

SPECIAL RECONNAISSANCE, SURVEILLANCE, AND EXPLOITATION

Program Executive Office Special Reconnaissance, Surveillance, and Exploitation

SOF PRIORITIES

Ensure SOF Readiness

Right People / Skills / Capabilities

Help Our Nation Win

Provide a Diverse Portfolio of Capabilities Sustainment Focused on Readiness

Continue To Build Relationships

Components; Industry; International; & Intelligence Community
You Can't Surge Trust

Prepare For The Future

Accept & Adapt to Rapidly Evolving Future

Develop Concepts That Challenge Our Organizational Construct

Preserve Our Force and Families

Take Care of Our People



Program Executive Office Special Reconnaissance, Surveillance, and Exploitation

PEO SRSE MISSION

Manage The Development, Acquisition, Fielding, New Equipment Training, And Sustainment Of State Of The Art Technical Collection And Exploitation Tools For Advanced Surveillance, Reconnaissance, And Intelligence Systems For Components And Theater Special Operations Commands.

- Agile Acquisition Rapid Fielding & In-Theater Support
 - Quick Reaction Capability
 - Rapid Prototyping
- Extensive Network of Partners to Assist & Advise
 - Intelligence Community
 - Service Labs / PEOs
 - Department of Energy

Program Executive Office

Special Reconnaissance, Surveillance, and Exploitation

TECHNICAL COLLECTION SYSTEMS

Hostile Forces - Tagging, Tracking, and Locating (HF-TTL









Operations Tactical Video System (TVS)







Blue Force Tracking (BFT)

Joint Threat Warning System







IDENTITY OPERATIONS







INTELLIGENCE SUPPORT SYSTEMS

Integrated Survey Program





Distributed Common Ground/ Surface System SOF





FOCUSED RDT&E

Tagging, Tracking, and Locating Special Reconnaissance Communications





Specialized





Tactical Exploitation of National Capabilities

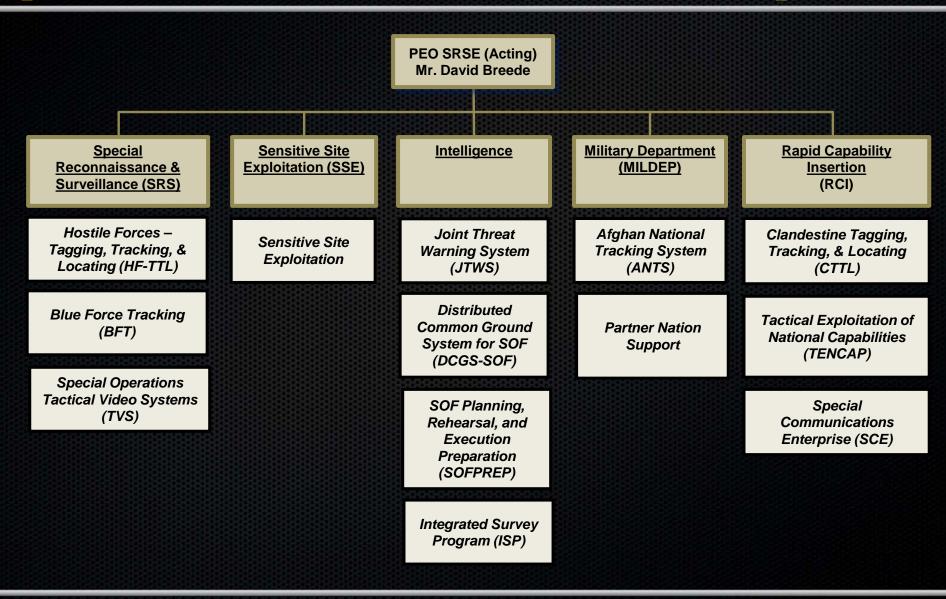




Quick Reaction Capabilities



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PEO SRSE

Intelligence Preparation of the (Acquisition) Battlefield

Define The Environment

- Closing a Decade of War
- Iraq/Afghanistan to Global Outlook
- Unpredictable Stability
- Uncertain / Evolving Budget

Opportunities

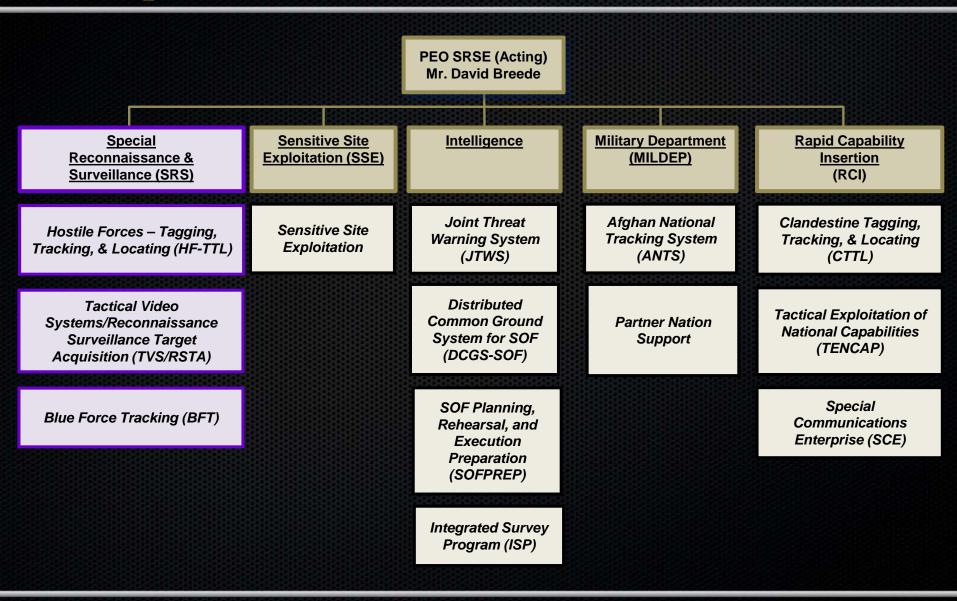
- More Contact with Partner Nations
- Leverage Components; Government Labs;
- Industry

Future Missions

- Support to Foreign / Irregular Forces
- Tailor Portfolio Capabilities for Blue / Green / 'Other'
- Equip & Train Forces
- Transnational Organized Crime



SPECIAL RECONNAISSANCE, SURVEILLANCE, AND EXPLOITATION



Priorities

- Size & Weight Reductions
- Modular / Multi-Use Components
- Technology Refresh

SRS Portfolio

- HF-TTL Mission Sets
- TVS/RSTA Family of Systems
- BFT Family of Systems

FY16/17 Priority Efforts

- Balancing Tailoring with
 Configuration Management
- Interoperability / Modularity



HOSTILE FORCES / TAGGING, TRACKING, & LOCATING (HF/TTL)

Development Effort:

- Continuously Tailored; Catalogue Ordering
- One/Two Annual Increments

Priorities

- Quick Reaction Capability (QRC)
- Integration of TTL Payloads on Remote Piloted Vehicles

ACQUISITION STRATEGY

 Commodity Procurement Project (CPP)

PERIOD OF PERFORMANCE

- Deliver Capability Within 90-Days to 1 Year of Award (Norm)
- QRC Delivers in 14 to 90 Days

HF/TTL Portfolio

- Tag/Track Kits
- Audio Kits
- Video Kits
- Misc Tool Kits

MILESTONES

- Kit Selection Annually
- NET Continuously
- Technical Insertion to Maintain Relevancy

POINT OF CONTACT

- Technology & Industry Liaison Office
- TILO@SOCOM.mil
- 813-826-9482

FUNDING APPROP FY16 FY17 O&M \$21.7M \$20.3M PROC \$23.1M \$23.8M RDT&E \$ 0.8M \$ 0.8M

CURRENT CONTRACT/OEM

• Multiple - Contact TILO

TACTICAL VIDEO SYSTEM/RECONNAISSANCE SURVEILLANCE TARGET ACQUISITION (TVS/RSTA)

- Kits are Operationally Tailored
 - Support Six Capability Areas
 - 24+ Variants
- Priorities
 - Enhanced Night / Obscured Operations
 - Component Interoperability

- TVS/RSTA Fielded Kits
 - Tactical Video System
 - Remote Observation Post
 - Tactical Sensor
 - Unmanned/Unattended Sensors
 - Austere Location Force Protection

ACQUISITION STRATEGY

 Commodity Procurement Project (CPP)

PERIOD OF PERFORMANCE

 Deliver Capability Within 90-Days to 1 Year of Contract Award (Norm)

MILESTONES

- Kit Selection Annually
- NET Continuously
- Capital Equipment Replacement

POINT OF CONTACT

- Technology & Industry Liaison Office
- TILO@SOCOM.mil
- 813-826-9482

FUNDING APPROP FY16 FY17 O&M \$14.2M \$10.1M PROC \$ 3.1M \$ 4.1M RDT&E \$ 0.4M \$ 0.4M

CURRENT CONTRACT/OEM

Multiple - Contact TILO

BLUE FORCE TRACKER (BFT)

- **Mission Set Fielding to Components**
 - Family of Devices that are Small; Lightweight; Employ Multiple Waveforms; & Self-Contained Transmitters
- **Priorities**
 - Multiple Waveform Support; Battery Life; Anti-Spoofing & MGUE Integration
 - Maximum Benefits Leveraging OGA Efforts

- **BFT Family of Devices**
 - Iridium Based
 - Government Off The Shelf (GOTS)

ACQUISITION STRATEGY

 Commodity Procurement Project (CPP)

PERIOD OF PERFORMANCE

Varied

MILESTONES

- Kit Selection Annually
- NET Continuously
- Technical Insertion to **Maintain Relevancy**

POINT OF CONTACT

- Technology & Industry **Liaison Office**
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FUNDING FY16 **FY17 APPROP** \$2.0M \$1.7M

PROC

O&M

- \$3.4M
- \$2.1M
- RDT&E \$ 0.5M

CURRENT CONTRACT/OEM

• Multiple - Leveraging OGAs

Capability Insertion Opportunities

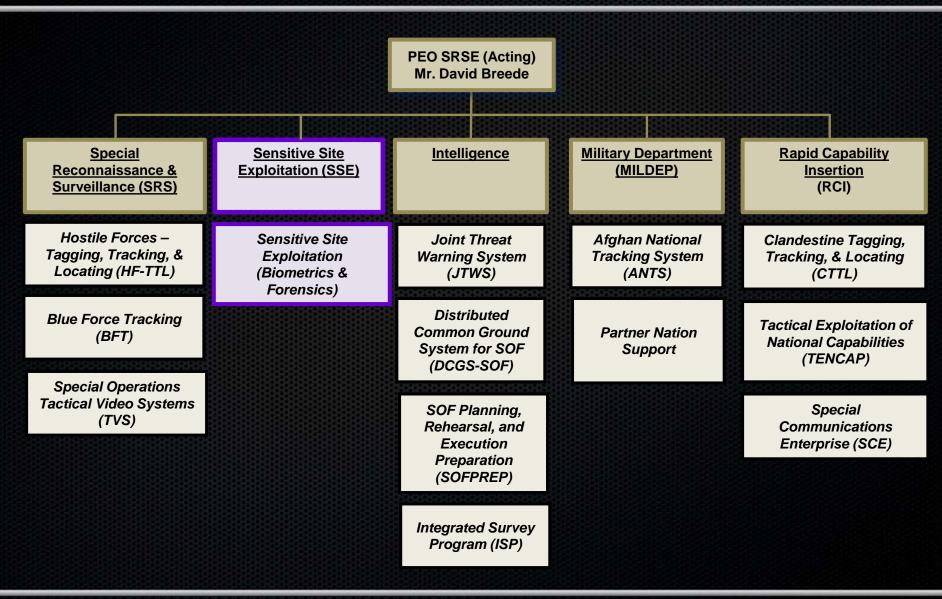
- Data Transfer Capabilities, SWAP-C, Increase Flexibility In Aerial, Ground, Underground, And Maritime/Riparian Communication Environments
 - Image And Video Compression Techniques
- Force Protection / Counter-measure
 - Electronic Counter-measures
 - Emission Reduction Or Masking
 - Threat Warnings And Counter-measures
 - Man-portable Discrete Intrusion Detection System
- Persistent Surveillance Systems (Unattended Ground Sensor Systems, Tactical Surveillance Systems)
 - On Camera Video Motion Detection
 - High Altitude Long Endurance (HALE) Sensor
 - Improved Sensor Algorithms To Reduce False Alarms And Missed Detections

Capability Insertion Opportunities (Con't)

- Tagging, Tracking, and Locating (TTL) Technologies That can Be Used On Persons and Objects
 - Non-GPS Trackers
 - Maritime TTL
 - Novel Non-Traditional TTL Capabilities
 - TTL Attachment Methodology; Self-Release, Non-Metallic, Timed Release
 - Micro-sized, Low Visibility, Emergency Personnel Locator Beacons (PLB)
 - Handheld TTL or PLB Geolocation
- Items Critical to Mission Success But Often Not Part of the Initial Design
 - Better Power Sources or Improved Efficiencies
 - Antennas



SPECIAL RECONNAISSANCE, SURVEILLANCE, AND EXPLOITATION



Sensitive Site Exploitation

- Provide the Tools to Gain Actionable Intelligence from a Sensitive Site
- Exploit Materials, Substances, Objects, Documents, and Electronic Media
- Collect, Compare, and Transmit Unique, Measurable Biometric Signatures
- Enable Exploitation on-site, at the FOB and at theater level

ACQUISITION STRATEGY

- Commodity Procurement Project (CPP)
- COTS / GOTS (and modified versions)

POINT OF CONTACT

- Technology & Industry Liaison Office
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PERIOD OF PERFORMANCE

- Level of Effort Various Lengths
- Sustain With Capital Equipment Replacement Program (CERP)
- Technical Refresh

FUNDING APPROP FY16 FY17 O&M \$ 8.9M \$ 12.8M PROC \$ 9.9M \$ 2.6M RDT&E \$ 0.2M \$ 0.2M

MILESTONES

- Kit Selection: Annual
- User Testing: Bi-Annual
- Commodity Procurements: Annual
- New Equipment Training: Ongoing
- Fielding And Deployment: Ongoing

CURRENT CONTRACT/OEM

- Broad Agency Announcement USSOCOM-BAAST-2015
- SRSE / T-REX Prime Vendors
- SOFSA / Lockheed Martin

SSE Priorities

- On Site Collection of Biometrics to Verify/Enroll Subjects into DOD Authoritative Biometrics Database
- Provide Actionable Intelligence Thru the Rapid Detection, Collection, & Identification of Physical and Digital Forensic Evidence while on a Sensitive Site to enable Identity Operations

SSE Focus Areas in Development and/or Field Test:

- Rapid DNA Field Testing
 - Rapid DNA Systems Fielding 2016
- Next Generation Tactical Forensic Document & Media Exploitation (DOMEX) – Ongoing
- Chemical Identification and Attribution Technologies Test & Evaluation

FY16/17 Priority Efforts

- Procure/Field Tactical Biometric Devices
- Provide Rapid DNA Data Collection Capability
- Evaluate and deploy innovative DOMEX and Forensic Technologies



Northrop-Grumman BioSled Fingerprint And Iris Imagers





Identification (ID) Kits

Fingerprint, Facial and Iris Imagers



Kojak Multi-Fingerprint Scanner



ID Badge Printer

Enrollment (EN) Kit

Biometrics



IDEX Pens



Metal Detector

Explosives And Trace Element Detection







DNA Swab

Latent Print Collection

Forensic Lights

DNA And Latent Print Collection











CELLEX

Basic MEDEX

Advanced MEDEX

Data And Information Extraction

Tactical Site Exploitation (Forensics)

Exploitation Analysis Center



Latent Print Extraction







Latent Print Fuming Chambers

Latent Print Copy Station



Latent Print Collection Kit



BattleLite Forensic Lights



TracER Laser Lite



AFIX Tracker
Latent Print Examiner

Trace Element Analysis



Griffin 460



AHURA First Defender

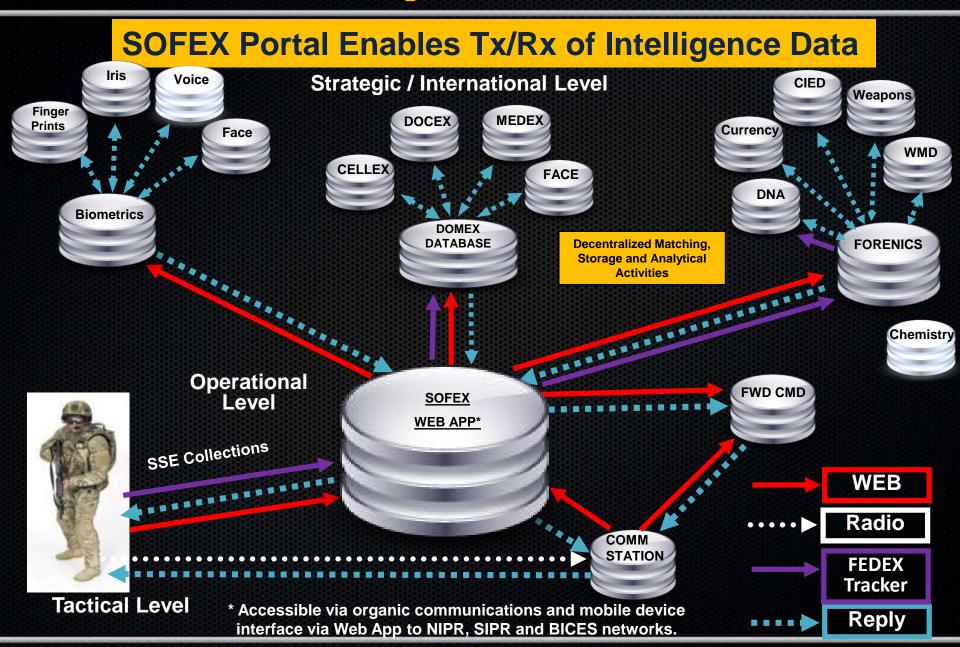


AHURA TruDefender



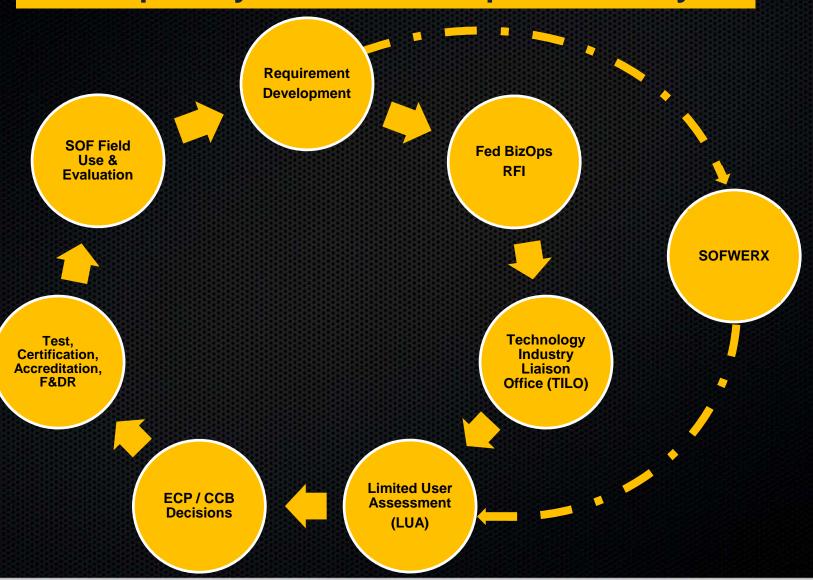
SABRE 5000

SOF Exploitation Portal



Sensitive Site Exploitation

SSE Capability Insertion or Replacement Cycle



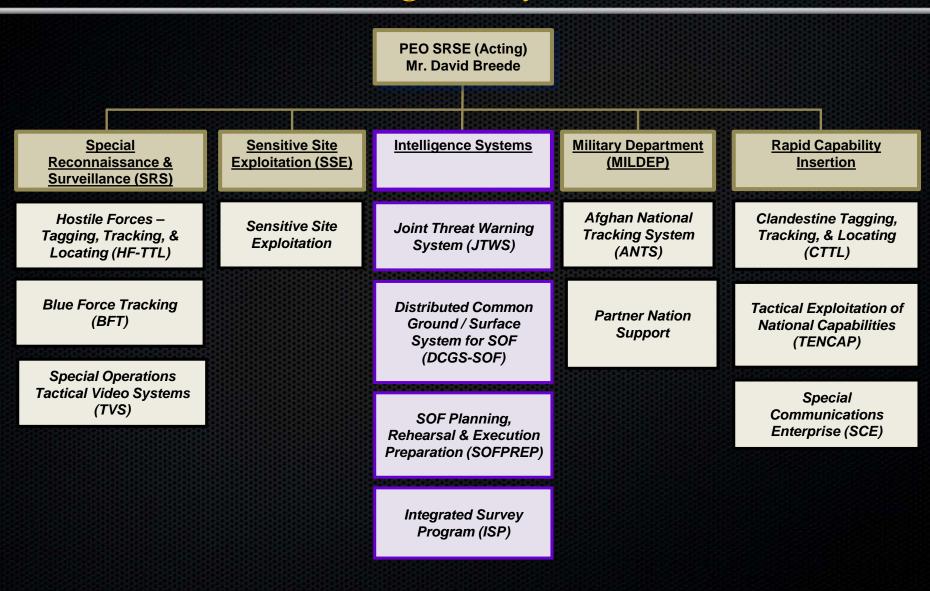
Sensitive Site Exploitation

Capability Insertion Opportunities

- Wireless Mobile CELLEX/DOMEX Collection Devices
 - Cell Phone-Based Tools For Exploiting Cell Phones, SIM Cards, Computers, Storage Devices
- Rapid Detection, Location and ID Of Forensic Evidence
 - Body-Worn System To Detect, Locate, And Identify Forensic Evidence (Fingerprints, Body Fluid, Explosives)
- Stand-off/Remote Facial Recognition And Iris Capture
 - Threshold 3 Meters, Objective 300 Meters
- Dustless Latent Print Collection
 - Porous And Non-Porous Surfaces
- Maritime Environment Operations
 - At Sea Processing/Exploiting Forensic, DOMEX, And Chemical Evidence From Exploited Sites



SPECIAL RECONNAISSANCE, SURVEILLANCE, AND EXPLOITATION



Distributed Common Ground/Surface System (DCGS)-SOF

- **Mission Set Fielding to Components**
 - A Family Of Systems Providing Intelligence, Surveillance, And Reconnaissance Processing, Exploitation, Dissemination and Analytical Capabilities At The Joint Task Force Level and Below
 - Mission Tailored Infrastructure Interconnects The Warfighters And Sensors To Find and Fix High Value Targets
 - Unimpeded Sharing of Intelligence Data, Information And Services With SOF, Services, Other National Intelligence Agencies, Combatant Commands, and Multi-National Partners
- **Priorities**
 - Agile development process with capability insertions into the baseline, Retain technical agility, maximize leverage/re-use opportunities
 - **ACQUISITION STRATEGY**
- Evolution Strategy With Spiral **Development to Insert Latest Technology into Components**

- PERIOD OF PERFORMANCE
- Annually Fields Initial Systems. Capital Equipment Replacement, and Technology Insertions To
- **Support Components**

- POINT OF CONTACT
- Technology & Industry **Liaison Office**
- TILO@SOCOM.mil
- 813-826-9482

FUNDING

APPROP	<u>FY16</u>	FY17
• O&M	\$25.2M	\$34.0M
• PROC	\$17.3M	\$15.0M
RDT&E	\$ 6.3M	\$ 5.3M

- **DCGS-SOF Components**
 - Enterprise
 - Full Motion Video (FMV) Processing, Exploitation & Dissemination (PED)
 - Signals Intelligence (SIGINT)
 - All Source Information Fusion (ASIF)

MILESTONES

- Enterprise CDD, Milestone C
- FMV PED, CPP
- SIGINT PED, CPP
- ASIF, CDD

CURRENT CONTRACT/OEM

Multiple

Joint Threat Warning System (JTWS)

- Mission Set Fielding to Components
 - Program Of Record For Signals Intelligence (SIGINT) Systems Acquisition At USSOCOM
 - Provides Threat Warning, Force Protection And Enhanced Situational Awareness
- Priorities
 - Rapidly Develop, Field, And Sustain SIGINT Capabilities
 - Technical Insertion Of Emerging Commercial Technologies
 - Multi-function/Multi-personality Capabilities In Reduced Size, Weight, And Power Form Factor
 - **ACQUISITION STRATEGY**
- Evolution Strategy With Spiral Development to Insert Latest Technology into Variants

- PERIOD OF PERFORMANCE
- Annually Fields Initial Systems, Capital Equipment Replacement, and Technology Insertions in support of SOCOM Components

- JTWS Portfolio
- Ground SIGINT Kit (GSK)
- Air
- · Precision Geo-location
- Unmanned Aerial Systems
- Unattended Ground Sensors
- Maritime

MILESTONES

- Fielding: Annually
- User Testing: Prior to Fielding
- New Equipment Trng: Continuously
- Fielding/Deployment: Continuously

POINT OF CONTACT

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- 813-826-9482

FUNDING

APPROP	<u>FY16</u>	<u>FY17</u>
• O&M	\$23.6M	\$22.9M
• PROC	\$45.4M	\$42.6M
• DDT9E	¢ / 2M	¢ 5 2M

CURRENT CONTRACT/OEM

Multiple

SRSE Priorities

- Integration & Interoperability of Capabilities to the Tactical Edge
- Rapid Fielding of Signals and Imagery Intelligence Systems for Tasking, Processing, Exploitation and Dissemination

- Joint Threat Warning System (JTWS)
- Distributed Common Ground/Surface System (DCGS)-SOF
- SOF Planning, Rehearsal & Execution Preparation (SOFPREP)
- Integrated Survey Program (ISP)

FY16/17 Planned Efforts

- Body-Worn Ground SIGINT Kit (GSK) for SOF Specific Missions
- JTWS Maritime Antennas

SOF Planning, Rehearsal & Execution Preparation (SOFPREP)

- Produces Enhanced Geospatial Intelligence (GEOINT) Data And 3D Scene Visualization Databases To Support SOF Mission Rehearsal and Execution Preparation
- Disseminates and Manages the DoD's Comprehensive **GEOINT Holdings**

MILESTONES

Project Dependent

ACQUISITION STRATEGY

 Evolutionary Strategy to Identify & **Insert Emerging Technologies** Tailored to SOF User-Defined **Mission Requirements**

PERIOD OF PERFORMANCE

- Annually Field Software ETIs for **3D GEOINT PED**
- Annually Field HW/SW Upgrades to Enhance Imagery Processing

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- 813-826-9482

FUNDING

<u>APPROP</u>	<u>FY16</u>	<u>FY17</u>
• O&M	\$ 6.2M	\$ 6.3M
• PROC	\$ 0.3M	\$ 0.5M
• RDT&F	\$ 0.3M	\$ 0.4M

CURRENT CONTRACT/OEM

- GEOINT Database Engineering & **Production Re-Compete in FY17**
- Several ETIs thru BAA, 8a, and **Foreign Comparative Test**

Integrated Survey Program (ISP)

- Performs Technical Surveys to Support National SOF Requirements for Operational Planning
- Produces Detailed Tactical Planning Data to Support SOF Operational Planners, Partner Nations, and the Intelligence Community



ACQUISITION STRATEGY

 Evolutionary Strategy to Identify & Insert Emerging Technologies Tailored to SOF User-Defined Mission Requirements

PERIOD OF PERFORMANCE

- Annually Field Software ETIs for GIS and CAD Interoperability
- Annually Field New Technologies for Mobile Collection

MILESTONES

Project Dependent

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- 813-826-9482

FUNDING APPROP FY16 FY17 O&M \$ 1.2M \$ 1.2M PROC \$ 1.3M \$ 0.3M RDT&E \$ 0.2M \$ 0.2M

CURRENT CONTRACT/OEM

- Application Management Support Re-Compete in FY17 (SITEC)
- SBIR for Geospatial Technologies
- 8a to Accelerate CAD/GIS

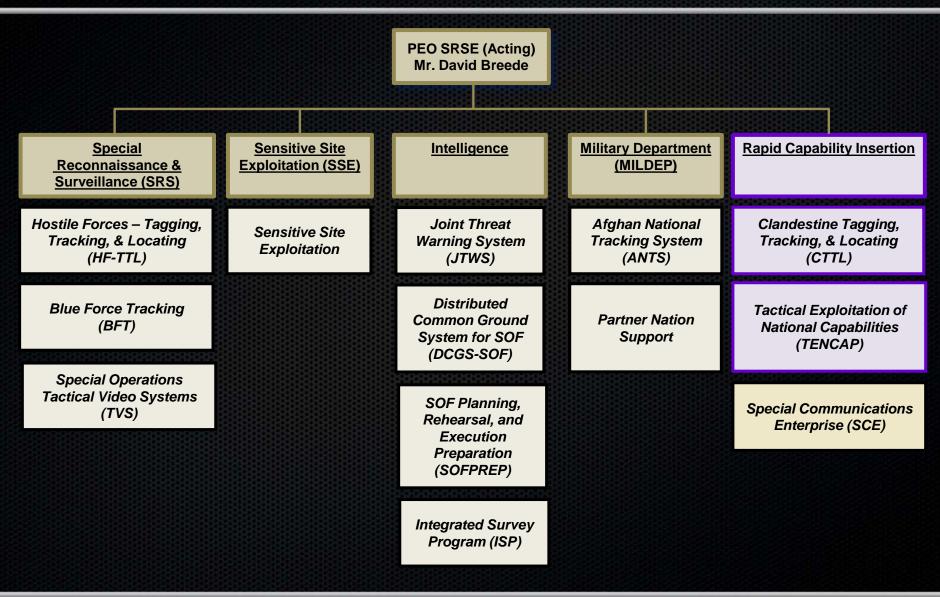
Capability Insertion Opportunities

- RF Communications Intercept & Location Identification
 - Software Defined Radio Emissions, Digital HF,VHF, & UHF Signal
 - Direction Finding Signal Processing Algorithms & Hardware
 - Passive Geolocation
- Close-Target Surveillance
 - Wi-Fi, WiMax, Bluetooth, RFID, Near Field Communications
 - Low-power/Low Noise Amplifiers
 - Detection Of Electronic Devices In Room, Vehicle, With Handheld Device
- 3D Visualization
 - Real-Time 3D Capture Of Interior or Exterior Spaces
 - Conversion Of 2D Images To 3D



SPECIAL RECONNAISSANCE, SURVEILLANCE, AND EXPLOITATION

Program Manager Rapid Capability Insertion



Program Manager Rapid Capability Insertion

- Develops And Prototypes Innovative TTL Capabilities and Novel Reconnaissance Devices Through Applied Research And Development (R&D)
- Improves Sensor SWAP-C For Use On Group 2 And 3 UAS
- Serves As The Command's TENCAP Office And Leverages Existing And Future **Space-Related Technologies**



 Rapid Prototyping, Technology **Demonstrations**, Combat **Evaluations**

• Project Dependent: Focus On 12-18 Month Project **Development Cycle**

PERIOD OF PERFORMANCE

POINT OF CONTACT

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- TILO@SOCOM.mil
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FUNDING

APPROP FY16 FY17 RDT&E \$ 33.0M \$ 33.6M





MILESTONES

• Project Dependent

CURRENT CONTRACT/OEM

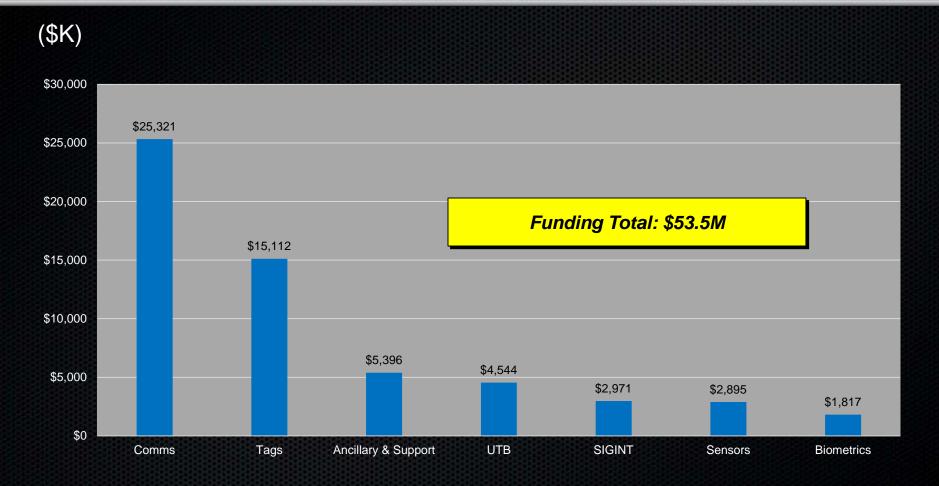
Project Dependent

So, Why do you Care?

- RCI Enables Tech Entry Point Into Programs of Record
 - Annual Quick-Look Capabilities
 Based Assessment
 - Broad Agency Announcement
 USSOCOM-BAAST-2015, Expires 31 Dec 2016
 - Goal Is To Provide Rapid Transition To SOCOM Programs of Record
- Typical RCI Year
 - 19 Industry Vendors On Contract
 - 9 Small Businesses
 - Average 9 Projects Delivered To Meet User
 Requirements Per Year



FY14-15 Distribution of Funds by Technology Area



69% OF THE FY14-15 TOTAL SUPPORTS TWO FOCUS AREAS

*** NOT AN INDICATOR OF FUTURE INVESTMENT

Tips for a Successful BAA Submission

- Target Specific Gap In BAA
- Propose A Product, Not A Corporate Overview
- Tell Us How You Think We'll Use It
- Know Your Customer (Note: It's Not SOF AT&L)
- RCI's Goal Is To Rapidly Prototype Capability To The User
 - Propose Phased Development
 - ~12-18 Month Start to Finish
 - − ~ \$1M Effort

Program Executive Office Special Reconnaissance, Surveillance, and Exploitation

Final Thoughts:

- Our Focus Is On Delivering Capability
 - Many Requirements Rely on Rapid Execution
 - Integration of COTS, NDI Focus IR&D
- Leverage All of Your Entry Points
 - PM RCI/S&T Broad Area Announcement
 - Team With Other Industry Partners
 - Work Directly With Our DoD/OGA Partners
- Be Responsive to Small Efforts Transition Opportunities
- Take Advantage of Access This Week





SPECIAL RECONNAISSANCE, SURVEILLANCE, AND EXPLOITATION