SPECIAL OPERATIONS FORCES INDUSTRY CONFERENCE

Mr. David Breede

Program Executive Officer

SPECIAL RECONNAISSANCE, SURVEILLANCE, AND EXPLOITATION

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

DISTRIBUTION A: APPROVED FOR PUBLIC RELEASE

UNCLASSIFIED

Program Executive Office Special Reconnaissance, Surveillance, and Exploitation

PEO SRSE MISSION

Be the recognized and trusted experts for the acquisition of state of the art technical collection and exploitation capabilities for advanced surveillance, reconnaissance, and intelligence systems for the Special Operations Warfighter.

- **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
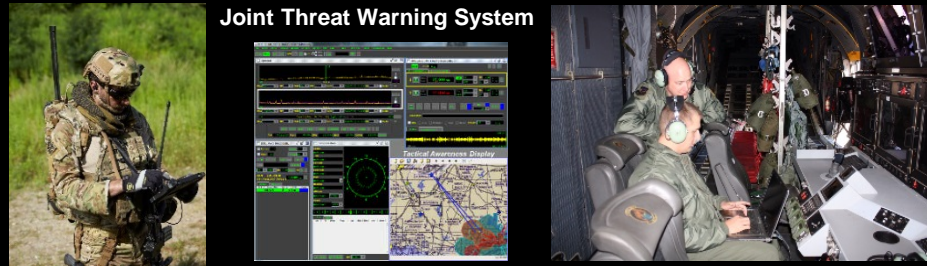
Hostile Forces – Tagging, Tracking, and Locating (HF-TTL)

BFT

Tactical Video System/Reconnaissance, Surveillance, and Target Acquisition
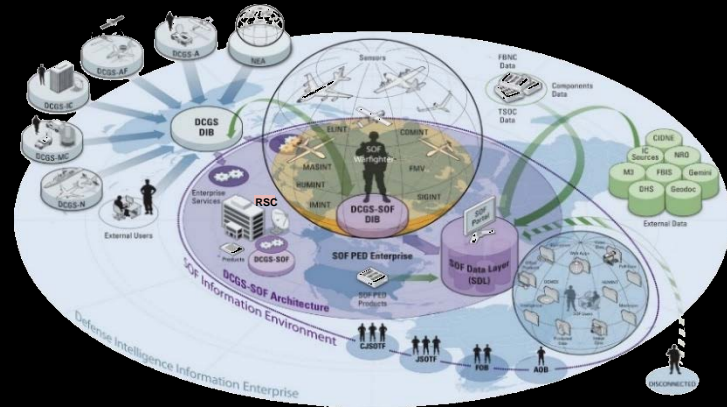

Joint Threat Warning System

IDENTITY OPERATIONS
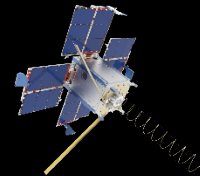
Biometrics and Forensics

MISSION SUPPORT SYSTEMS

Processing, Exploitation, & Dissemination

SIGINT PED ◆ **GEOINT PED** ◆ **Big Data PED**
Distributed Common Ground/Surface System (DCGS)-SOF
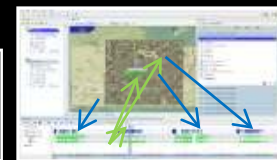
FOCUSED RDT&E

Specialized Communication
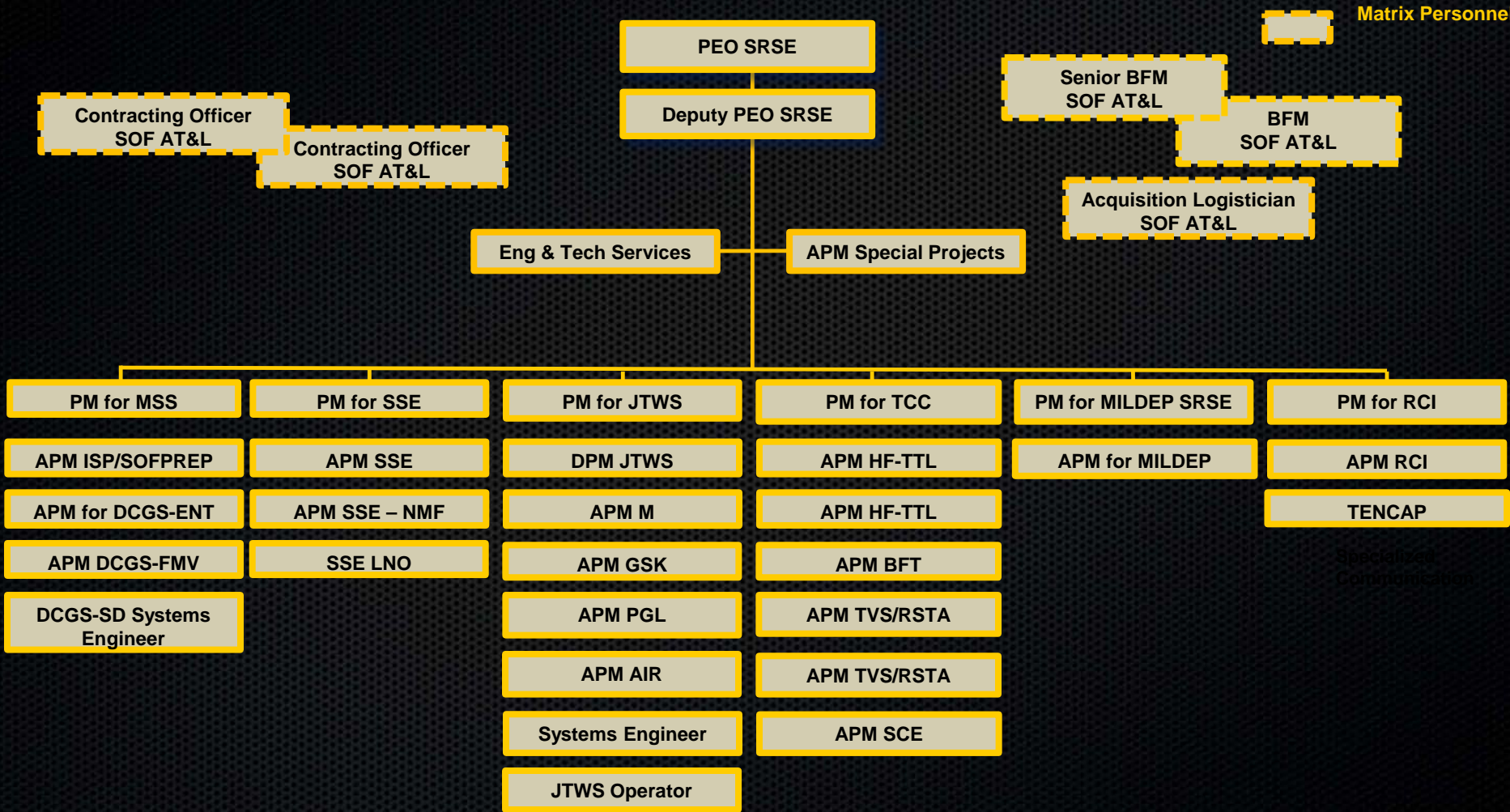
Tagging, Tracking, and Locating

Tactical Exploitation of National Capabilities

Quick Reaction Capabilities

Program Executive Office Special Reconnaissance, Surveillance, and Exploitation

ACQUISITION

Matrix Personnel

PEO SRSE

Deputy PEO SRSE

Senior BFM SOF AT&L

BFM SOF AT&L

Contracting Officer SOF AT&L

Contracting Officer SOF AT&L

Acquisition Logistician SOF AT&L

Eng & Tech Services

APM Special Projects

PM for MSS	PM for SSE	PM for JTWS	PM for TCC	PM for MILDEP SRSE	PM for RCI
APM ISP/SOFPREP	APM SSE	DPM JTWS	APM HF-TTL	APM for MILDEP	APM RCI
APM for DCGS-ENT	APM SSE – NMF	APM M	APM HF-TTL		TENCAP
APM DCGS-FMV	SSE LNO	APM GSK	APM BFT		
DCGS-SD Systems Engineer		APM PGL	APM TVS/RSTA		
		APM AIR	APM TVS/RSTA		
		Systems Engineer	APM SCE		
		JTWS Operator			

DISTRIBUTION A: APPROVED FOR PUBLIC RELEASE

PEO SRSE Capability Evolution

Capability Insertion or Replacement Cycle

- Requirement Development
- SOF Field Use & Evaluation
- Fed BizOps RFI
- RCI / CTTSO / ISR PMO / MERIT / SBIR
- SPAWAR NAVAIR CRANE NSA
- Technology Industry Liaison Office (TILO)
- Test, Certification, Accreditation, F&DR
- ECP / CCB Decisions
- Development and Operational Test

Program Executive Office Special Reconnaissance, Surveillance, and Exploitation

PEO SRSE

Intelligence Preparation of the (Acquisition) Battlefield

Define The Environment

- **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 OPERATIONS FORCES INDUSTRY CONFERENCE

Program Manager
RAPID CAPABILITY INSERTION
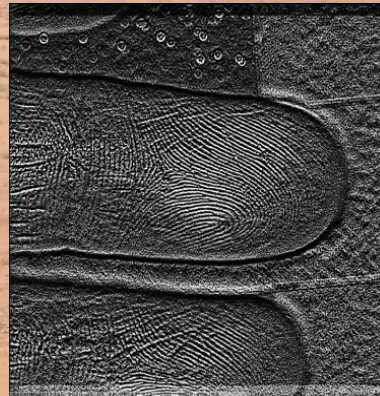
SPECIAL RECONNAISSANCE, SURVEILLANCE, AND EXPLOITATION

Program Manager
Rapid Capability Insertion

RCI Portfolio

- **72 Active Projects**

- **Portfolio Supports SRSE PoRs**

- **Tactical Exploitation of National Capabilities (TENCAP) Projects**

Key Events

- **Two Annual Program Management Reviews**

- **Annual Gap Analysis / Broad Agency Announcement**

- **Trident Spectre Exercise**

Near 50% Reduction in Size and Power Consumption on TTL Device(s)
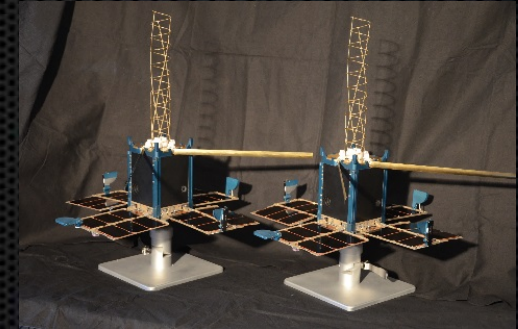
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Program Manager
Rapid Capability Insertion

Development Effort:

- **Rapid Prototype TTL Capabilities And Reconnaissance Devices Through Applied R&D**

- **Improve Sensor SWAP-C For Use On Group 2 And 3 UAS**

- **Serve As Command's TENCAP Office And Leverage Existing And Future Space-Related Technologies**

ACQUISITION STRATEGY
- **Rapid Prototyping, Technology Demonstrations, Combat Evaluations**

PERIOD OF PERFORMANCE
- **Project Dependent: Focused on 12-18 Month Project Development Cycle**

MILESTONES
- **Project Dependent**

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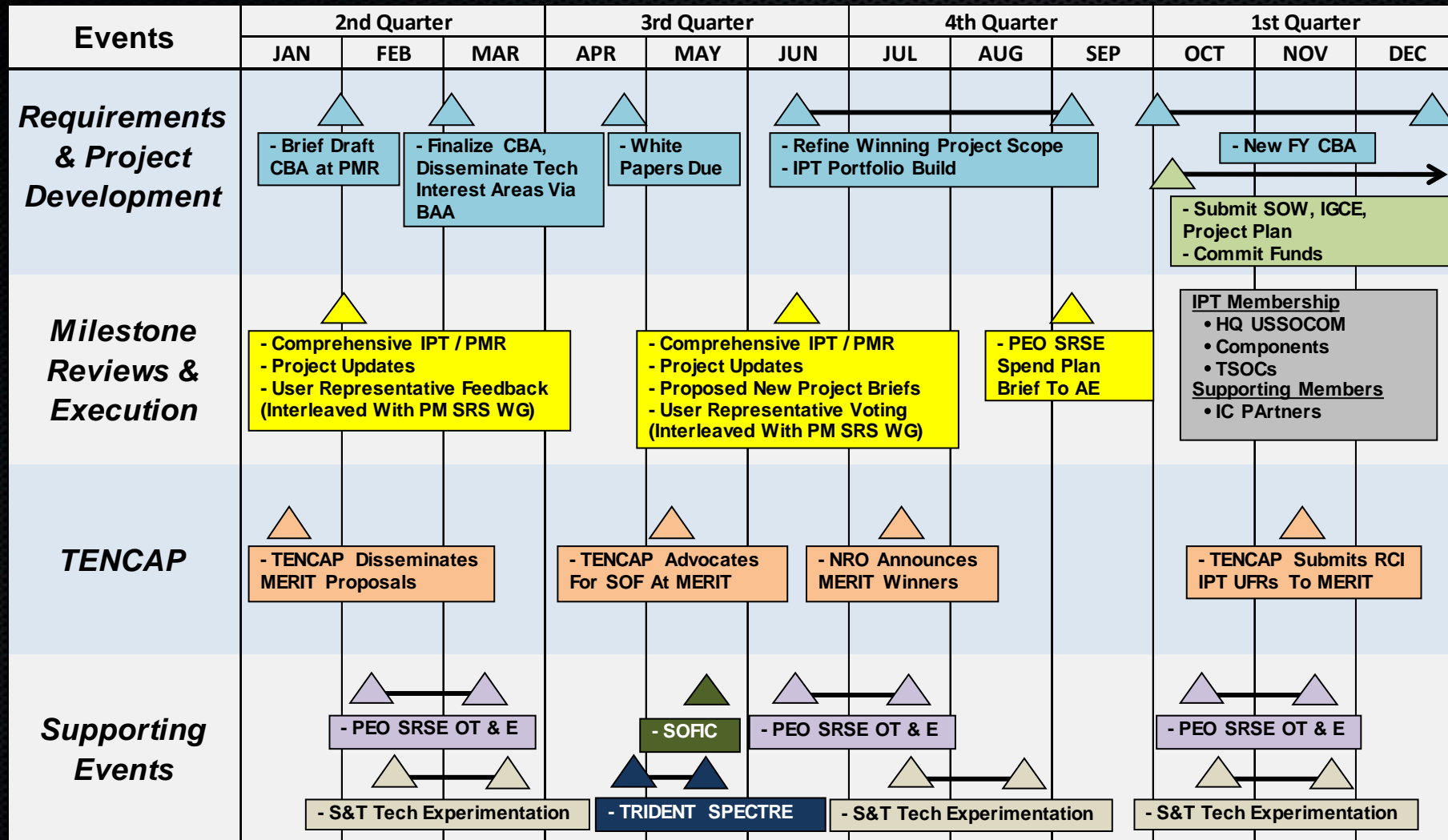- **Technology & Industry Liaison Office**
- **TILO@SOCOM.mil**
- **813-826-9482**

FUNDING

APPROP	FY17	FY18
• O&M	$ 0.0M	$ 0.0M
• PROC	$ 0.0M	$ 0.0M
• RDT&E	$ 33.6M	$ 35.2M

CURRENT CONTRACT/OEM
- **Project Dependent**

Program Manager Rapid Capability Insertion

Events	2nd Quarter			3rd Quarter			4th Quarter			1st Quarter		
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC

Requirements & Project Development
- Brief Draft CBA at PMR
- Finalize CBA, Disseminate Tech Interest Areas Via BAA
- White Papers Due
- Refine Winning Project Scope
- IPT Portfolio Build
- New FY CBA
- Submit SOW, IGCE, Project Plan
- Commit Funds

Milestone Reviews & Execution
- Comprehensive IPT / PMR
- Project Updates
- User Representative Feedback (Interleaved With PM SRS WG)
- Comprehensive IPT / PMR
- Project Updates
- Proposed New Project Briefs
- User Representative Voting (Interleaved With PM SRS WG)
- PEO SRSE Spend Plan Brief To AE

IPT Membership
• HQ USSOCOM
• Components
• TSOCs
Supporting Members
• IC PArtners

TENCAP
- TENCAP Disseminates MERIT Proposals
- TENCAP Advocates For SOF At MERIT
- NRO Announces MERIT Winners
- TENCAP Submits RCI IPT UFRs To MERIT

Supporting Events
- PEO SRSE OT & E
- SOFIC
- PEO SRSE OT & E
- PEO SRSE OT & E
- S&T Tech Experimentation
- TRIDENT SPECTRE
- S&T Tech Experimentation
- S&T Tech Experimentation

Program Manager
Rapid Capability Insertion

FY14 - FY16 Investments
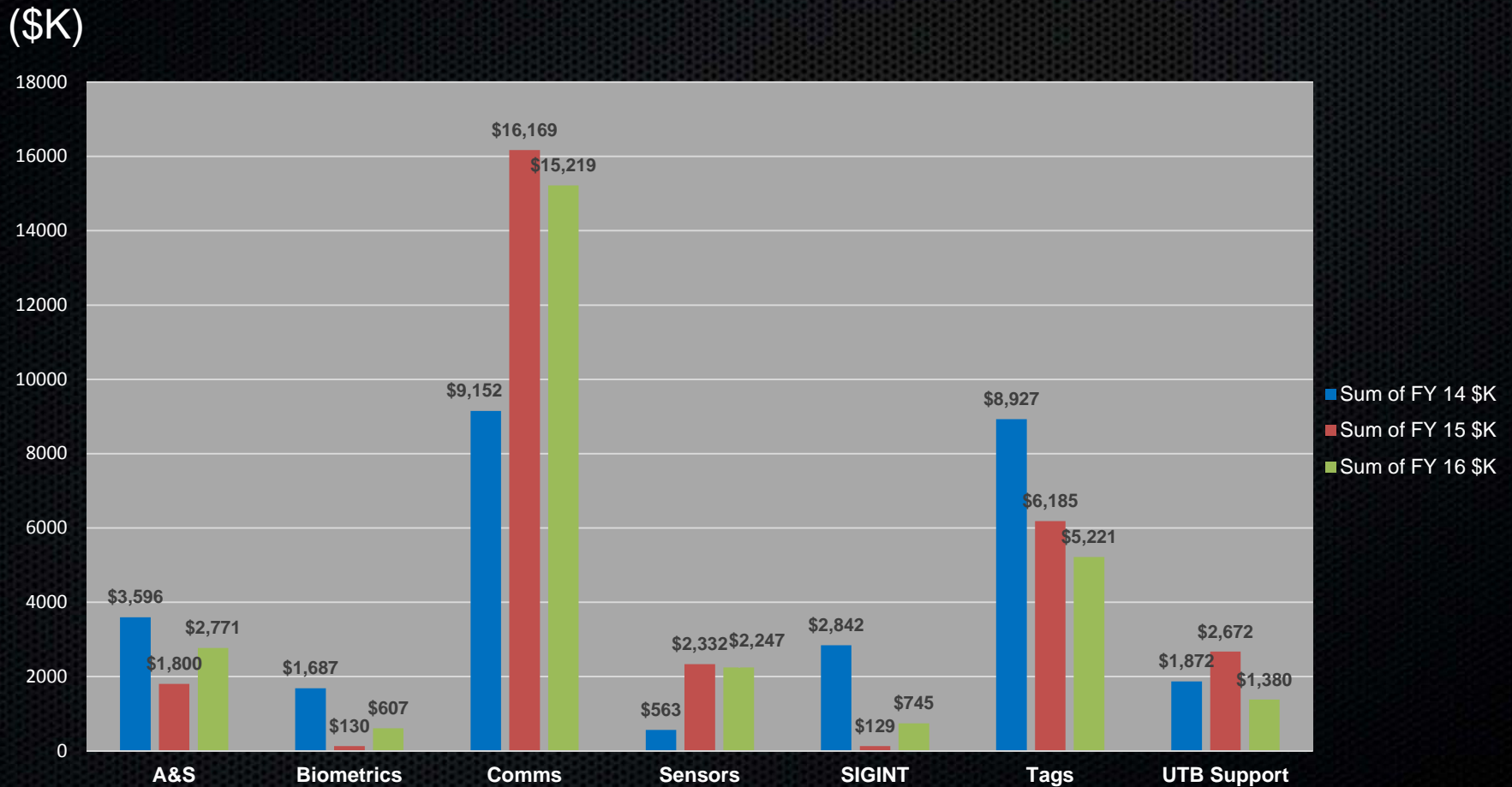
Program Manager
Rapid Capability Insertion

Capability Insertion Opportunities

- **SRSE Program of Record Priorities**

- **Strike balance w/ Leap-Ahead Tech vs. Rapid Incremental Steps**

- **Novel Combinations of Existing Technologies**

- **Modular / Multi-Use Components**

- **Size, Weight and Power Reductions**

- **Interoperability With Legacy Systems**

Program Manager
Rapid Capability Insertion

Why Should You Care?

- **RCI Enables Tech Entry Point Into SRSE Programs of Record**

- **Annually Refreshing Capability Gaps**

- **Low Barrier To Entry: Broad Agency Announcement**

- **RCI Partners with Numerous Other Departments and Agencies**

- **Typical Year: 20-30 Contract Awards, Roughly Half Small Businesses**

Tips for a Successful BAA Proposal

- **Propose A Phased Development**

- **~12-18 Months Start to Finish**

- **~$1M Effort**

- **BAA located on FBO.GOV: Search for "USSOCOM-BAAST"**

  - **SRSE requirements are located in Appendix G-1**

SPECIAL OPERATIONS FORCES INDUSTRY CONFERENCE

Program Manager
TECHNICAL COLLECTION
AND COMMUNICATIONS

SPECIAL RECONNAISSANCE, SURVEILLANCE, AND EXPLOITATION

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)

DISTRIBUTION A: APPROVED FOR PUBLIC RELEASE

Program Manager Technical Collection and Communications

TCC Portfolio

- **HF-TTL Mission Sets**

- **TVS/RSTA Family of Systems**

- **BFT Family of Systems**

- **SCE Mission Sets**

Key Events

- **Two Annual Program Management Reviews**

- **Three Annual Operational Test and Evaluations**

- **Two to Three Annual Procurement Cycles**

MUSKRAT Electro-Optical Security Sensor

Program Manager Technical Collection and Communications

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

Mission Set Fielding to Components and TSOCs:

- **Continuously Tailored; Commodity Ordering**

- **Two/Three Annual Increments**

Priorities:

- **Quick Reaction Capability (QRC)**

- **Integration of TTL Payloads on Remotely Piloted Vehicles**

HF-TTL Portfolio:

- **Tag/Track Kits**

- **Audio Kits**

- **Video Kits**

- **Misc Tool Kits**

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**

MILESTONES

- **Mission Set Kits Procured Annually**
- **NET Continuously**
- **Focused Technical Insertion in an Ever-Changing Environment**

POINT OF CONTACT

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

FUNDING

APPROP	FY17	FY18
• O&M	$19.4M	$20.1M
• PROC	$19.2M	$19.0M
• RDT&E	$ 0.8M	$ 0.8M

CURRENT CONTRACT/OEM

- **T-REX Multiple Award IDIQ Contract**
- **Multiple OEMs - Contact TILO**

Program Manager Technical Collection and Communications

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

Kits are Operationally Tailored:

- **Support Six Capability Areas**
- **9 Variants**

Priorities:

- **Enhanced Night / Obscured Operations**
- **Component Interoperability**

TVS/RSTA Portfolio:

- **Tactical Video System**
- **RECCE Systems**
- **Remote Observation Post**
- **Tactical Sensor**
- **Unattended Ground 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	FY17	FY18
• O&M	$ 9.3M	$ 9.7M
• PROC	$ 4.1M	$ 3.8M
• RDT&E	$ 0.4M	$ 0.4M

CURRENT CONTRACT/OEM
- **T-REX Multiple Award IDIQ Contract**
- **Multiple OEMs - Contact TILO**

Program Manager Technical Collection and Communications

BLUE FORCE TRACKER (BFT)

Mission Set Fielding to Components:

- **Family of Devices that are Small, Lightweight, Employ Multiple Waveforms, & Have Self-Contained Transmitters**

BFT Family of Devices:

- **Iridium Based**

- **Government Off The Shelf (GOTS)**

Priorities:

- **Multiple Waveform Support; Battery Life; MGUE Integration**

- **Maximum Benefits Leveraging OGA Efforts**

ACQUISITION STRATEGY

- **Commodity Procurement Project (CPP)**

PERIOD OF PERFORMANCE

- **Varied**

MILESTONES

- **Device Selection Annually**
- **NET Continuously**
- **Capital Equipment Replacement**

POINT OF CONTACT

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

FUNDING

APPROP	FY17	FY18
• O&M	$ 1.4M	$ 1.7M
• PROC	$ 3.4M	$ 3.4M
• RDT&E	$ 0.07M	$ 0.07M

CURRENT CONTRACT/OEM

- **Multiple – Leveraging OGAs**

Program Manager Technical Collection and Communications

Special Communication Enterprise (SCE)

Development Effort:

- **MS are continuously tailored based on threat and capability**
- **Two/Three annual increments**

Priorities:

- **Providing operationally relevant SC equipment in fluid and unique environment**
- **Providing low density two way communications with diverse capabilities**

SCE Portfolio:

- **Field Segment**
- **Transport Segment**
- **Enterprise Control Segment**
- **Base End Segment**

ACQUISITION STRATEGY

- **Acquisition Category III (ACAT III)**

PERIOD OF PERFORMANCE

- **Varied**

MILESTONES

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

POINT OF CONTACT

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

FUNDING

APPROP	FY17	FY18
• O&M	$ 7.0M	$ 9.7M
• PROC	$ 2.9M	$ 4.5M
• RDT&E	$ 4.5M	$ 4.7M

CURRENT CONTRACT/OEM

- **T-REX Multiple Award IDIQ Contract**
- **Multiple OEMs – Contact TILO**
- **Leveraging OGAs**

Program Manager Technical Collection and Communications

Capability Insertion Opportunities

- **Size, Weight and Power Reductions**

- **Balancing Tailoring with Configuration Management**

- **Interoperability with Legacy Systems**

- **Modular / Multi-Use Components**

- **Technology Refresh in Fluid Environment**

- **Data Transfer Capabilities**

- **Image and Video Compression Techniques**

Program Manager Technical Collection and Communications

Capability Insertion Opportunities (cont.)

- **Tagging, Tracking, and Locating (TTL) Technologies that can be used on Persons and Objects**

- **Items Critical to Mission Success but often not Part of the Initial Design**

- **Affordable TVS/RSTA Capabilities for UGS / Surveillance Systems**

- **BFT Technology that is M-Code Compliant**

- **Miniaturized Data Transport Segments for Long Distance Transfers**

KeyMaker TTL and UGS Data Dissemination

RaptorX GUI
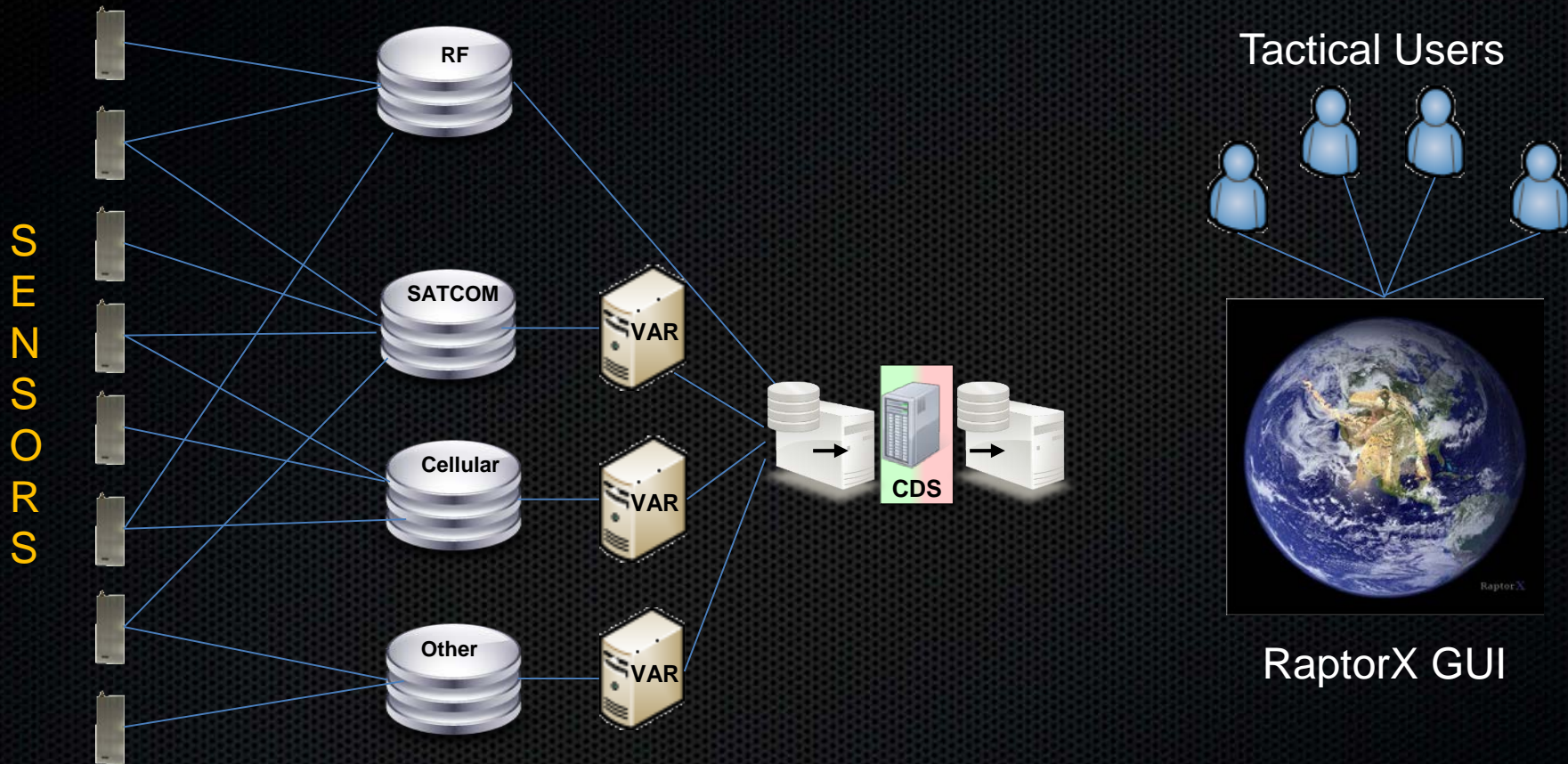
- Provides a system for standardized, consolidated, command and control of technical collection tools
- Allows data to be shared for wide distribution in support of operational requirements while ensuring control of the distribution always remains with the sensor/tags owner

Program Manager Technical Collection and Communications

Tracking Device

Handheld DVR Monitor

Pinhole Camera Surveillance Kit w/ Miniature Recorder & Monitor

TTL

GPS Denied — WF 1, WF 2, WF 3

Subterranean

UHF Doppler TTL

Adv. GPS Denied

TTL Adv. Form Factor Mod 1

TTL Adv. Form Factor Mod 2

SUAS Waveform Integration

TVS

Integrated Reporting Architecture

Swappable/ Modular Components

Tactical Radar

"Smart" Target ID UGS

Hidden Personnel Detection

FY   17   18   19   20   21   22   23

Program Manager Technical Collection and Communications

Special (US-only) Communications

SCE

Device 1   Device 2   Device 3

Device 1   Device 2   Wave Form 2

Wave Form 1
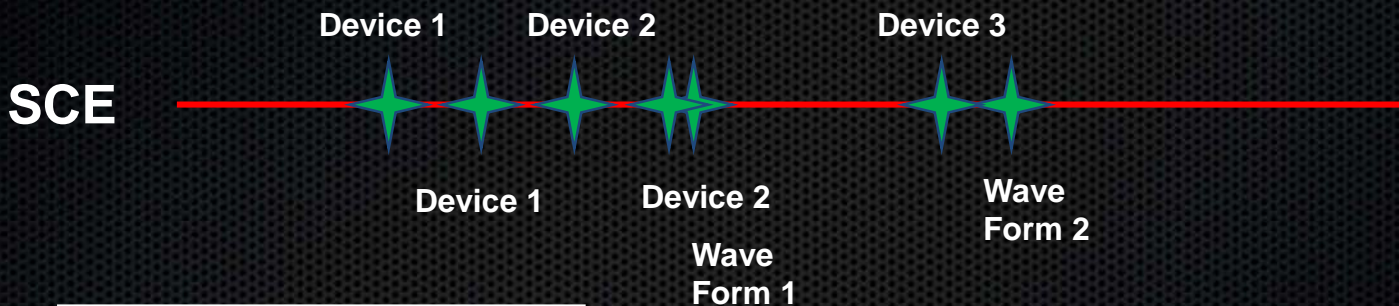
Low Visibility Communications

Enhanced devices

BFT

MicroGram Integration

M-Code GPS User Equipment (MGUE) Integration

Multi-Waveform Transmitter Replacement

SHOUT nano
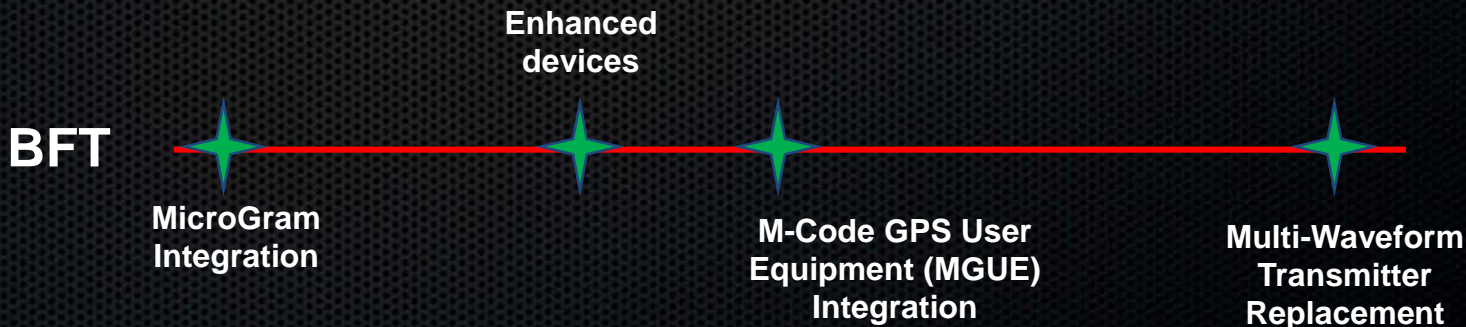
| FY | 17 | 18 | 19 | 20 | 21 | 22 | 23 |

SPECIAL OPERATIONS FORCES INDUSTRY CONFERENCE
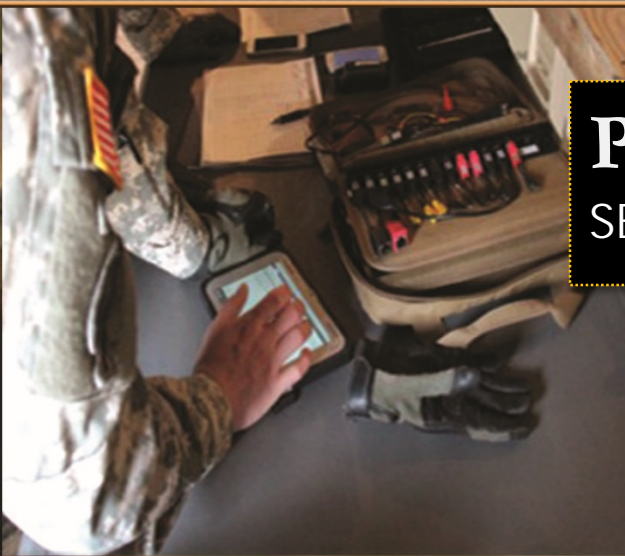
Program Manager
SENSITIVE SITE EXPLOITATION

SPECIAL RECONNAISSANCE, SURVEILLANCE, AND EXPLOITATION

Program Manager
Sensitive Site Exploitation
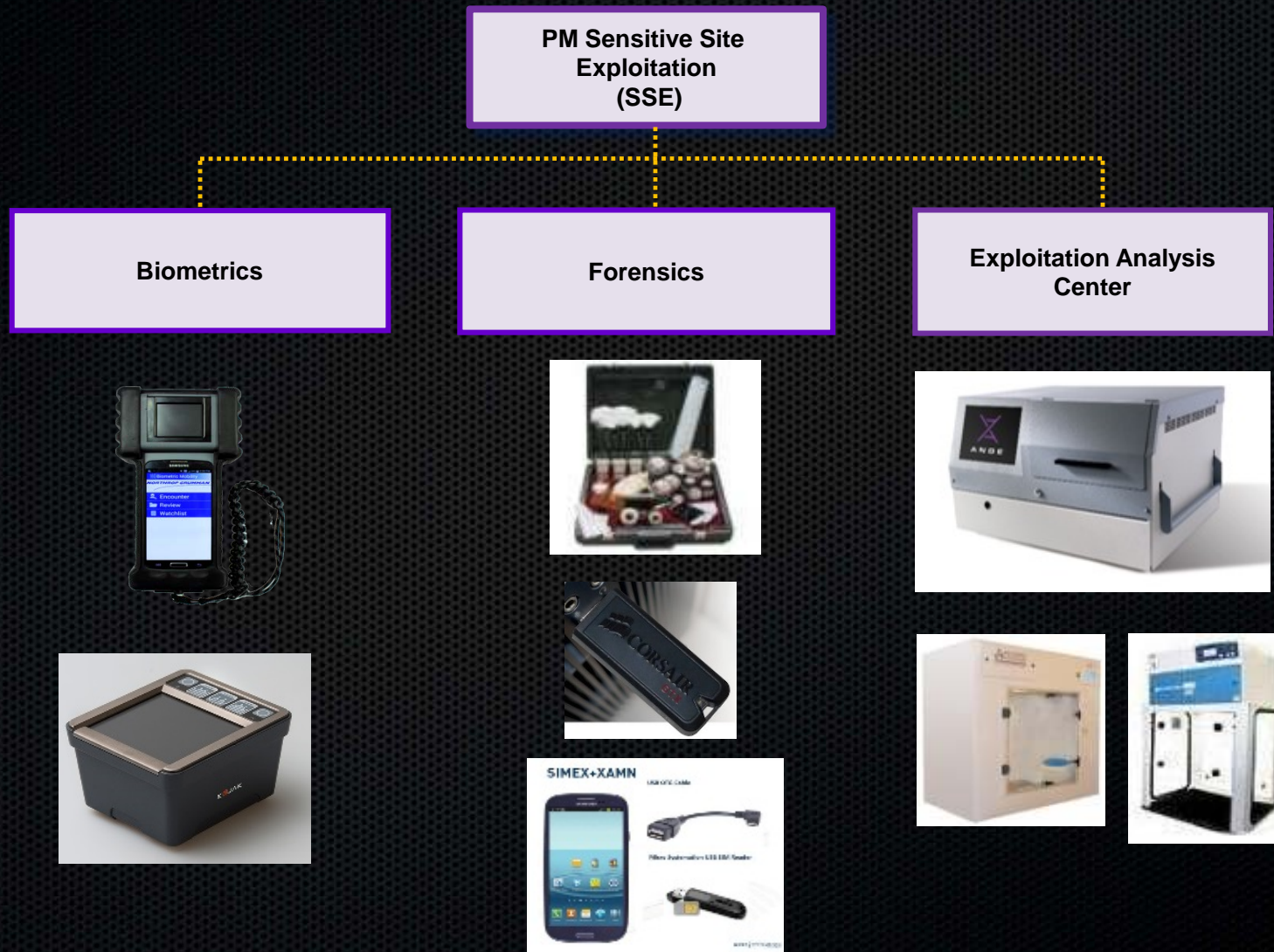
Program Manager Sensitive Site Exploitation

Biometrics, Forensics, & Exploitation Analysis Centers

Fielding to Components

- **Continuously Tailored**
- **SOFSA**
- **NFSTC**

SSE Priorities

- **On Site Collection of Biometrics**
- **Verify/Enroll Subjects**
- **Provide Actionable Intelligence**
- **Rapid Detection, Collection, & Identification**

SSE Portfolio

- **ID Kits**
- **Enrollment Kits**
- **Operator Advanced Kits**
- **Enabler Kits**
- **Exploitation Analysis Centers (EAC) Shelter**

ACQUISITION STRATEGY

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

PERIOD OF PERFORMANCE

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

MILESTONES

- Kit Selection semi-annually
- NET Continuously
- Technical Insertion to Maintain Relevancy

POINT OF CONTACT

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

FUNDING

APPROP	FY17	FY18
O&M	$ 15.5M	$ 14.1M
PROC	$ 2.6M	$ 2.4M
RDT&E	$ 0.2M	$ 0.2M

CURRENT CONTRACT/OEM

- TREX - Contact TILO

Program Manager
Sensitive Site Exploitation

ID Card Printer

N-G BioSled
Fingerprint, Facial and Iris Imagers

Identification (ID) Kits

Kojak Multi-Fingerprint Scanner

ID Badge Printer

Enrollment (EN) Kit

Biometrics

Metal Tec 1500
Metal Detector

IDEX Pens

Field Forensics EL-100

Explosives And Trace Element Detection

DNA Swab

Latent Print Collection

Forensic Lights

DNA And Latent Print Collection

SIMEX
CELLEX
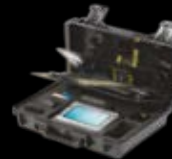
XRY/XACT

ADF G-2
Basic MEDEX

Tableau TD-2 Imager

Digital Intelligence FRED-L

Advanced MEDEX

Data And Information Extraction

Tactical Site Exploitation (Forensics)

EAC Shelter

EAC Shelter (x2)

Rapid DNA

ANDE 200

RapidHIT

Trace Element Analysis

Griffin 460

AHURA First Defender

AHURA TruDefender

SABRE 5000

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

SOF Exploitation Portal

SOFEX Portal Enables Tx/Rx of Intelligence Data

Strategic / International Level

Finger Prints · Iris · Face · Biometrics

CELLEX · DOCEX · MEDEX · FACE · DOMEX DATABASE

CIED · Weapons · Currency · WMD · DNA · FORENSICS

Decentralized Matching, Storage and Analytical Activities

Operational Level

SOFEX WEB APP*

SSE Collections

FWD CMD

Tactical Level

COMM STATION

	WEB
	Radio
	FEDEX Tracker
	Reply

Sensitive Site Exploitation

BIOMETRICS

- 3RD GEN Multi-Modal Biometric Device
- Long-Range Collection Integration (UAS)
- Remote PID

FORENSICS

- DOMEX DownSelect APR 2017
- TFE 17 JUN 2017
- Rapid DNA (trace)
- Chem Attrib (proof of concept) / Presumptive ID
- DOMEX LUA
- Voice Matching (Multi-speaker)
- DOMEX LUA
- Hidden Chamber Detection
- Wireless CELLEX
- DOMEX LUA

MOBILE OPERATIONS

- Web Portal
- Wireless Biometric Accreditation
- Forensic Data Compression
- Wireless Forensics Accreditation

LEGEND:
- Biometrics
- DOMEX / CELLEX
- Explosives / Narcotics
- Data
- Other Enablers

FY 17 18 19 20 21 22 23

- Events dependent upon request via components per outcomes of ISC-IPTs
- Other factors include technology catching up and/or SOF internal authorities

Sensitive Site Exploitation

Capability Insertion Opportunities

- **Wireless Mobile CELLEX/DOMEX Collection Devices**

- **Rapid Detection, Location and ID Of Forensic Evidence**

- **Stand-off/Remote Facial Recognition And Iris Capture**

- **Dustless Latent Print Collection**

- **Triage**

Sensitive Site Exploitation

General Considerations

- **Average User - Proficient in Mobile Electronics (24 to 35 years old)**
- **SWAP-C**
- **Software**
  - **Non-Proprietary**
  - **Windows 10 Preferred**
  - **Compliant w/ Intelligence Community Databases**
- **Ruggedized (*MIL STD 810-G*)**
- **Reduce User Workload**
- **Training Accomplished in One Eight Hour Session**
- **Limited Time on Objective**
- **Logistics**
  - **Shipping and Storage**
  - **DOT Compliant (Lithium Ion Batteries, etc...)**
  - **Shelf Life**

Events

- **Business Process:**

| ▲ | RFI T(X)E 17 | ▲ | T(X)E TILO | ✦ | Technical Evaluation | ✦ | Operator Evaluation | ▲ | Final Report |
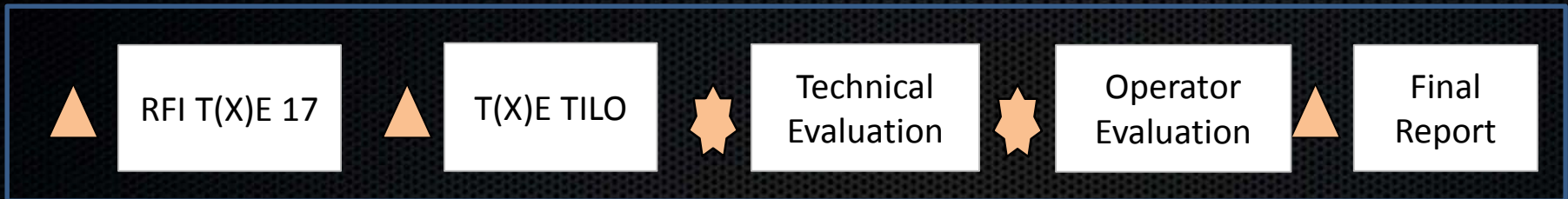
Upcoming Events:

- **Capability Collaboration Engagement – September 26, 2017**
- **Tactical Biometric Event (TBE) – March 2018**
  - **RFI TBE 18 – June 2017**
  - **TILO for TBE 18 – September 2017**
- **Technical Experiment – Tentative March 2018**
  - **RFI TFE 18 – November 2017**

All RFIs posted on FedBizOpps

SPECIAL OPERATIONS FORCES INDUSTRY CONFERENCE
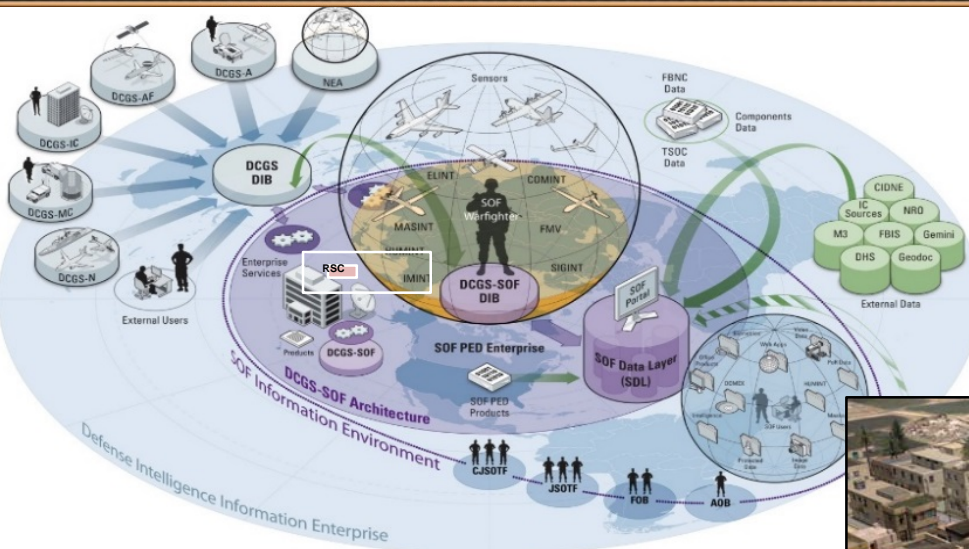
Program Manager
MISSION SUPPORT SYSTEMS

SPECIAL RECONNAISSANCE, SURVEILLANCE, AND EXPLOITATION

Program Manager
Mission Support Systems

PM Mission Support Systems

Integrated Survey Program (ISP)

SOF Planning, Rehearsal & Execution (SOFPREP)

Distributed Common Ground System for SOF (DCGS SOF)

Enterprise & All Source Information Fusion (ASIF)

Full Motion Video PED

SIGINT PED

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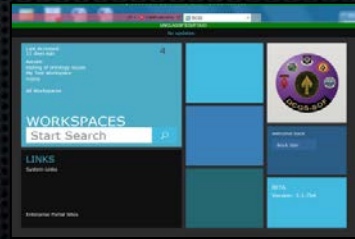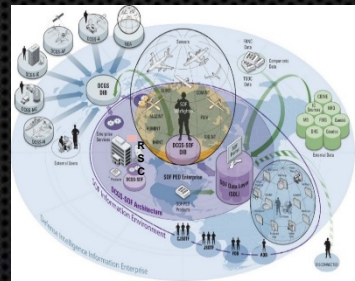
Program Manager Mission Support Systems

Multi-INT Capabilities for Operational Intelligence:

- **Integration & Interoperability to the Tactical Edge**
- **Agile Acquisition of Emerging Technologies**

Priorities:

- **Integration & Fielding of Advanced Analytics**
- **Solutions Framework for Big Data Challenges**

MSS Portfolio:

- **Integrated Survey Program**
- **SOF Planning Rehearsal & Execution Preparation**
- **DCGS-SOF Enterprise & ASIF**
- **Full Motion Video PED**
- **SIGINT PED**
- **Big Data**

ACQUISITION STRATEGY

- **Partner with National Mission Forces, IC community, Services, SOF C4 and industry partners**
- **Agile development**

PERIOD OF PERFORMANCE

- **Multi year support contracts**
- **HW QRC Deliveries in 14 to 90 Days**

MILESTONES

- **Periodic program reviews**
- **Technology insertions to maintain relevancy**

POINT OF CONTACT

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

FUNDING

APPROP	FY17	FY18
• O&M	$41.62M	$43.57M
• PROC	$14.22M	$11.49M
• RDT&E	$5.98M	$6.07M

CURRENT CONTRACT/OEM

- **Multiple: HW, SW, IT, Technical Management Support**
- **Foreign Comparative Test (FCT)**
- **SBIR, Rapid Innovation Fund**

Integrated Survey Program (ISP)

Description:

- **CJCS CONPLAN support to Tier Units and Theater Special Operations Commands**
- **Conducts technical surveys to provide detailed tactical planning data for contingency planning and crisis response**
- **Surveys US Facilities abroad, Ports & Harbors, and Commercial Vessels**

Operational Mission:

- **Disconnected Survey Collection**
- **Dissemination to Garrison and Deployed SOF Users as well as DoD / IC and Interagency**
- **Data Sharing with Coalition Partners**

Milestones:

- **GO ISP mobile application for disconnected operations and distributed data management**
- **Ongoing test and evaluation of mobile devices to speed collection: objective +/- 1% accuracy**
- **Enterprise GIS data services**

SOF Planning, Rehearsal & Execution Preparation (SOFPREP)
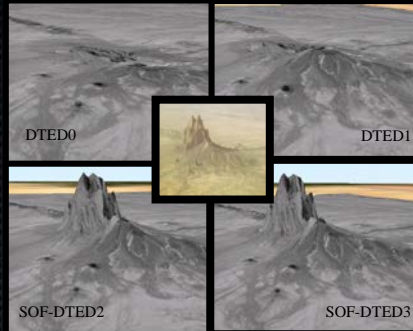
Description:

- **Produces Enhanced GEOINT (maps, imagery, and terrain data) and 3D Scene Visualization Databases**
- **Manages SOCOM's most comprehensive repository of SOF-common Geospatial Data**
- **Databases support Component Simulators, JTAC Rehearsal Systems, Mission Planning, Virtual Battlespace, and 3D Globes**

Operational Mission:

- **Garrison system for Geospatial-Intelligence Data Processing, Exploitation and Dissemination**
- **Operational Intelligence support for Mission Rehearsal and Planning**

Milestones:

- **Evolutionary Technology Insertions**

DCGS SOF Enterprise/All Source Information Fusion

Description:

- **The Enterprise provides infrastructure and processing capability to allow for worldwide SOF intelligence information sharing**
- **All Source Information Fusion will provide the intelligence analytical tools via a global and disconnected architecture**

Operational Mission:

- **Part of a family of systems providing Intelligence, Surveillance, and Reconnaissance (ISR) Processing, Exploitation, and Dissemination (PED) and analytical capabilities at the Joint Task Force level and below**
- **Interconnect the warfighter and sensors to find and fix High Value Targets of interest**
- **Provide a network-enabled interoperable construct allowing continual unimpeded sharing of intelligence data, information and services**

Milestones:

- **User evaluation of All-Source Analytical Environment capability**
- **Completed User Guide & instructor led new equipment training**
- **Successful interoperability testing ant Unified Vision 16 & Enterprise Challenge 16**

Full Motion Video Processing, Exploitation & Dissemination

Description:

- **Provides PED capabilities in garrison and deployed tactical environments of manned and unmanned sensors**

Operational Mission:

- **Intelligence processing of collected data from various manned and unmanned ISR platforms & sensors**
- **Near-real-time find-fix-finish-exploit-analyze (F3EA) intelligence operations on a 24/7/365 basis at all levels of warfare (Strategic, Operational, Tactical)**

Milestones:

- **Full Rate Production Decision, Sept 2012**
- **Completed CERP of Intelligence Formal Training Unit facility**
- **Delivered hardware to support 11th SOIS increase in mission capacity**
- **Completed site survey for communications & systems requirements CERP**

Silent Dagger Processing, Exploitation & Dissemination

Description:

- **Provides Signals Intelligence (SIGINT) exploitation capability in both garrison and deployable environments**
- **Silent Dagger has fielded 231 garrison workstations and 101 deployable nodes**

Operational Mission:

- **Provides SOF SIGINT elements a robust, organic, scalable capability for garrison and tactical SIGINT Processing, Exploitation and Dissemination**
- **Interconnect the warfighter and sensors to find and fix High Value Targets of interest**

Milestones:

- **Milestone C, Feb 2011**
- **Program Parameter Change Dec 2014**
- **Fielded Garrison workstations for SOCKOR and 2 Deployable kits for AVSPECWARCOM**
- **Completed partial CERP of component hardware**

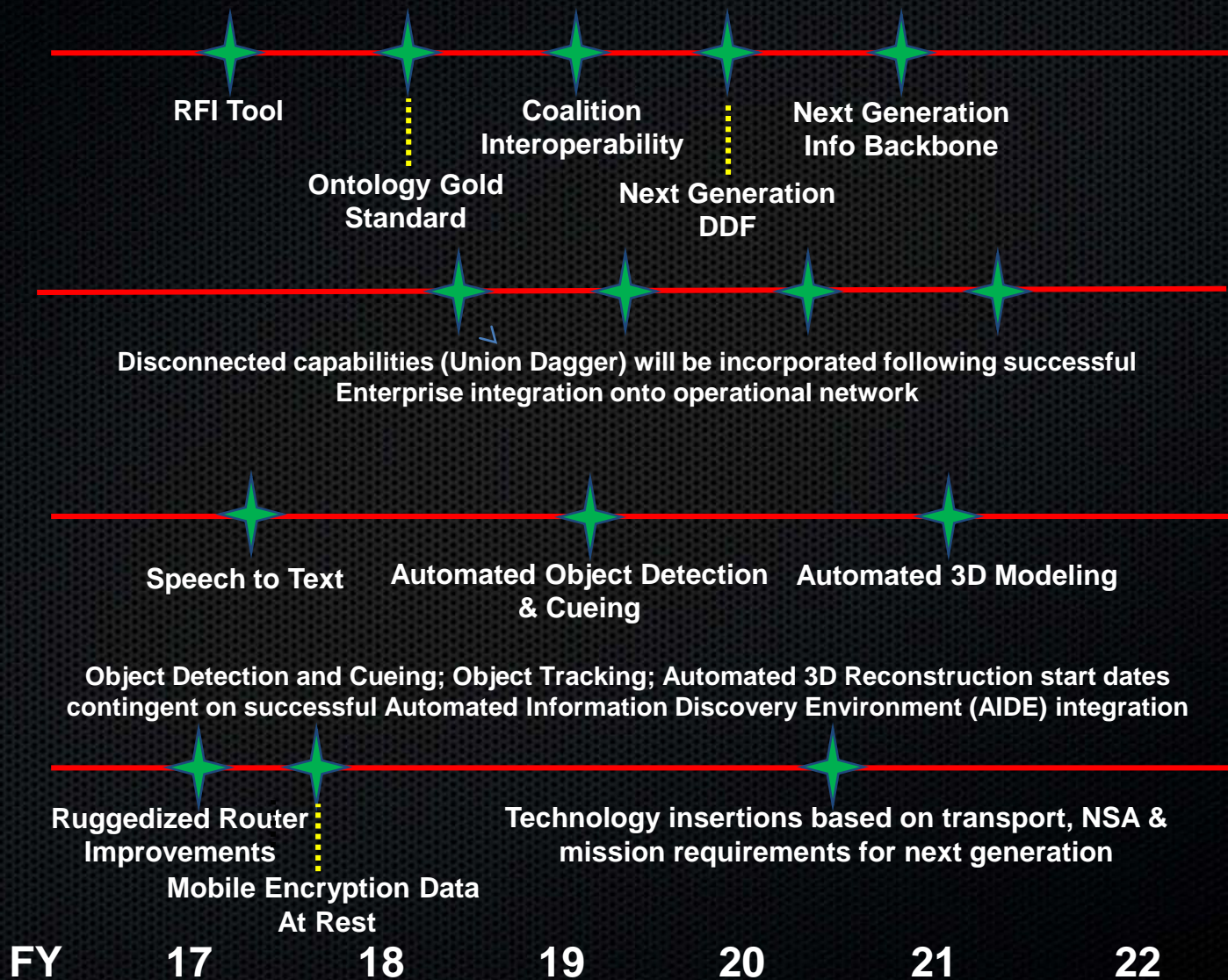# Mission Support Systems DCGS Technology Insertion Roadmap

Enterprise

- RFI Tool
- Ontology Gold Standard
- Coalition Interoperability
- Next Generation DDF
- Next Generation Info Backbone

Union Dagger

Disconnected capabilities (Union Dagger) will be incorporated following successful Enterprise integration onto operational network

FMV PED

- Speech to Text
- Automated Object Detection & Cueing
- Automated 3D Modeling
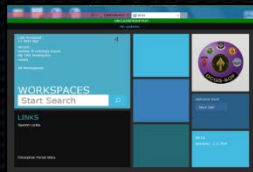
Object Detection and Cueing; Object Tracking; Automated 3D Reconstruction start dates contingent on successful Automated Information Discovery Environment (AIDE) integration

Silent Dagger

- Ruggedized Router Improvements
- Mobile Encryption Data At Rest

Technology insertions based on transport, NSA & mission requirements for next generation

| FY | 17 | 18 | 19 | 20 | 21 | 22 |

Program Manager
Mission Support Systems

Capability Insertion Opportunities

- **Integration & Fielding of Advanced Analytics**

- **Solutions Framework for Big Data Challenges**

- **FMV PED Automation and Analysis**

- **3D Tactical Sensor PED**

- **Standards & Interoperability across Systems**

SPECIAL OPERATIONS FORCES INDUSTRY CONFERENCE

Program Manager
JOINT THREAT WARNING SYSTEM

Tactical Awareness Display
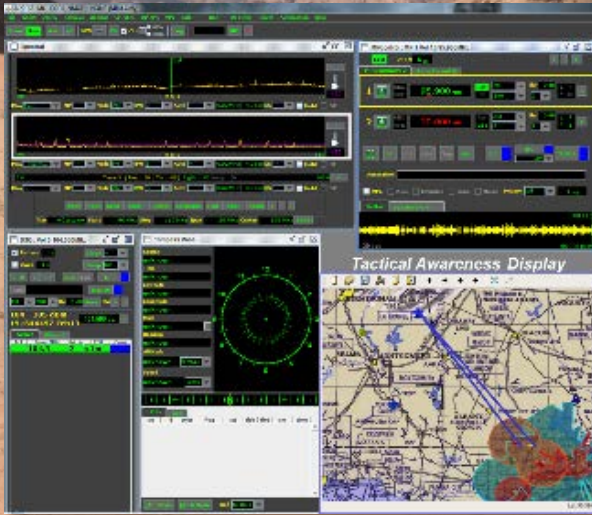
SPECIAL RECONNAISSANCE, SURVEILLANCE, AND EXPLOITATION

Program Manager
Joint Threat Warning Systems

ACQUISITION

DISTRIBUTION A: APPROVED FOR PUBLIC RELEASE

Program Manager Joint Threat Warning System

Joint Threat Warning System (JTWS)

Mission:

Synchronize acquisition of signals intelligence across the ground, air and maritime domains. 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.

JTWS Sub-programs:
- Air
- Ground
- Maritime
- Precision Geo-Location (PGL)

Priorities:
- Be positioned to rapidly respond to dynamic mission requirements and threat picture
- Technical Insertion Of Emerging / Maturing Technologies
- Modular and Scalable Cross-Domain Solutions

ACQUISITION STRATEGY
- Incremental Procurement of COTS/GOTS/NDI with Technical Insertions and Planned Program Improvements

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

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

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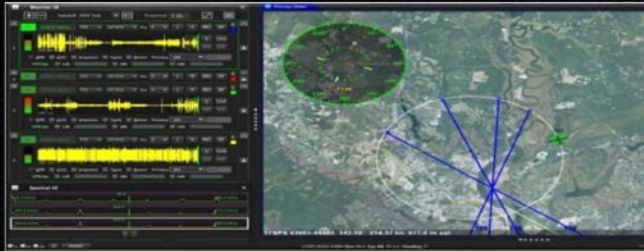- TILO@SOCOM.mil
- 813-826-9482

FUNDING

APPROP	FY17	FY18
O&M	$23.0M	$21.7M
PROC	$42.7M	$45.6M
RDT&E	$ 5.2M	$ 5.2M

CURRENT CONTRACT/OEM
- Multiple

JTWS Air 2 System

Description:

- JTWS-Air 2 is the Second Increment of Upgraded Capability for the Air Sub-program
- Enhanced Situational Awareness & Tactical SIGINT Collection Capability

Operational Mission:

- Detect & Collect Simple and Complex Signals of Interest (SOI)
- Incorporates New Threat SOI, Tactical / Enterprise Net-centric Operations, Reach Back & Increased DF accuracy
- Provide Intelligence Broadcast Data & Collaborative Tactical Networking Tools
- Precision Geo-location

Milestones:

- Flight Testing: AC-U / AC-W / MC-H

   (with ETI #1) – Complete

   MC-J Basic – Complete

- F&DR (MC-J Basic): Complete

JTWS Air Nite System

Description:

- **Scalable Situational Awareness & Threat Warning for Space Limited Aircraft**

- **Platform Agnostic**
  - **Carry-on/Carry-off**
  - **Power Flexible**
  - **Multi-Box Design**
  - **Expandable: Ethernet, RF, and Power for additional Components / Sub-systems**

Operational Mission:

- **Detect and Collect Narrow-band SOI**
- **Integrate Companion Sub-systems for Complex Signals of Interest and DF**
- **Map Display & Mature Software Interface**
- **Small Footprint / Low SWaP**

Milestones:

- **Airborne Demonstration and Evaluation: MAR 2016**
- **MIL-STD 810 Tested: JUN 2016**
- **CV-22 Integration w/ Direction Finding: 4QFY17**

JTWS Air UAS

5/24/2017
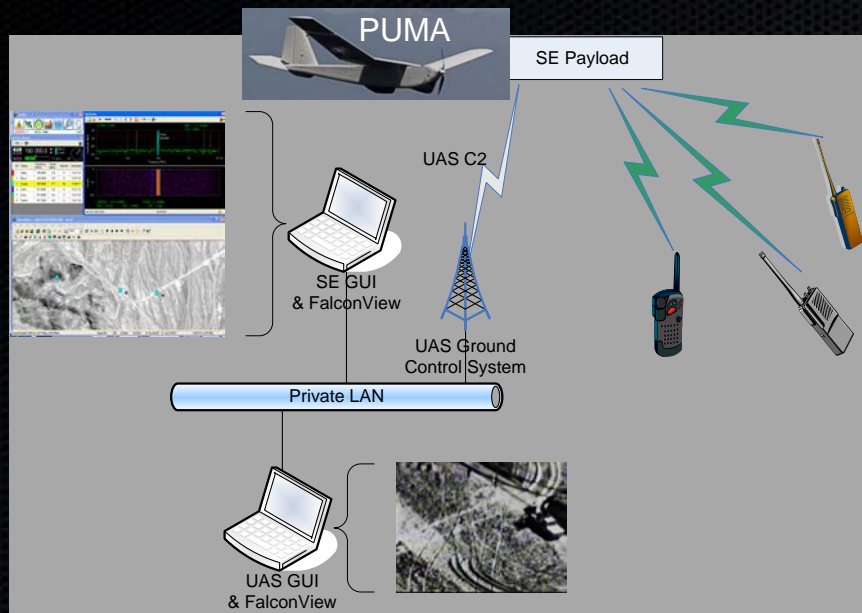
Description:

- **The Silent Echo payload is an ongoing developmental effort for JTWS AIR UAS**
- **Development began in 2009 leveraging advanced SIGINT technologies and capabilities**
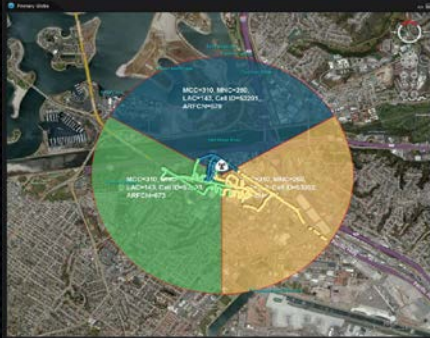- **Primarily onboard Puma UAS platform**

Operational Mission:

- **Perform SIGINT operations**
- **Maintain UAS core payloads**

Milestones:

- **Silent Echo 10.4 Completed Test – July 2016**
- **Silent Echo 10.6 Final Testing – April 2017**

JTWS Ground SIGINT Kit Body Worn System

Description:

The current Body Worn solution is the Cutlass

- **Characteristics:**
    - **VHF/UHF Direction Finding**
    - **Relatively Low Size, Weight, and Power**

Operational Mission:

- **The Body Worn system provides Threat Warning, Force Protection, and a Situational Awareness toolbox consisting of SIGINT capabilities which are man-packable**

Milestones:

- **RFI to be sent out Q3FY17 for replacement kit**

JTWS Ground SIGINT Kit Static System

Description:

STATIC-2

- **All the capability, half the size and cost**
- **Planned Fielding 4QFY17**
- **Satellite Communications Suite**
- **Silent Dagger Compatible**
- **2 cases @ 150lbs each & DTECH**

Operational Mission:

- **Simple/Complex Signal Survey & Other Missions**
- **Tactical Storage / Wideband Record / Playback**

Milestones:

- DT and OT planned for summer 2017
- Smaller 'Static-Lite' variant for future development/delivery

JTWS Ground SIGINT Kit Mobile System

Description:

Mobile

- **HF/VHF/UHF DF Receiver**
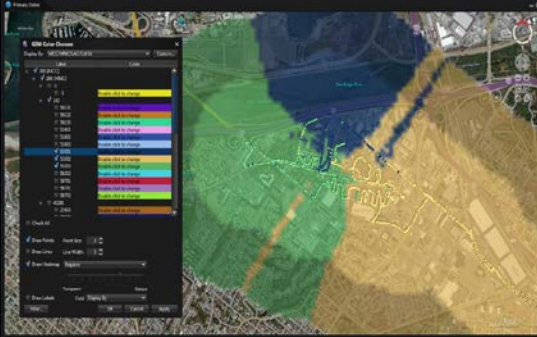- **Total sensor weight < 50 lb**
- **Total sensor power < 150 W**

Operational Mission:

- **Simple/Complex Signal Survey & Other Missions**
- **Provides Threat Warning, Force Protection, and Situational Awareness**
- **Mounts in vehicles**

Milestones:

- **RCI funded contract for Mobile system development**
- **Early development test FY16/17**

JTWS Maritime System

Description:

- **Maritime System will be Carry-on/Carry-Off SIGINT Capabilities for Standard and Non-standard Platforms While Maintaining Low SWaP**

- **Testing to validate newly developed solution**

Operational Mission:

- **Configurable, Ruggedized, Low-profile Capabilities Performing Simultaneous Survey, Detection, DF, Processing of Intelligence Information, and Other Missions**

- **Support Find, Fix, and Finish Operations**

Milestones:

- **Kraken and Corsair Selected for DT and OT**
- **Scheduled Fielding End of CY 2017**

JTWS Precision Geo-location System

Description:

- **Ruggedized and Handheld Devices Capable of Processing Frequency Measurements**

- **Self-configurable and Supports Numerous Protocols**

- **Stand-Alone Mode for Collecting Signal Measurements & Geographical Coordinates**

Operational Mission:

- **Geo-locate Signals of Interest (SOI) for Vehicle, Man-packable and Aerial Components**

- **Survey, Location Identification, DF, and other missions**

Milestones:

- **Executed $42.6M in PROC for CERP investments in FY16-FY17**

- **Obtained two F&DRs for six sensors**

- **Trained 30 Cryptologic Operators in FY16**

- **DT/OT completed on 22 sensors**

Joint Threat Warning System (JTWS)
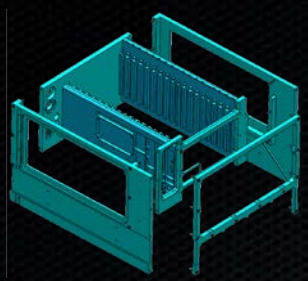
Open-System

Systems based on Proprietary Hardware/ Software

Prototype Open-Architecture System

Fully Modular, Scalable, Interoperable

Define Open-Architecture Approach

Modular/Scalable Components

UAS

C-UAS

Proprietary Sensor Payloads

Swappable Sensor Payloads

UAS sized modules

Define C-UAS Approach

T&E C-UAS Solutions

Field C-UAS Solutions

Reduce SWAP-C

Improve Antenna/ DF Performance

Interoperability/ SWAP-C

JICD 4.2 (sensor level) Integration [i.e. TNG]

Real-time Speech Detection, Language/Speaker/ Gender/Group Identification

Full RaptorX GUI Command and Control for all JTWS Sensors

Fully Modular, Scalable, Interoperable, Cross-Domain SIGINT Solution, across All Sub-Programs, w/ C2 Commonality

| FY | 17 | 18 | 19 | 20 | 21 | 22 |

JTWS Technology Roadmap

Capability Insertion Opportunities

- **Planned CERP cycle (complete every 4-8 years)**

- **Improved Direction Finding Capability (20% Minimum Improvement in Accuracy)**

- **Open Hardware and Software Architecture**

- **Maritime Environment Operations**

SPECIAL OPERATIONS FORCES INDUSTRY CONFERENCE

Questions

SPECIAL RECONNAISSANCE, SURVEILLANCE, AND EXPLOITATION