SPECIAL OPERATIONS FORCES INDUSTRY CONFERENCE
Accelerating SOF Innovation

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TECHNICAL COLLECTION AND COMMUNICATIONS (TCC)

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)

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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

Electro-Optical Camera & Sensor

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
- Maritime TTL
- Non-Traditional Capabilities

HF-TTL Portfolio:

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

ACQUISITION STRATEGY	PERIOD OF PERFORMANCE	MILESTONES
• Commodity Procurement Project (CPP)	• Deliver Capability Within 90-Days to one Year of Award (Norm) • QRC Delivers in 14 to 90 Days	• Mission Set Kits Procured Annually • NET Continuously • Focused Technical Insertion in an Ever-Changing Environment

OPPORTUNITIES	FUNDING			CURRENT CONTRACT/OEM
FBO Classified BAA: U.S. Special Operations Command Keywords: Novel TTL Approaches Release Date: 2QFY20	**APPROP**	**FY18**	**FY19**	• T-REX Multiple Award IDIQ Contract • Multiple OEMs - Contact TILO
	• O&M	$20.1M	$20.3M	
	• PROC	$19.0M	$19.0M	
	• RDT&E	$ 0.8M	$ 0.8M	

HF-TTL Technology Insertion Roadmap

Technology Insertion Roadmap Focus Areas:

- **Non-GPS Trackers**
  - Traditional
  - Non-traditional (unique employment methods for greater stand-off)
- **Maritime TTL**
- **UAS Payload Integration**
- **Data Exfiltration**

Above/At/Below the Waterline

M-TTL Capabilities

GPS Denied   **Subterranean**

WF   **WF**   **WF**

Adv. GPS Denied

TTL Adv. Form Factor Mod 1

TTL Adv. Form Factor Mod 2

SUAS Waveform Integration

| FY | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
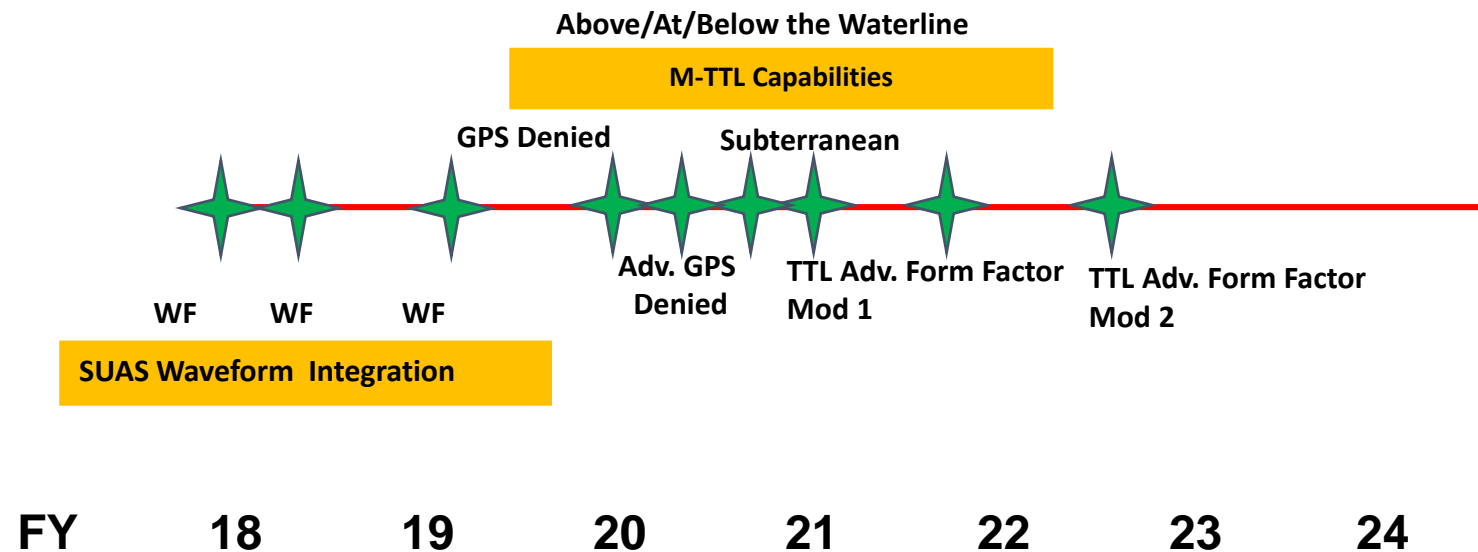
KeyMaker TTL and UGS Data Dissemination

Provides a system for standardized, consolidated, command and control of technical collection tools that 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

Mandatory DOD IA Requirements
- **Browser Compatibility (MS Edge & Firefox)**
- **Operating System Compatibility (Windows 10)**
- **Server Compatibility (Windows 2012 & 2016)**
- **Adherence to the DOD Security Technical Implementation Guidelines (STIG)**
- **Documentation (Installation Guide, Admin & Developer Guide, Release Notes, etc.)**

Tactical Users

RaptorX GUI
(GOTS)
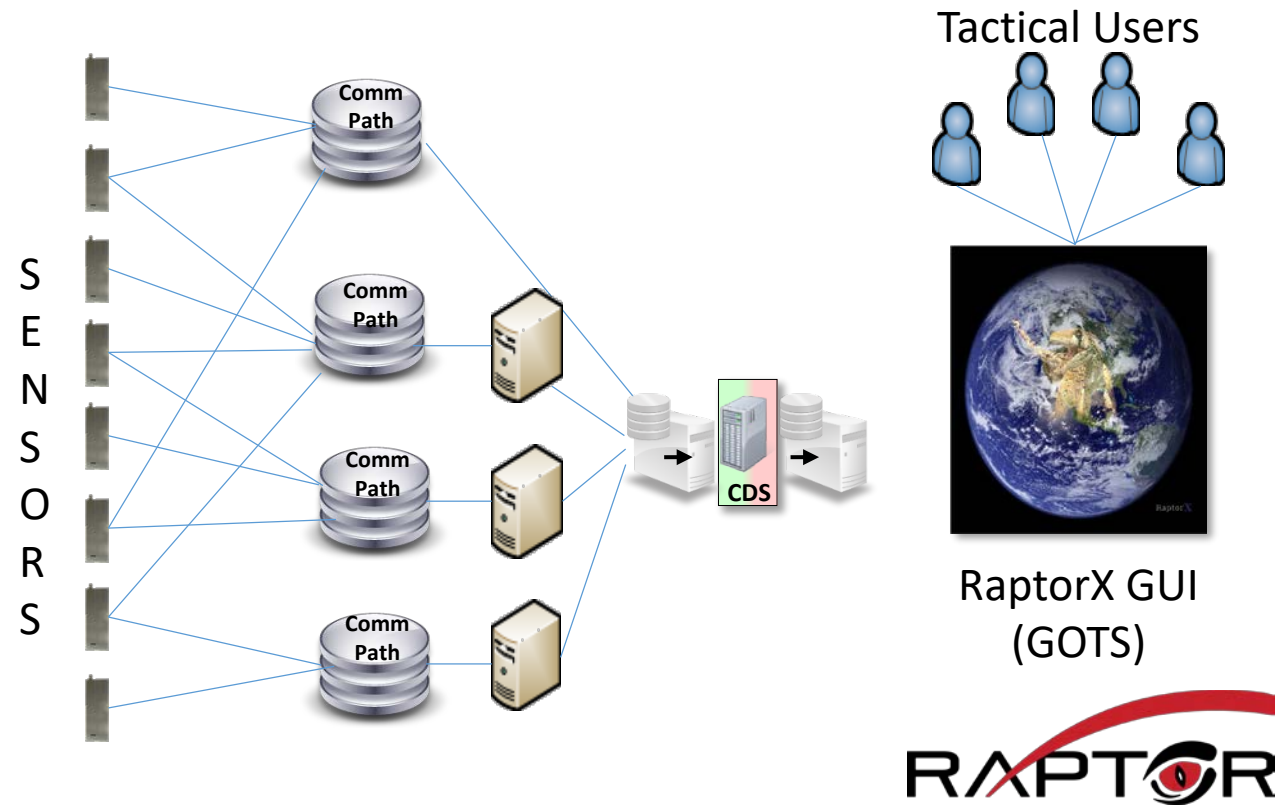
Tactical Video System/Reconnaissance Surveillance Target Acquisition (TVS/RSTA)

Kits are Operationally Tailored:

- **Supports Three Primary Capability Areas**

- **Adaptable In Tactical and Strategic Operations**

Priorities:

- **Enhanced Night/Obscured Operations**

- **Component Interoperability**

- **Non-Traditional Approaches for Data Infil/Exfil**

TVS/RSTA Portfolio:

Family of Systems

- **Attended**

- **Semi-Attended**

- **Unattended**

ACQUISITION STRATEGY	PERIOD OF PERFORMANCE	MILESTONES
• Commodity Procurement Project (CPP)	• Deliver Capability Within 90-Days to one Year of Contract Award (Norm)	• Kit Selection Annually • Sustainment Training Continuously • Capital Equipment Replacement

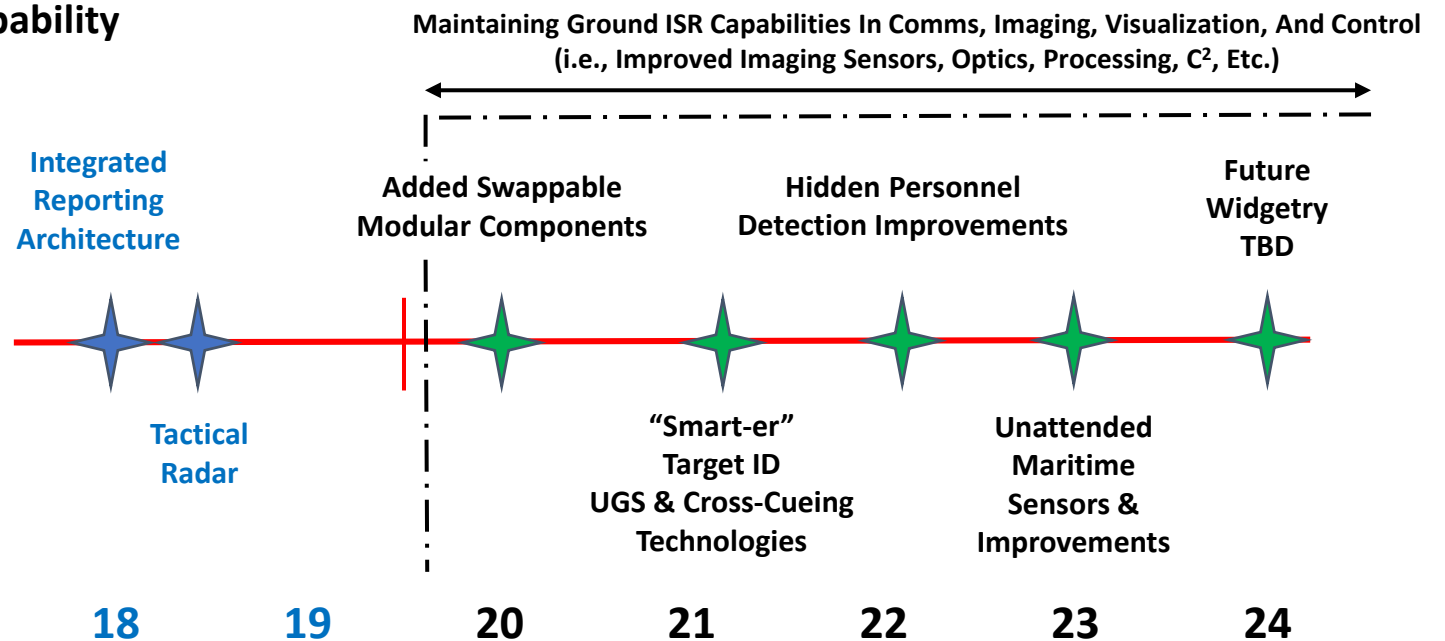| OPPORTUNITIES	FUNDING			CURRENT CONTRACT/OEM
FBO BAA: U.S. Special Operations Command/NAVSOC Keywords: Trident Spectre, UGS Release Date: 4QFY19	**APPROP**	**FY19**	**FY20**	• T-REX Multiple Award IDIQ Contract • Multiple OEMs - Contact TILO
	• O&M	$ 32.5M	$ 17.0M	
	• PROC	$ 22.2M	$ 21.4M	
	• RDT&E	$ 0.564M	$ 0.716M	

TVS/RSTA Insertion Roadmap

Driving The TVS/RSTA Technology Insertion Roadmap:

- **Monitor, Leverage, And Employ Government And Commercial Developments, Reserving Resources Primarily For The Transfer And Integration Of Proven And Necessary Capabilities**
- **Everything Possible Within An Integrated Architecture**
  - Gov't Owned API's
  - Built To An Already Accepted Standard
  - Limited Need/Use Of Proprietary Control Formats
- **Continual Reductions In SWaP**
- **Maintain A Baseline Ground ISR Capability**

Maintaining Ground ISR Capabilities In Comms, Imaging, Visualization, And Control (i.e., Improved Imaging Sensors, Optics, Processing, C^2, Etc.)

Integrated Reporting Architecture

Added Swappable Modular Components

Hidden Personnel Detection Improvements

Future Widgetry TBD

Tactical Radar

"Smart-er" Target ID UGS & Cross-Cueing Technologies

Unattended Maritime Sensors & Improvements

FY	18	19	20	21	22	23	24

Blue Force Tracker (BFT)

Mission Set Fielding to Components:

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

Priorities:

- Multiple Waveform Support; Battery Life; MGUE Integration
- Assured Position Navigation and Timing
- Personnel Recovery (PR) Integration
- Maximum Benefits Leveraging OGA Efforts
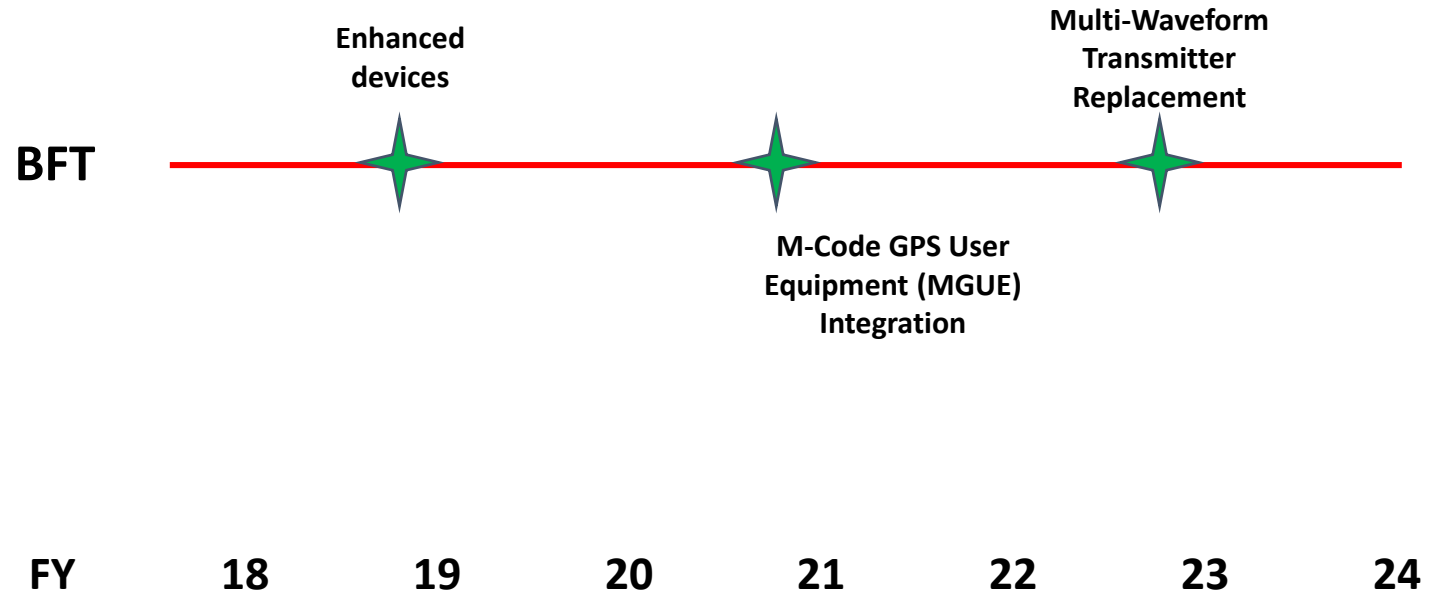
BFT Family of Devices:

- Iridium Based
- Government Off The Shelf (GOTS)

ACQUISITION STRATEGY	PERIOD OF PERFORMANCE	MILESTONES
• Commodity Procurement Project (CPP)	• Varied	• Device Selection Annually • NET Continuously • Capital Equipment Replacement

OPPORTUNITIES	FUNDING			CURRENT CONTRACT/OEM
FBO Classified BAA: U.S. Special Operations Command Keywords: Assured PNT Release Date: 2QFY20	APPROP	FY19	FY20	• Multiple – Leveraging OGAs
	• O&M	$ 1.4M	$ 1.4M	
	• PROC	$ 9.7M	$ 3.2M	
	• RDT&E	$ 0.07M	$ 0.67M	

BFT Insertion Roadmap

SHOUT-TS1

BFT

Enhanced devices

M-Code GPS User Equipment (MGUE) Integration

Multi-Waveform Transmitter Replacement

FY   18   19   20   21   22   23   24

Special Communication Enterprise (SCE)

Development Effort:

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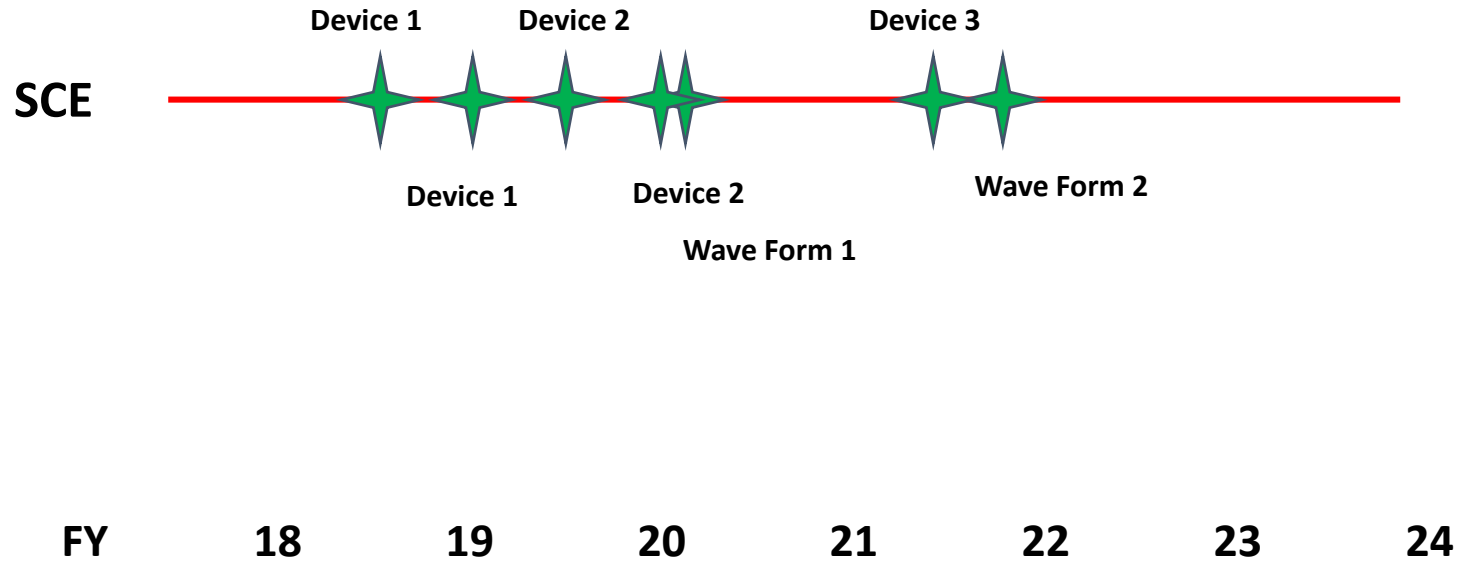- **Two/Three annual increments**

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	PERIOD OF PERFORMANCE	MILESTONES
• Acquisition Category III (ACAT III)	• Varied	• MS Selection Annually • NET Continuously • Technical Insertion to Maintain Relevancy

OPPORTUNITIES	FUNDING			CURRENT CONTRACT/OEM
FBO Classified BAA: U.S. Special Operations Command Keywords: Two-way, low vis comms Release Date: 2QFY20	**APPROP**	**FY18**	**FY19**	• T-REX Multiple Award IDIQ Contract • Multiple OEMs – Contact TILO • Leveraging OGAs
	• O&M	$ 8.2M	$ 8.5M	
	• PROC	$ 4.5M	$ 2.7M	
	• RDT&E	$ 4.7M	$ 4.3M	

SCE Insertion Roadmap

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
- Non-traditional Tagging, Tracking, and Locating (TTL) Technologies
- Affordable TVS/RSTA Capabilities for UGS/Surveillance Systems
- BFT Technology that is M-Code Compliant
- Miniaturized Data Transport Segments for Long Distance Transfers
- Raptor Plug-In Development

How to do Business with PM TCC

- **USSOCOM-BAAST-2015, Appendix G2 Spring 2019, SOF AT&L-SRSE**
  - https://www.fbo.gov/index.php?s=opportunity&mode=form&id=f0e1fa515fc227b22ce246068b7491be&tab=core&_cview=1
  - Closing Date: 30 September 2019
  - Submit White Papers/Quads via https://www.socom.mil/SOF-ATL/Pages/baa.aspx

- **Technology & Industry Liaison Office (https://www.socom.mil/SOF-ATL/Pages/submit-your-idea.aspx)**

- **S&T Technical Experimentation Events (https://www.socom.mil/SOF-ATL/Pages/technical-experimentation.aspx)**

- **SOFWERX (https://www.sofwerx.org/)**

- **RapidX (https://www.raptorx.org/rapidx)**

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