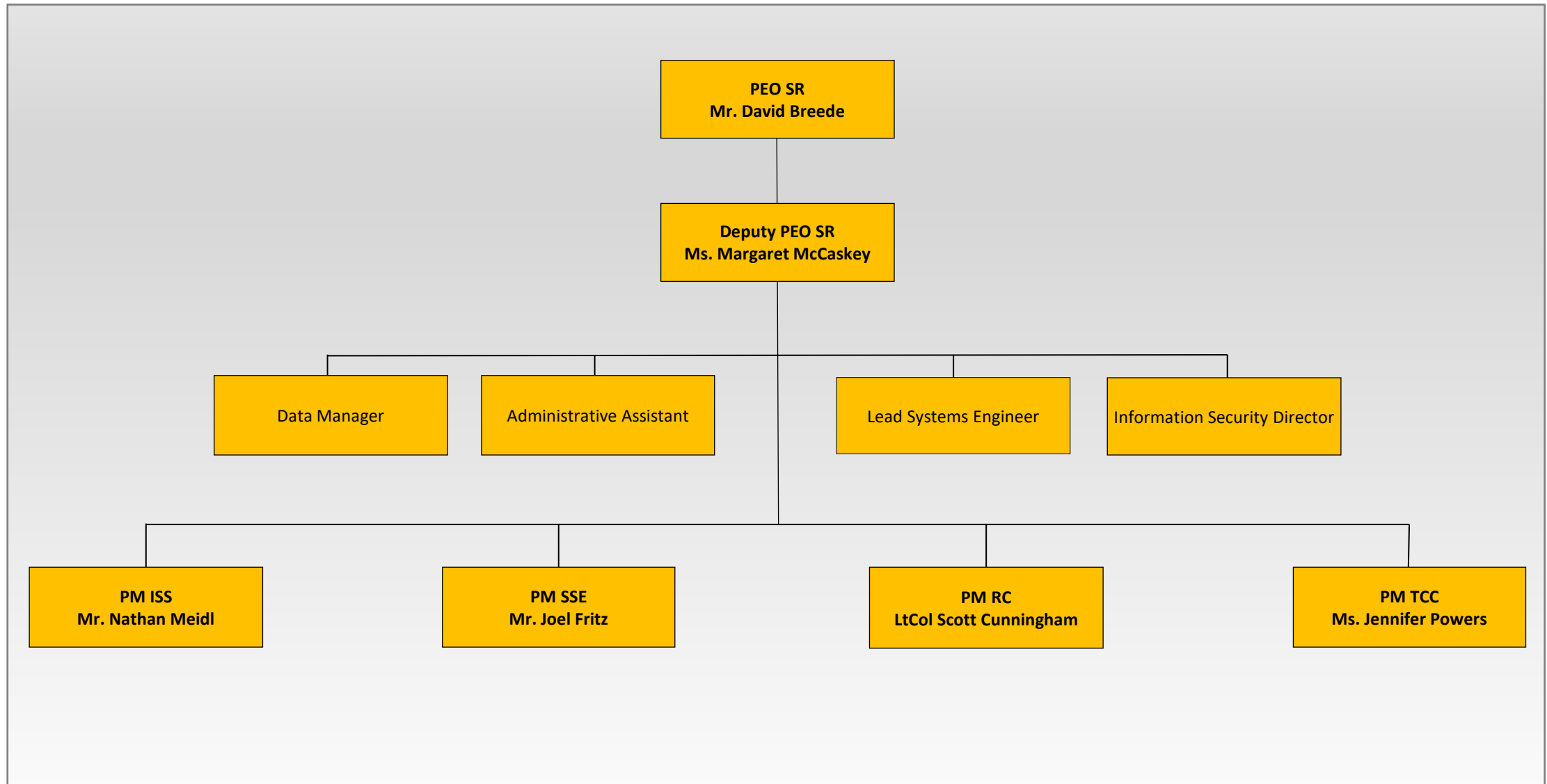


MEUAS



TENCAP/Space Based Capabilities

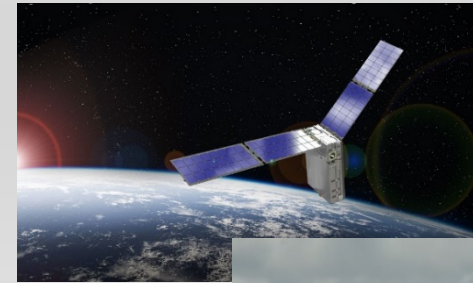
# Program Executive Office Special Reconnaissance



# Next Generation of Special Reconnaissance

## Operations in a Near-Peer and Non-Permissive Environment

- Low signature
- Remote/unmanned/unattended sensors
- Integrated & cooperative SR
- Alternative Position, Navigation, and Timing (A-PNT)



## More Efficient CT/CVEO

- Cross-Program Solutions
- Partner Force Advise and Assist
  - Releasable technologies
  - Shareable and accessible intelligence



# Program Manager - Technical Collection and Communications

## PM Technical Collection and Communications (TCC)

### Hostile Forces – Tagging, Tracking, & Locating (HF-TTL)



### Tactical Video Systems/Reconnaissance Surveillance Target Acquisition (TVS/RSTA)



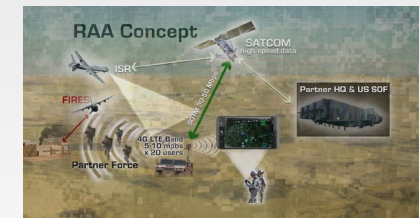
### Blue Force Tracking (BFT)



### Special Communications Enterprise (SCE)



### Remote Advise Assist Virtual Accompany Kit (RAA/VAK)





# Technical Collection & Communications (TCC)

## Mission:

Develop, field and sustain credible special reconnaissance, surveillance, and communication capabilities that support the SOF Operator missions to include: Tagging, Tracking, and Locating of enemy assets; capturing and transferring of near-real time ground based tactical imagery and video; providing non-traditional communications capabilities for low density and sensitive missions; and providing battlefield visualization and situational awareness through remotely tracking and monitoring SOF Operators and Partnered Forces.

## Development Priorities:

- Traditional & Non-traditional TTL
- Personnel Recovery
- Remote Emplacement of Sensors
- Intelligent Sensors – Processing at the Edge
- Data Exfiltration (LPI/LPD Waveforms)
- Assured & Alternate PNT
- Releasable Technologies

## TCC Portfolio:

- Blue Force Tracking
- Hostile Force Tagging, Tracking and Locating
- Close Target and Long-Range Video
- Close Target Audio
- Attended & Unattended Ground and Maritime Sensors
- Remote Advise and Assist
- Over-the-Horizon Special Communications

### OPPORTUNITIES

- HF TTL / TV RSTA FSR contract pending post on beta.SAM.gov
- Collaborate with SOFWERX for Technology and Integration

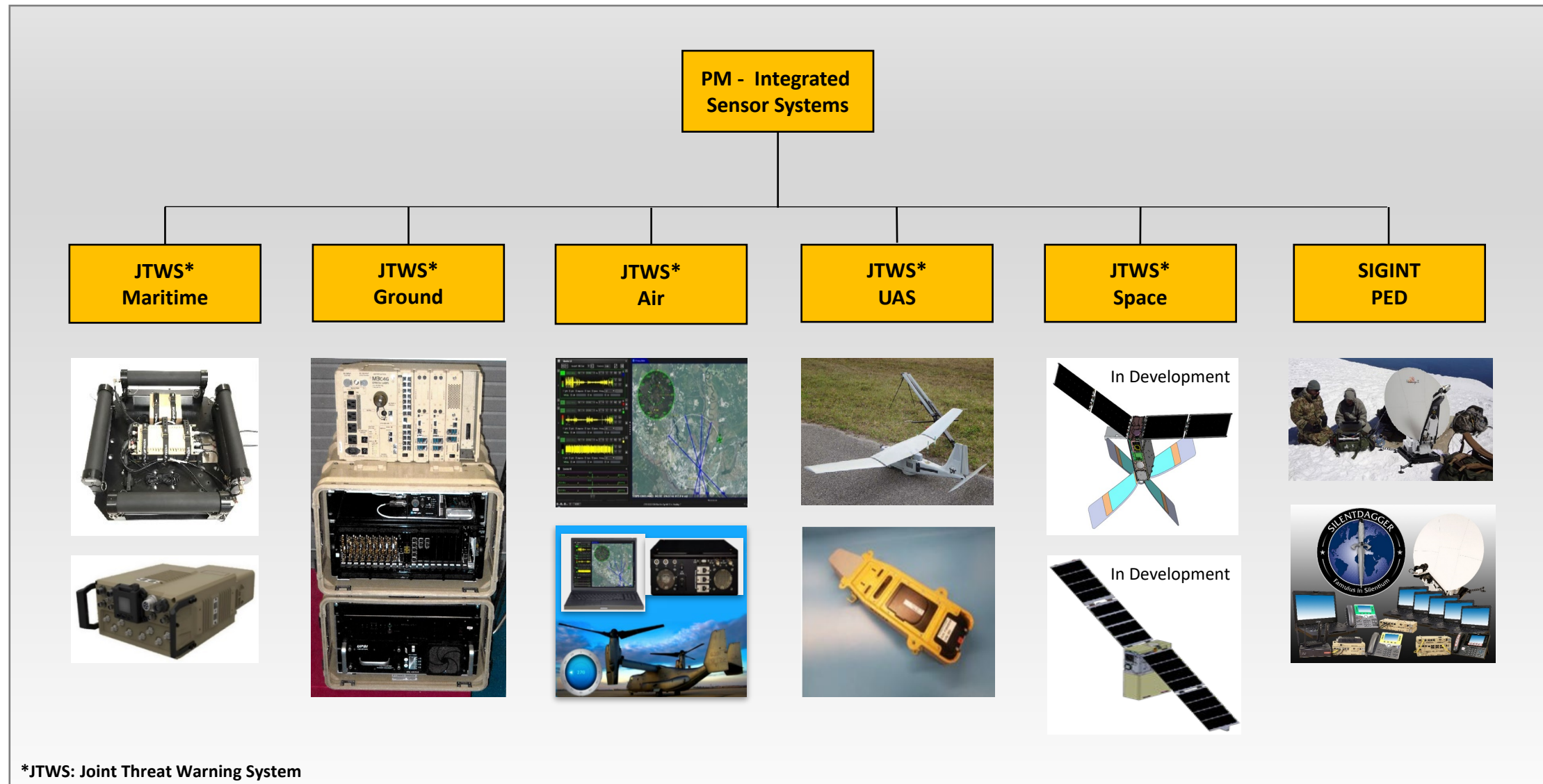
### FUNDING

<u>APPROP</u>	<u>FY21</u>
O&M	\$70.9M
PROC	\$41.7M
RDT&E	\$14.4M

### CURRENT CONTRACT/OEM

- T-REX Multiple Award IDIQ Contract
- Multiple OEMs
- Leveraging OGAs

# Program Manager Integrated Sensor System





# Integrated Sensor Systems

## Mission:

Synchronize acquisition of signals intelligence capabilities across the air, ground and maritime domains. Enhanced target acquisition of Signals of Interest. Develop and field interoperable, networked sensors based upon open hardware and software architectures to enable the common operating picture and feed data into all-source analysis tools.

## Development Priorities:

- Interoperability (Modular Payload Compliant/Software Defined Interfaces).
- Information Assurance/Risk Management Framework hardening by Developers
- Frequency Agile Sensors (Near Peer Signals of Interest)
- Cyber Enabling Capabilities (enabling, not offensive)

## ISS Portfolio:

- JTWS
  - Maritime Systems
  - Ground Systems
  - Air Systems (Manned)
  - Unmanned Aerial Systems
  - Space
- Processing Exploitation & Dissemination

### OPPORTUNITIES

- ISS Industry Demo Event
  - 30 Aug – 3 Sep, MUTC, IN
- Small Satellite SIGINT Payloads

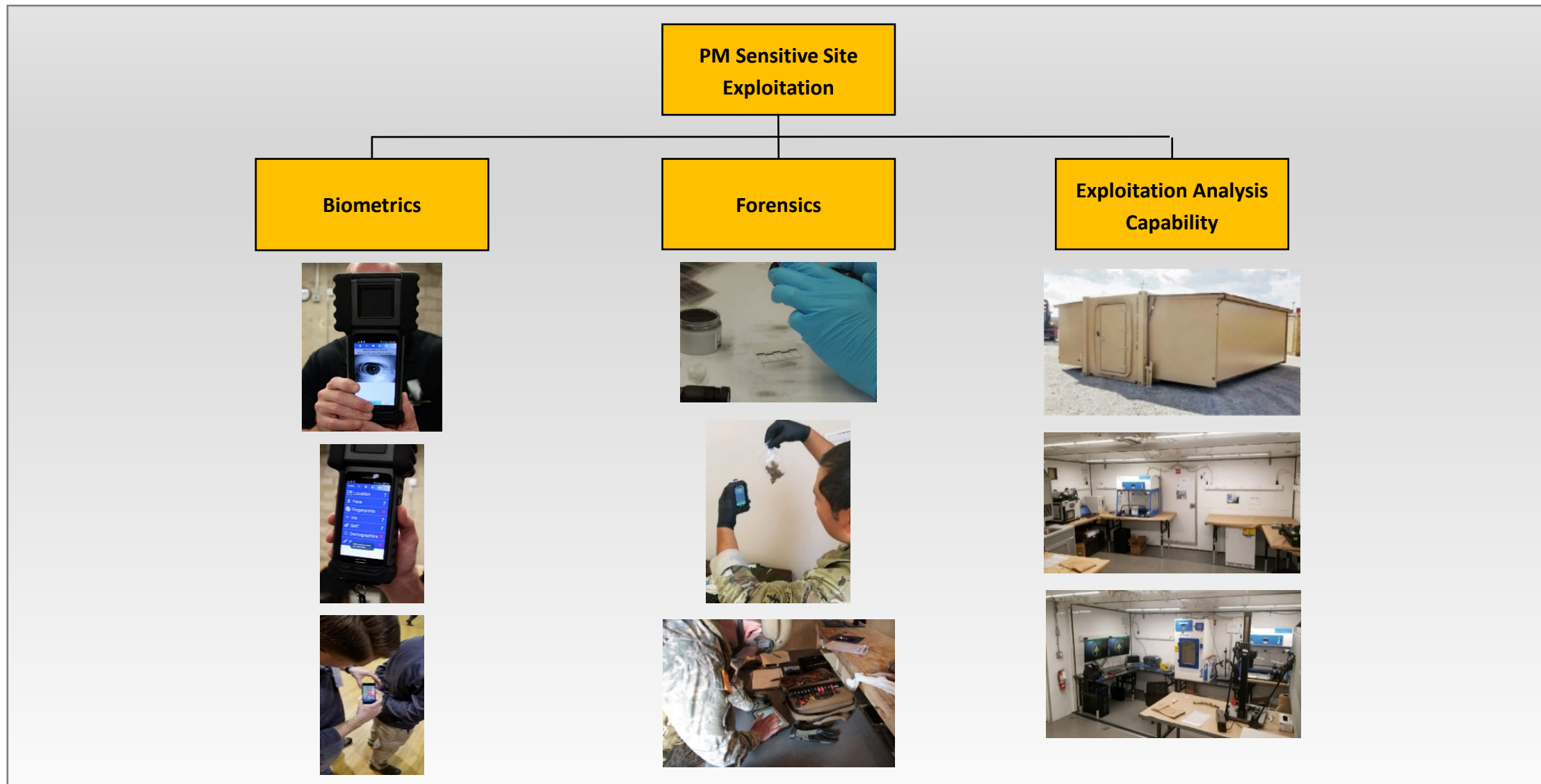
### FUNDING

<u>APPROP</u>	<u>FY21</u>
O&M	\$37M
PROC	\$68M
RDT&E	\$16M

### CURRENT CONTRACT/OEM

- 5Yr IDIQ Contract with HW Vendor
- 1Yr with 3 option year sustainment and Logistics Contract
- T-Rex Multiple Award IDIQ Contract

# Program Manager - Sensitive Site Exploitation



# Sensitive Site Exploitation

## Mission:

In support of the SOF warfighter, the SSE Program provides capability to exploit personnel and collected exploitable material on a sensitive site/objective. SSE equipment collects unique biometric signatures to include latent fingerprints and DNA and forensically links events to specific persons through forensic chemistry analysis, document and media exploitation, and cell phone exploitation. Exploitation Analysis Capabilities provide modular field-level multi-disciplined forensic capability that allows for more in-depth analysis of materials taken off target.

## Development Priorities:

- On Site Collection, Verification, and Enrollment of Biometrics (Iris, Face, DNA, Fingerprint, etc.)
- Apply Forensic Principles to Collected Exploitable Materials (CEM) for Rapid Detection, Collection, Identification, Analysis, and Dissemination to the Intelligence Community

## SSE Portfolio

- Biometrics
- Forensics
- Exploitation Analysis Capability (EAC)

### OPPORTUNITIES

- Collaborative Project Order with SOFWERX for Technology and Integration
- Tactical Forensic Chemistry Event  
4th Quarter FY21

### FUNDING

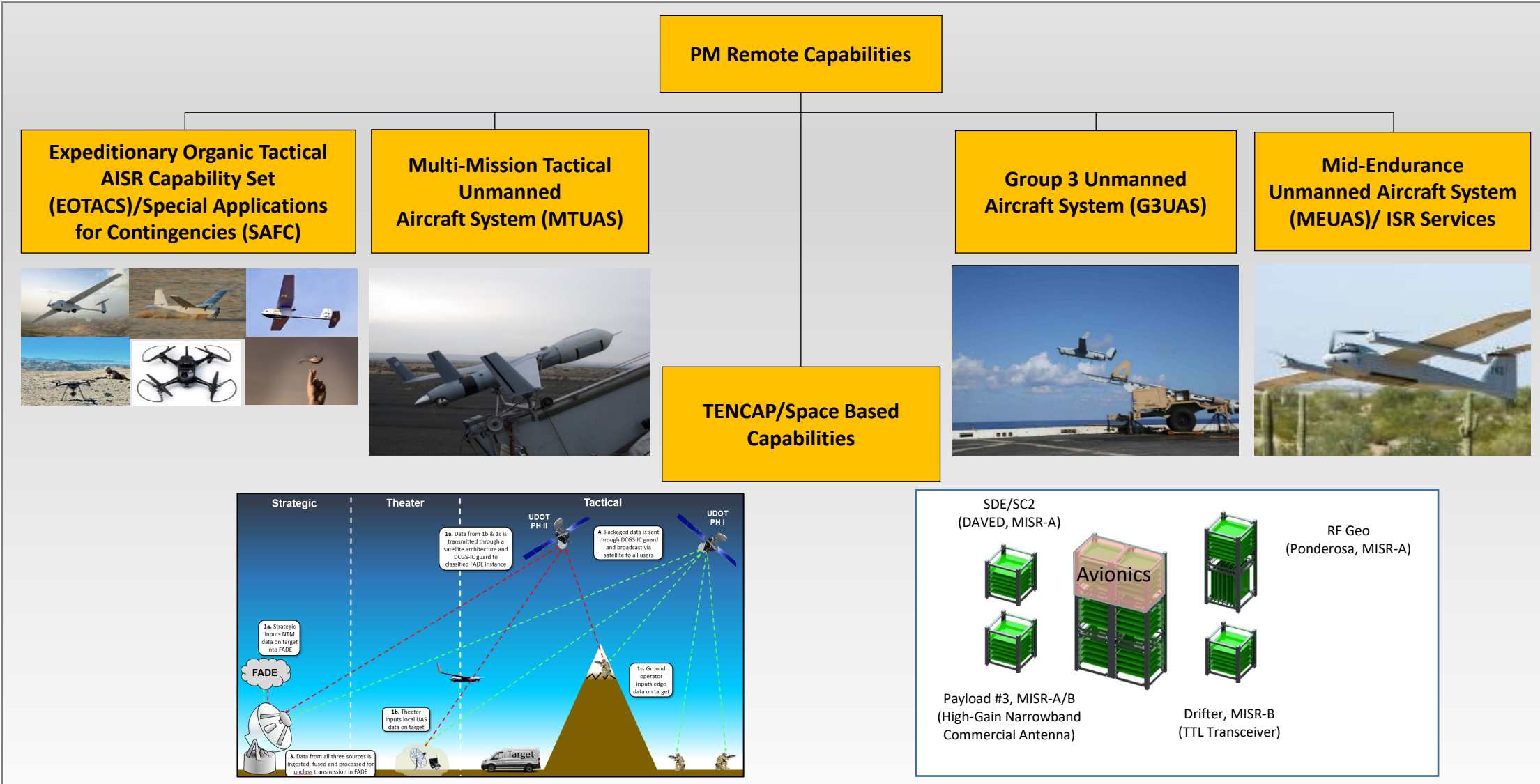
<u>APPROP</u>	<u>FY21</u>
O&M	\$17.1M
PROC	\$2.7M
RDT&E	\$7.6M

### CURRENT CONTRACT/OEM

- T-REX Multiple Award IDIQ Contract
- Multiple OEMs



# Program Manager - Remote Capabilities



# Remote Capabilities (RC)

## Mission:

Develop, field, and sustain unmanned systems across space, air, ground and maritime domains. Enable autonomous technical and tactical collection and exploitation of ISR sensor capabilities providing total situational awareness in support of SOF operations in permissive and contested environments.

## RC Portfolio:

- Groups 1-3 UAS
- ISR Services
- Space Based Capabilities
- TENCAP

## Development Priorities:

- Modular and multi-Int payloads
- Tools to leverage national capabilities
- Remote sensor emplacement, C2, and retrieval
- Mission tailored small satellite payloads

### OPPORTUNITIES

- MTUAS increment 2 production contract—3QFY22
- Exploring autonomous AI/ML-enabled UAS
- Exploring commercial space for hosting mission payloads

### FUNDING

<u>APPROP</u>	<u>FY21</u>
O&M	\$260M
PROC	\$19.7M
RDT&E	\$15M

### CURRENT CONTRACT/OEM

- T-REX Multiple Award IDIQ Contract
- Multiple OEMs
- Leveraging OGAs

# Unmanned Systems to Enable the SOF Special Reconnaissance Modernization Strategy

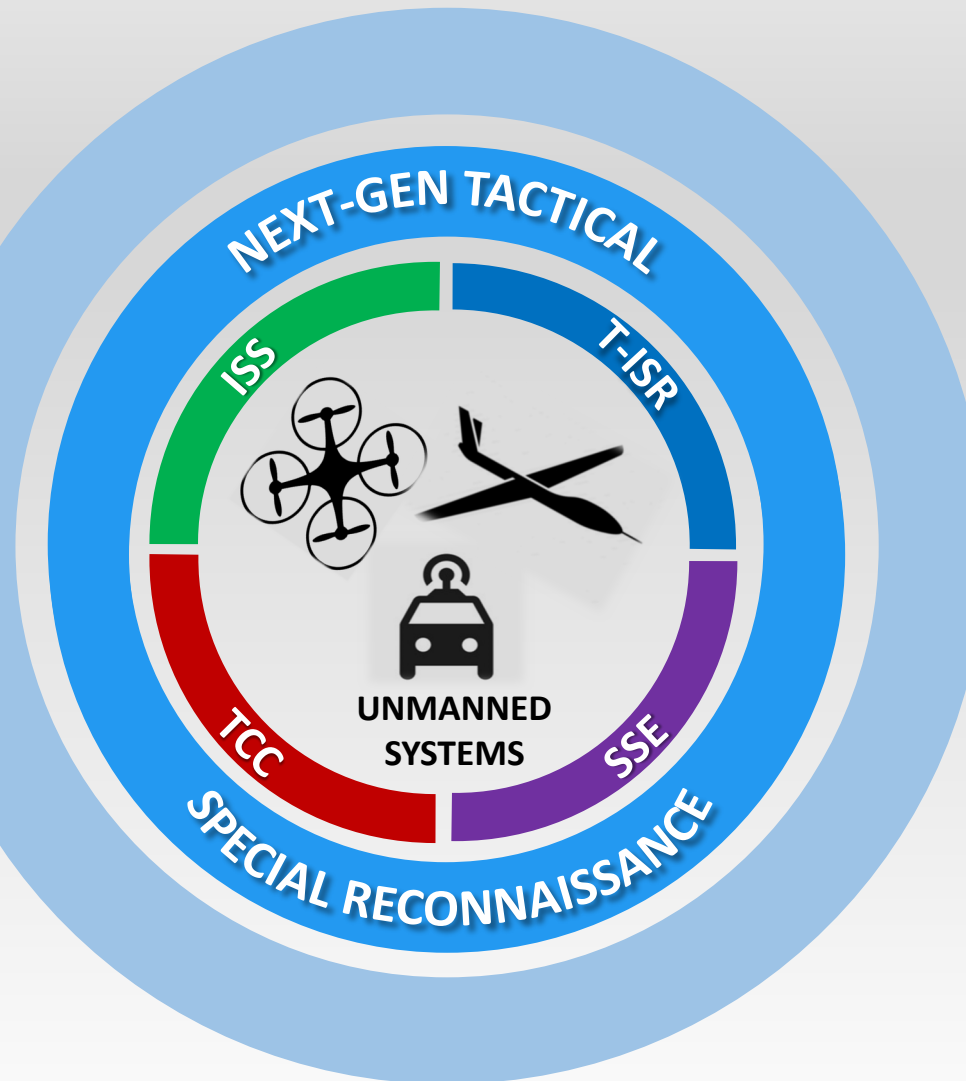
## ISS - Integrated Sensor Systems

Flexible RF systems through software defined radios, frequency agile antennas, and modularity across domains

HUMAN-MACHINE TEAMING  
COLLABORATIVE UxS  
PAYLOAD INTEGRATION  
EDGE COMPUTING/AUTOMATION

## TCC - Technical Collection & Communication

Increase ground sensor processing power, integrate alternative comm pathways, and improve interoperability with disparate networks



## T-ISR - Tactical Intelligence, Surveillance, & Reconnaissance

Collaborative autonomous platforms operating based on a shared understanding of the environment without active operator control

## SSE - Sensitive Site Exploitation

Stand-off, untethered detection and exploitation and advanced edge processing



# Rapid Prototyping Via SOFWERX

## CONCEPT

### PURPOSE:

Insertion of new technology or capabilities into programs of record via rapid prototyping

- Technology interests will be distributed via the SOFWERX Ecosystem and published on SAM.gov
- Prototype developed via a 6-to-9-month effort
  - Effort kick-offs could be in current FY or planned for next FY based on effort cost and availability of funds
- Targeting technologies at TRL 5- 7
- Prototypes are for proof-of-principle only not intended for DT or OT
- Prototype efforts will be at the unclassified level.

\*\*\* Go to SOFWERX.org and join the ecosystem to make sure you get all the announcements.

## PROCESS/TIMELINE

### FY 21 (Compressed)

- Initial “Eco-Blast” end of April 2021
- Mid May to Mid June, window for Q&A sessions with PM reps
- White papers due mid July
- Initial down select end of July
- Assessment event first week of August
- Final selections mid August

### FY22

- Goal is to have Eco-Blast out mid to late 1QFY
  - Other Eco-Blasts during the year are possible based on PM needs
- More time for WP submissions
- More time for evaluation and selection process

# USSOCOM- BAAST- 2020

**SAM**  
SYSTEM FOR AWARD MANAGEMENT

A NEW WAY TO SIGN IN - If you already have a SAM account, use your **SAM email** for login.gov. [Log In](#)

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**ALERT:** SAM.gov will be down for scheduled maintenance Saturday, 04/11/2020 from 8:00 AM to 1:00 PM

The System for Award Management (SAM) is an official website of the U.S. government. There is no cost to use SAM. You can use this site for FREE to:

- Register to do business with the U.S. government
- Update or renew your entity registration
- Check status of an entity registration
- Search for entity registration and exclusion records

**Getting Started**

**USSOCOM-BAAST-2020**

- Update in April 2021
- Appendix A: SR unclassified technology areas are incorporated into this appendix
  - Section 4.1

## Technology Areas of Interest

- Biometrics/Forensics and Sensitive Site Exploitation
- Data Exfiltration
- Information Systems
- Low-Vis Communications
- Obfuscated Data Transport Systems/Architectures
- Sensors
- SIGINT
- Tagging, Tracking, and Locating
- Technical Support Systems

# Industry Support to the SOF Mission

- Partnering – Collaboration
- Modular Solutions
- Multiple Points of Entry
- Don't be Afraid of Small Projects
- Warfighter Focus
- Big Leaps as well as Iterations
- Yes, if...

