



EXPANDING THE COMPETITIVE SPACE

SPECIAL OPERATIONS FORCES VIRTUAL INDUSTRY CONFERENCE

COL Joel Babbitt, Program Executive Office

SOF WARRIOR OVERVIEW



Program Executive Office SOF Warrior (SW)











Support to All Components

MOBILITY "Individual to Heavy Ground Vehicles"





Tactical All Terrain Vehicles (Light)

Non-Standard Commercial Vehicles





Ground Mobility Vehicle (Medium)

MRAP-ATV (Heavy)

SURVIVAL "Protection, Load Carriage & Medical" Combat Uniform & Helmets Individual & Combat Medic Kits Carriage System Casualty Evacuation

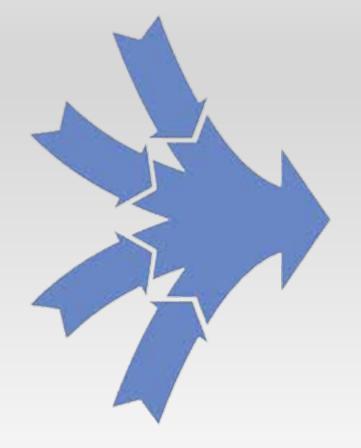
LETHALITY "Munitions, Visual Augmentation, Lasers & Weapons" Night Vision Combat Assault Rifles Goggles Precision Strike M72 LAW Light Assault Weapon Aviation Ammo Laser Acquisition Non-Standard Arms Markers Advanced Sniper Weapon & Ammo

PEO Oversight & Support for JSOC Find -Electronic Warfare (EW) - Signals Intelligence (SI) -Computer Network Operations (CNO) - Intelligence, Surveillance, Reconnaissance (ISR) - C4 / CP / CS / Intel - Weapons/Ammo Fix **Analyze** Soldier Survival/Supp rpose Munitions & Explos -Visual Augmentation Systems (VAS) - Fire Support/Non-Lethal - SOF Enablers - Mobility -Tactical Comms -Tgt Engagement -Medical Ops **Finish Exploit**

Key Initiatives

Drivers

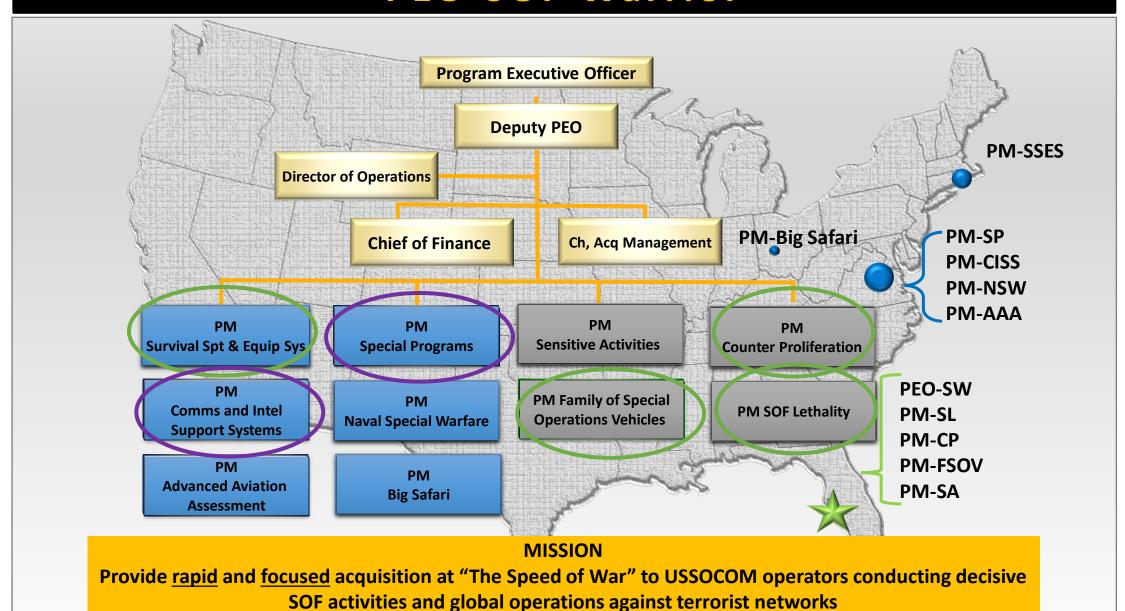
- New Capabilities
- New Material
- New Threats
- New Operational Paradigms



Game Changers

- 6.5 CM/338 NM
- Polymer Ammo
- ULPE Body Armor
- Precision Strike
- Fusion NVGs
- ATAK
- CUAS
- Al for Small Unit Maneuver

PEO-SOF Warrior



PM-CISS Technology Interest Item 5G Cellular Technologies

Keeping pace with Commercial Technology Trends



Systems:

- Intelligence systems
- Electronic warfare
- Communications platforms

Needs:

- Wideband antenna systems
- Low cost frequency down converters
- 3GPP R15 and R16 capable systems
- Software enabled Hardware agnostic solutions
- Live data studies

photo credit: Ivan Radic Cell tower and transparent 5G text via photopin (license)

PM-CISS Technology Interest Item Data Analytics

Data is only as Good as your Ability to Analyze and Produce Intelligence



Systems:

- Enterprise level solutions
- Tactical systems

Needs:

- Cross domain solutions that feed Data lake repositories
- Analysis of Structured and unstructured intelligence data sets

Photo credit: Janet McKnight https://flickr.com/photos/janetmck/15422638442/in/photolist-puR46m-71REW8-6LgNcR-aMbw5H-ap5Je6-6Xq9FM-6Xu9T9-2Yxv9A-dvdWi-25htBCk-dQEPCC-8G68VZ-8G68JX-8G68F2-8G68JZ-9XaVP2-8G68zt-8G9iDJ-7uXPBA-8G9j7q-3A1j1z-5c5WBr-3A1nek-rEAH-7fLZfq-8CpFau-Wu3cv3-6cyWB-nmZnrf-9bWVHV-9wJLwq-T5MifH-6jQj7m-uq4zV-6rf4Xg-5eVeXR-2b5yP9-9uQG7p-6jTJBA-8G9iL3-4mAf5Q-2b61H9-HGwVJh-arF84-8G691g-4mAf35-cZUPK-ak7hXk-8UxCTj-6SCANd/

PM-CISS Technology Interest Item Artificial Intelligence/ Machine Learning

Big Data leads to the need for more Efficient Methods to aid the User and Analysts



Systems:

- Enterprise level solutions
- Tactical systems

Needs:

- Tactical level systems
- Supplement users tipping and queuing
- RF signal analysis
- Natural language processing at low SWaP
- Low use language data sets
- Aided recognition image, audio, etc.

Photo Credit: Reports Monitor

https://www.flickr.com/photos/142918125@N02/43451135460/in/photolist-29cCqKW-24Sshoy-25V6hiE-2hA7YMB-2dy8tee-oAoj8u-29jds94-4rZi2H-2i54QbR-2gdqiZ5-2iaQGKu-2ho3NdX-2imw5QY-2iaQBAG-2iipk2n-2d4KsBP-2gR9vHV-JnqRip-2iGXWkj-2ifHBjJ-R93AGY-2hosxAf-ME7ywp-8Gmym4-PjXmyo-9Gvy6d-MPkfEd-2hgjvTR-2hyK5pC-weSxHb-vzsT7S-FQdzyG-XmVU61-wwu5k2-2aHYRoF-27pq9bw-WaQvDu-2jz4DA-7FPxr1-2iePP7m-L8qJ3U-5zEcVt-5zEcVM-5zEcVB-bPUQWv-5zEeA6-5zEeA2-5zEezH-5zEezz-5zEcVn

PMCISS Contact Information



Program Manager – LTC Aron Hauquitz 703.664.5097

Deputy Program Manager – Mr. George Antoniou 703.664.5042



APM Mission Systems – MAJ Sean Godfrey 703.664.5000 x5043

APM Net Centric- MAJ Patrick Horvat 703.664.5000 x2266

APM Net Centric- MAJ Al LeCounte 703.664.5000 x3061

APM SIGINT – MAJ Eric Stangle 703.664.5000 x2145

Lead Systems Engineer – Mr. David Weisbecker 703.664.5000 x3782

Goals of NGIA

Core Technology Components/Capabilities:

- Biometrics
- Communications
- Sensor Employment
- Data Analytics/Fusion

End User Capability:

- Faster Rational Decision Making
- Greater decentralized awareness
- Cognitive overmatch
- End user visualization (data/information)

Acquisitions Objectives:

- Vendor teaming for exponential innovation
- 12-18 months efforts to transition to operational users
- Small Business Focus streamline for commercial best business practices (payments)
- Negotiate IP rights

Challenges

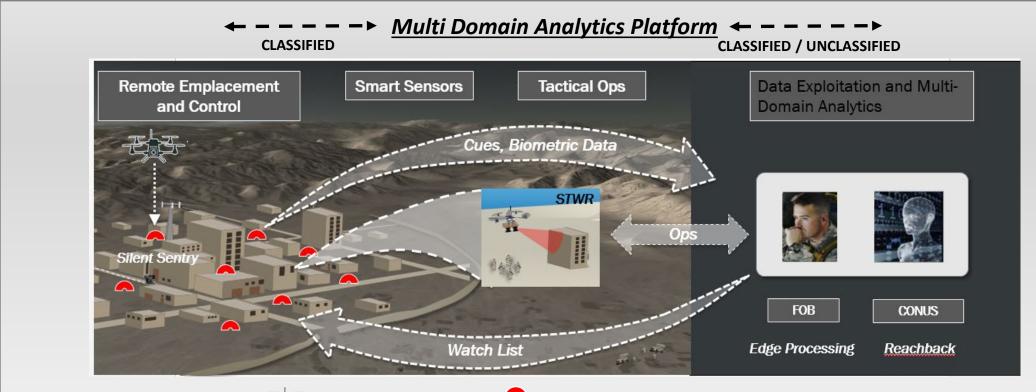


Opportunities

Contested air/space/EW domains where the adversary has access to advanced commercial technology.

Our advantage will come from our ability to find new access to data, more efficient means of analysis, and faster extraction of information via multiple sensors and edge processing.

Next Generation Identification Awareness (NGIA) "Technology Interoperability"



Remote Emplacement

- Sensor Delivery Unmanned
- Air Vehicle
- Ground Vehicle
- Air Drop
- Perch/Stare

Smart Sensors

- EO/EM Sensor
- Thru Wall Radar
- Edge Analytics
- Bio-Algorithms
- Exfil comms

Tactical Ops

- Smart Sensors
- Tactical UGV/UAS
- Tactical C3

Automated Multi-Domain Analytics

- Captured Enemy Material
- Data Fusion
- Scalable Computing
- Cross Domain Correlation
- Optical Character Recognition

UNCLASSIFIED

NGIA Collaborative Approach

Acquisition Approach

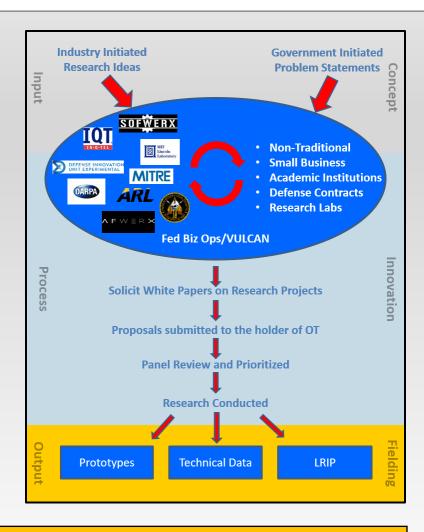
- NGIA using Other Transaction Authority forms a sphere of technology excellence to conduct rapid prototyping
- Full and open advertisement
- Agreements established under <u>Participant Basic Agreement</u>
- Participants are vetted based on:
 - Merit of technology
 - Operational relevance

Technology Focus Areas:

- Biometrics
- Communications
- Sensor Employment
- Data Analytics/Fusion

Objectives

- Innovative solutions for rapid prototyping & initial fieldings
- Competitive yet flexible
- Leverage advanced commercial technologies
- Self-organize relationships to grow capabilities/innovation



OTA structure must have the flexibility to expand Technology Focus Areas

NGIA Other Transaction Authority Contact Information

- How do I find this NGIA Posting? Keyword Search:
 - W911QY-19-S-0008 (beta.sam.gov)
 - "NGIA" (beta.sam.gov)
- POCs:
 - Richard Totten: <u>richard.w.totten2.civ@mail</u>
 - MAJ William Taylor: william.l.taylor118.mil@mail.mil
- Posting from 5 April 2019 to 5 April 2022
- Set aside as Research and Development
- Agreement value
 - Indefinite quantity awards up to \$40mil each for Projects/Prototypes
 - Tailorable payments to industry (fixed milestone payments monthly)
 - To date: \$17.3Mil spent towards NGIA
- Participants within the OTA construct:
 - Must sign a Participation Basic Agreement (PBA)
 - Participation require no fees



EXPANDING THE COMPETITIVE SPACE

SPECIAL OPERATIONS FORCES INDUSTRY CONFERENCE

Mr. Adam Fields, Program Manager

SURVIVAL SUPPORT & EQUIPMENT SYSTEMS



SOF Personal Equipment Advanced Requirements (SPEAR) Portfolio Overview







Hard Armor



Eyewear

- Body Armor Load Carrying Systems / **Ballistic Protection**
 - **Body Armor Vests**
 - Plates / Soft Armor
 - **SOF Operator Eye Protection**
 - **Load Carrying Systems**
 - **Safety Belts and Lanyards**
 - Backpacks
- **Protective Combat Uniforms**
 - Levels 1-7
 - Level 9 / Lightweight Temperate Uniform
 - **Modular Glove System**
 - Signature Management
- **Modular Integrated Communications Helmets**
 - Hearing Protection
 - **Communications Interface**
 - **Ballistic Helmets**
 - **VAS Mounts**



Body Armor Vests



Modular Glove **System**



Backpacks



Protective Combat Uniform

 An multi-layer clothing system designed to protect the operator from -50F to temperate weather environments







ACQUISITION STRATEGY

- Addition to Existing IDIQ
- Federal Procurement List

PERIOD OF PERFORMANCE

• FY2000 - TBD

MILESTONES

- FY19/20 Temperate Uniform
- FY20 Artic Evaluations

POINT OF CONTACT

 USSOCOM SOF AT&L, Engage SOF (eSOF) (813) 826-9482

FUNDING

- FY20 \$6.131M O&M
- FY21 \$3.020M O&M
- FY22- \$1.656 O&M

- Source America
- Lost Arrow

Modular Glove Suite

 Multi layer glove system to allow operators to work in environments from -50F to temperate weather environments







ACQUISITION STRATEGY

Addition to Existing IDIQ

PERIOD OF PERFORMANCE

• FY 19-FY24

MILESTONES

- FY19 Evals
- FY20 Arctic Evals

POINT OF CONTACT

 USSOCOM SOF AT&L, Engage SOF (eSOF) (813) 826-9482

FUNDING

- FY20 \$3.744M O&M
- FY21 \$2.052M O&M
- FY22 \$.782M O&M

- Outdoor Research
- Dryfire
- Line of Fire
- First Spear

Backpacks

- Suite of backpacks to support USSOCOM Operator in all operational environments
 - Recce
 - Mountain Recce
 - Patrol
 - Jungle Patrol
 - Assault



ACQUISITION STRATEGY

Addition to Existing IDIQ

PERIOD OF PERFORMANCE

• FY17-22

MILESTONES

• FY18 Addition of improved Airops Harness

POINT OF CONTACT

 USSOCOM SOF AT&L, Engage SOF (eSOF) (813) 826-9482

FUNDING

- FY19 \$2.473M O&M
- FY20 \$.381M O&M

- Mystery Ranch
- Tyr Tactical
- Froma

Ballistic Plates

- Standalone hard plates that provide front and rear armor piercing rifle ballistic protection to the individual operator
- Modular Supplemental Armor
 Protection (MSAP) hard plates that
 provide additional armor piercing rifle
 protection to the outer shoulder areas,
 side oblique areas and the groin









ACQUISITION STRATEGY

• 5 Year IDIQ (+2 Year Option)

PERIOD OF PERFORMANCE

• FY14-25

MILESTONES

- FY16 FY19 Market Research
- 4th QFY19 Solicitation
- 4th QFY20 Contract Award

POINT OF CONTACT

 USSOCOM SOF AT&L, Engage SOF (eSOF) (813) 826-9482

FUNDING

- FY19 \$16.418M O&M
- FY20 \$10.272M O&M
- FY21 \$5.075M O&M

CURRENT CONTRACT/OEM

Leading Technology Composites

Soft Armor Inserts

- Soft Armor insert that provides front, rear, side oblique, and groin handgun and fragmentation protection to the individual operator
- Compatible with currently fielded body armor vest and load carriage systems









ACQUISITION STRATEGY

• 5 Year IDIQ

PERIOD OF PERFORMANCE

• FY18-23

MILESTONES

• 3QFY22 Solicitation

POINT OF CONTACT

 USSOCOM SOF AT&L, Engage SOF (eSOF) (813) 826-9482

FUNDING

- FY19 \$16.418M O&M
- FY20 \$10.272M O&M
- FY21 \$5.075M O&M

CURRENT CONTRACT/OEM

Hardwire, LLC

Ballistic/Impact Helmets & Mounts

BALLISTIC / IMPACT HELMETS

- Provides the operator 9mm, fragmentation, and bump (impact) protection
- Provides the ground operator a stable and comfortable platform that is compatible with night vision devices, communications, military freefall and CBRN equipment
- Maritime operations coxswain helmet to provide additional eye/mandible protection and provide a stable & comfortable platform to mount NVGs during normal sea-state and high-sea state and high speed maneuvering

PERIOD OF

5 Year IDIQ (Ground)

ACQUISITION

STRATEGY

• 5 Year IDIQ (+2 Yr Option) (Coxswain)

PERFORMANCE

- FY19-24 (Ground)
- FY19-24 or 26 (Coxswain)



MILESTONES

- FY19 Contract Awards
- **Ground Helmet Solicitation FY23**
- **Coxswain Helmet** Solicitation FY23 or 25

VISUAL AUGMENTATION SYSTEM (VAS) MOUNTS

Hardware that allows the operator to attach and secure night vision devices to a ballistic or non-ballistic helmet to effectively conduct low light maneuvers and operations





ACQUISITION STRATEGY

 Part of Helmet Solicitation / Contract

PERIOD OF PERFORMANCE

 Part of Helmet Contract / Solicitation

MILESTONES

 Same as Ground and Coxswain helmet

POINT OF CONTACT

 USSOCOM SOF AT&L, Engage SOF (eSOF) (813) 826-9482

FUNDING

- FY19 \$2.089M O&M
- FY20 \$1.328M O&M
- FY21 \$1.394M O&M

- Gentex (Ground & Coxswain Helmet)
- Wilcox (Mounts)

Communication Headsets/Hearing Protection

Suite of hearing protection and communications headsets

- Maritime
- Land
- Wireless



ACQUISITION STRATEGY

IDIQ Contracts

PERIOD OF PERFORMANCE

- Maritime FY17-22
- Land FY19-24

MILESTONES

- FY15-FY17 Maritime Recompete
- FY18-19 Land Re-compete

POINT OF CONTACT

 USSOCOM SOF AT&L, Engage SOF (eSOF) (813) 826-9482

FUNDING

- FY19 \$6.669M O&M
- FY20 \$13.124M O&M
- FY21 \$12.9134M O&M

- Invisio
- Peltor 3M
- Atlantic Signal
- Gentex

Special Operations Eye Protection

- Spectacle and goggle kit that provides the operator ballistic, impact and laser protection and meets ANSI optics standards
- Can accommodate prescription lens inserts







ACQUISITION STRATEGY

Addition to existing IDIQ

PERIOD OF PERFORMANCE

• FY19-24

MILESTONES

- FY18-20 Arctic Goggle Market Research
- User evaluations as appropriate

POINT OF CONTACT

 USSOCOM SOF AT&L, Engage SOF (eSOF) (813) 826-9482

FUNDING

- FY19 \$0.484M O&M
- FY20 \$0.398M O&M
- FY21 \$0.200M O&M

- Oakley
- Smith Optics
- Revision

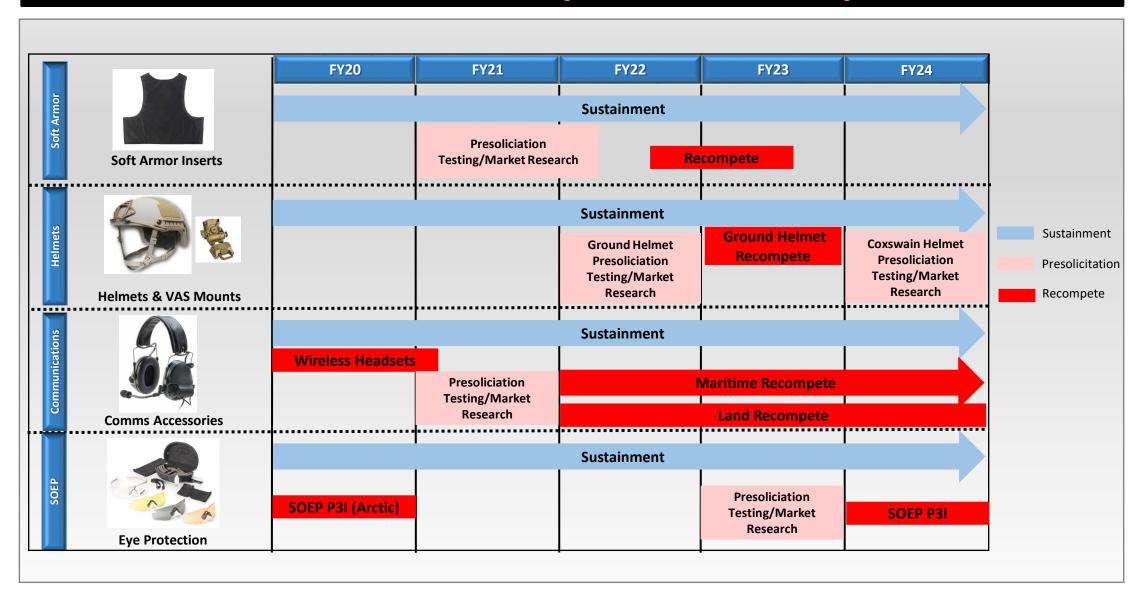
Capability Areas of Interest

- Lightweight wearable armor to defeat non-AP rifle rounds; protection of body regions such as arms, upper legs, lower back, lower abdomen, and groin
- Lightweight handheld ballistic shields to defeat non-AP rifle rounds; easily transportable during all SOF modes of infil/exfil and light enough to utilize on target
- Lightweight ballistic helmets to defeat non-AP rifle rounds
- Single variable light transmission eyewear lens that meets ANSI optics, ballistic, and laser standards; replaces the separate clear, laser, and tinted lenses that are currently fielded
- Militarized USB-C connectors

SPEAR Recompete Roadmap

| | | <u> </u> | | pete no | a a i i i a p | | |
|------------|----------------------------|-------------------|----------------------------------|-----------|----------------------------|---------------------------------------|-----------------|
| PCU | Protective Combat Halfoure | FY20 | FY21 | FY22 | FY23 | FY24 | |
| | | Sustainment | | | | | |
| | | Artic Evaluations | | | | | |
| | Protective Combat Uniform | Combat Uniforms | | | | | |
| Ш | Modular Glove System | Sustainment | | | | | |
| MGS | | | | | Presoliciation | Recompete | |
| | | | | | Testing/Market Research | | |
| | · · | | | | | | Sustainment |
| ks | | Sustainment | | | | | Presolicitation |
| Backpacks | | | Presoliciation Testing/Market | Recompete | | , , , , , , , , , , , , , , , , , , , | Recompete |
| | Rucksack Suite | | Research | | | | |
| | | Sustainment | | | | | |
| BAVs | | | Presoliciation | I | | | |
| BA | | | Testing/Market Research | Recompete | | | |
| <u> </u> | Body Armor Vests | | Research | | | | |
| | | Sustainment | | | | | |
| Hard Armor | | | | | | Presoliciation | |
| Hard | | Recompete | | | | Testing/Market Research | |
| | Ballistic Plates | | | | | | |

SPEAR Recompete Roadmap



Power for SOF Equipment

- Suite of high energy dense power sources, integrated power and data management, and other power accessories
- Intent to meet the needs of Assaulters, JTACs, Recce, etc.
- Operationally relevant sizes and architectures
- Includes cables/cable management and non proprietary connectors

PRC-152A PRC

ACQUISITION STRATEGY

IDIQ Contracts

PERIOD OF PERFORMANCE

• FY20-26

MILESTONES

- FY20-21, Baseline power testing of Operator equipment
- FY21, Begin user evaluations

POINT OF CONTACT

 USSOCOM SOF AT&L, Engage SOF (eSOF) (813) 826-9482

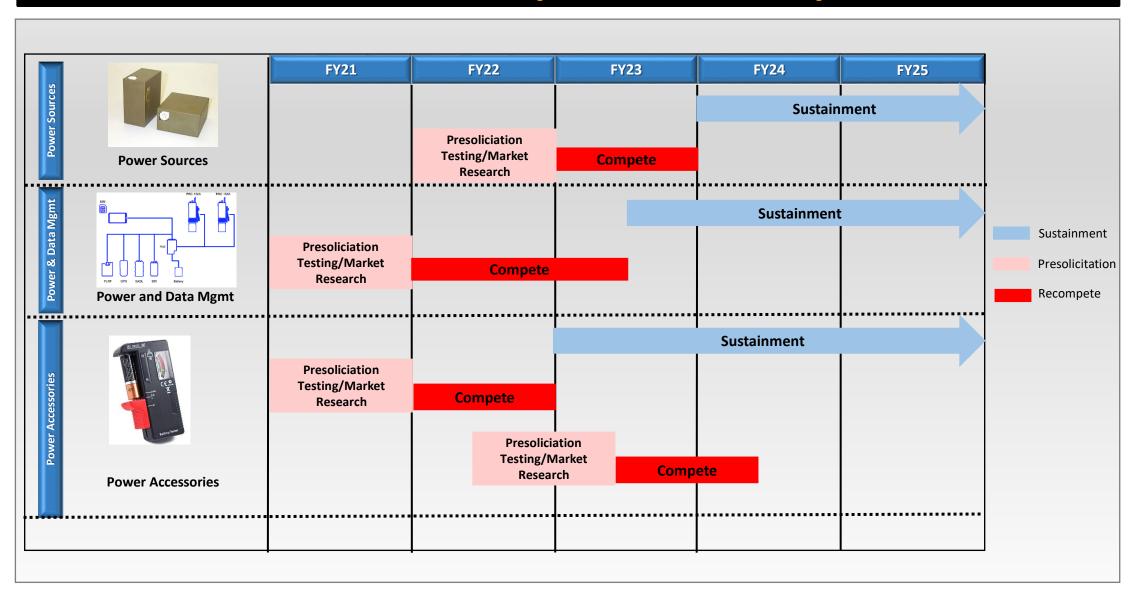
FUNDING

• FY20 - \$0.500M RDT&E

CURRENT CONTRACT/OEM

None currently

Power Compete Roadmap



Tactical Casualty Combat Care (TCCC) Operator Kit

- **Improved Self and Buddy Aid**
- **Life Threatening Hemorrhage Control**
- **Airway Management**
- Pain Management / **Infection Prevention**
- Fluid Resuscitation
- **Blast Exposure Monitoring System**

ACQUISITION STRATEGY

- Prime Vendor Contracts
- IDIQ or Other Transactional Agreement (Blast **Exposure Monitoring System)**

POINT OF CONTACT

 USSOCOM SOF AT&L, Engage SOF (eSOF) (813) 826-9482





Operator **Kit Items**



Operator **Kit Pouch**

PERIOD OF PERFORMANCE

- Sustainment through FY25
- BEMO Fielding FY22-26

FUNDING

- FY20 \$2.279M O&M
- FY21 \$3.340M O&M
- FY22 \$2.267M O&M

MILESTONES

- Milestone C 25 Sept 07
- Continuous Configuration Updates as Required

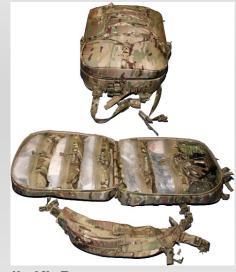
- Cardinal Healthcare
- DMS Pharmaceuticals

Tactical Casualty Combat Care (TCCC) Medic Kit

- Advanced Airway
 Intervention
- Intravenous Medications
- Hypothermia Prevention
- Advanced Monitoring / Diagnostics
- Intraosseous Infusion

Prime Vendor Contracts





Medic Kit Bags

PERIOD OF PERFORMANCE

Sustainment through FY25



Medic Kit Items

MILESTONES

- Milestone C 25 Sept 07
- Continuous Configuration Updates as Required

POINT OF CONTACT

ACQUISITION STRATEGY

 USSOCOM SOF AT&L, Engage SOF (eSOF) (813) 826-9482

FUNDING

- FY20 \$1.567M O&M
- FY21 \$1.670M O&M
- FY22 \$1.606M O&M

- Cardinal Healthcare
- DMS Pharmaceuticals

Tactical Casualty Combat Care (TCCC) Casualty Evacuation Set CASEVAC

- Extract
- Stabilize
- Treat
- Monitor
- Transport







ACQUISITION STRATEGY

- Existing IDIQ Contract
- · Recompete through GSA is ongoing

PERIOD OF PERFORMANCE

- Contract through FY20
- Follow-on award TBD

MILESTONES

• Milestone C - 7 Jul 2011

POINT OF CONTACT

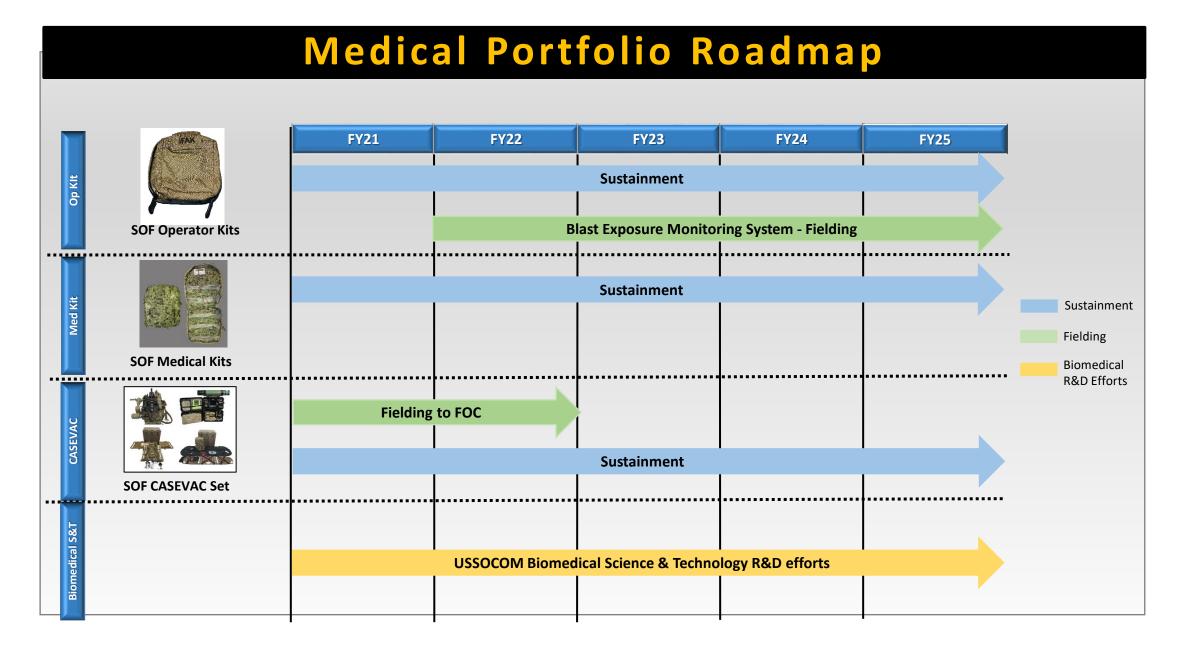
 USSOCOM SOF AT&L, Engage SOF (eSOF) (813) 826-9482

FUNDING

- FY20 \$6.741M O&M
- FY21 \$8.242M O&M
- FY22 \$6.908M O&M

CURRENT CONTRACT/OEM

• Tribalco, LLC.





EXPANDING THE COMPETITIVE SPACE

SPECIAL OPERATIONS FORCES INDUSTRY CONFERENCE

LTC Marcos Cervantes, Program Manager SOF Lethality

DELIVERING DOMINANCE



Ammo, Demolitions, Breaching: Small Caliber

6.5mm Creedmoor Ammunition

- 2018 National Defense Strategy acknowledged a Gap between US Forces and our adversaries relating to conventional and unconventional weapons
- Contract for procurement of Sniper Support ammunition
- Ammunition will be built to Government Specification



ACQUISITION STRATEGY

- Full and Open Competition
- IDIQ Contract

PERIOD OF PERFORMANCE

• 5 Years

MILESTONES

- RFP Release: 4th QTR FY20
- Contract Award: 1st QTR FY21

POINT OF CONTACT

 USSOCOM SOF AT&L, Engage SOF (eSOF) (813) 826-9482

FUNDING

• \$20M

CURRENT CONTRACT/OEM

• N/A

Ammo, Demolitions, Breaching: Small Caliber

338 Norma Magnum Machine Gun Ammunition

- 2018 National Defense Strategy acknowledged a Gap between US Forces and our adversaries relating to conventional and unconventional weapons
- Supports Lightweight Machine Gun Medium (LMG-M) Program
 - Procurement via OTA for initial production
- Contract for procurement of linked ammunition
- Ammunition will be built to Government Specification
 - Government Design on Projectile and Link

ACQUISITION STRATEGY

POINT OF CONTACT

USSOCOM SOF AT&L, Engage SOF (eSOF)

- Full and Open Competition
- IDIQ Contract

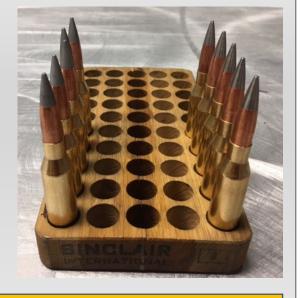
(813) 826-9482

PERIOD OF PERFORMANCE

• 5 Years

FUNDING

• \$50M



MILESTONES

- OTA Award supporting LMG-M Program: 3rd QTR FY20
- RFP Release: 2nd QTR FY21
- Contract Award: 4rd QTR FY21

CURRENT CONTRACT/OEM

• N/A

UNCLASSIFIED

Lightweight Ammunition

7.62mm Lightweight Cased Linked Ammunition

- 2018 National Defense Strategy acknowledged a Gap between US Forces and our adversaries relating to conventional and unconventional weapons
- Contract for procurement of lightweight ammunition for use in MK44 Mini-gun
- Should reduce overall cartridge weight by over 20-30% compared to existing brass cased rounds
- Competitive RFP will follow assessment of samples procured via OTA to be conducted late FY19

ACQUISITION STRATEGY

- Full and Open Competition
- IDIQ Contract

PERIOD OF PERFORMANCE

5 Years

MILESTONES

- OTA Multi-Award for Samples: 3rd QTR FY19
- RFP Release: 4rd QTR FY20
- Contract Award: 21nd QTR FY21

POINT OF CONTACT

 USSOCOM SOF AT&L, Engage SOF (eSOF) (813) 826-9482

FUNDING

• \$25M

CURRENT CONTRACT/OEM

• N/A

Mid-Range Gas Gun - Assault (MRGG-A)

Mid-Range Gas Gun – Assault (NSW Specific)

 The MRGG Project will provide 6.5 Creedmoor assault rifle that will decrease weight, increase range, and provide more accuracy over current assault rifle platforms



 2018 National Defense Strategy acknowledged a Gap between US Forces and our adversaries relating to conventional and unconventional weapons

ACQUISITION STRATEGY

Middle Tier Acquisition

PERIOD OF PERFORMANCE

• 5 Year IDIQ

MILESTONES

- Request for Proposal: 4Q FY20
- Collider: 4QFY20
- Vendor Shoot & User Down Select: 2Q FY21
- Combat Evaluation: 2Q FY21
- Contract Award: 4Q FY22

POINT OF CONTACT

 USSOCOM SOF AT&L, Engage SOF (eSOF) (813) 826-9482

FUNDING

- \$XXM Prototype
- \$XXM Fielding

CURRENT CONTRACT/OEM

USSOCOM OTA

Lightweight Machine Gun - Medium (LMG-M)

Lightweight Machine Gun - Medium

- Provide versatile capabilities to SOF Operators for a lighter & more lethal capability using the .338 linked ammunition
- 2018 National Defense Strategy acknowledged a Gap between US Forces and our adversaries relating to conventional and unconventional weapons
- Lightweight .338NM belt-fed medium machinegun
- System will include weapon, tripod, and fire control (separate program)
- Designed to engage both individual and material targets out to 2,500m
- Intent of program is to provide a system that is roughly the same size/weight of M240B



Middle Tier Acquisition

PERIOD OF PERFORMANCE

• 5 Year IDIQ

POINT OF CONTACT

 USSOCOM SOF AT&L, Engage SOF (eSOF) (813) 826-9482

FUNDING

- \$1.2M Prototype
- \$49M Fielding



MILESTONES

- Combat Evaluation MAR 2020 MAR 2021
- Request for Proposal: 1Q FY21
- Safety: 2QFY21
- Military User Assessment: 3Q FY21
- Contract Award: 4Q FY21

CURRENT CONTRACT/OEM

DOTC OTA

Lightweight Machine Gun - Assault (LMG-A)

Lightweight Machine Gun - Assault

- Provide versatile capabilities to SOF Operators for a lighter & more lethal capability using an intermediate caliber
- 2018 National Defense Strategy acknowledged a Gap between US Forces and our adversaries relating to conventional and unconventional weapons
- System will include weapon, tripod, and fire control (separate program)
- Designed to engage both individual and material targets out to 1500m
- Intent of program is to exceed the performance of current Lightweight Machine Guns.

ACQUISITION STRATEGY

Middle Tier Acquisition

PERIOD OF PERFORMANCE

• 5 Year IDIQ

POINT OF CONTACT

 USSOCOM SOF AT&L, Engage SOF (eSOF) (813) 826-9482

FUNDING

- \$1.2M Prototype
- \$49M Fielding

MILESTONES

- RFP: 2QFY21
- Collider: 3QFY21
- Vendor Shoot & Safety: 4QFY21
- Combat Evaluation: 1QFY22
- Contract Award: 2Q FY23

CURRENT CONTRACT/OEM

DOTC OTA

Advanced Precision Variable Powered Scope (P-VPS)

Miniature Aiming System - Day Optic = (MAS-D)

- Upgrade to Family of Sniper Scopes previously fielded as part of the sniper weapon system.
- For sniper weapons including the PSR, AMR and future ASR
- A magnified optic to improve target acquisition and P (h) between 50-1500m.
- Includes a non-caliber specific Milliradian grid reticle
- Variable power
- Illuminated aim-point
- Incorporates a micro data display to display range finding, ballistics offsets,
 and other engagement data within the optics field of view; objective of disturbed reticle

ACQUISITION STRATEGY

- Full and Open Competition
- IDIQ Contract

PERIOD OF PERFORMANCE

• 5 Years + 5 option years

MILESTONES

- RFP Release: TBD
- Receive Proposals: 2nd QTR FYXX
- Source Selection: 3rd QTR FYXX
- Contract Award: 4th QTR FYXX

POINT OF CONTACT

 USSOCOM SOF AT&L, Engage SOF (eSOF) (813) 826-9482

FUNDING

• \$49M

CURRENT CONTRACT/OEM

N00164-18-R-JQ60

Ranging Variable Powered Scope (R-VPS)

Miniature Aiming System - Day Optic = (MAS-D)

- Upgrade to Enhanced Combat Optical Sight Optimized (ECOS-O) previously fielded as part of the VASWA program.
- For combat and sniper support rifles including the MK17, MK20, M110A1.
- A magnified optic to improve target acquisition and P (h) between 50-1000m.
- T3 reticle
- Variable power
- First Focal Plane

ACQUISITION STRATEGY

POINT OF CONTACT

USSOCOM SOF AT&L, Engage SOF (eSOF)

- Full and Open Competition
- IDIQ Contract

(813) 826-9482

PERIOD OF PERFORMANCE

• 5 Years + 5 option years

FUNDING

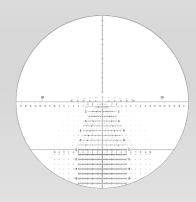
• \$45M

MILESTONES

- RFP Release: 1st QTR FY20
- Receive Proposals: 2nd QTR FY20
- Source Selection: 4th QTR FY20
- Contract Award: 2nd QTR FY22

CURRENT CONTRACT/OEM

N00164-20-R-JQ71



UNCLASSIFIED

Miniature Aiming Systems - Night (MAS-N Squad)

Miniature Aiming Systems – Night Sights (MAS-N)

- MAS-N Squad
 - Weapon platforms: SOF assault rifles, designated marksman rifles and sniper support rifles
 - Interoperate with MAS-D: Squad Variable Power Scope (S-VPS), Ranging Variable Power Scope (R-VPS), and MAS-L: Squad Aiming Laser (SAL)
 - The squad sight target detection range shall be 0-900m.

ACQUISITION STRATEGY

- Full and Open Competition
- IDIQ Contract

PERIOD OF PERFORMANCE

• 5 Years + 5 option years

MILESTONES

- RFP Release: TBD
- Receive Proposals: 2nd QTR FYXX
- Source Selection: 3rd QTR FYXX
- Contract Award: 4th QTR FYXX

POINT OF CONTACT

 USSOCOM SOF AT&L, Engage SOF (eSOF) (813) 826-9482

FUNDING

• TBD

CURRENT CONTRACT/OEM

• TBD

Miniature Aiming Systems - Night (MAS-N Precision)

Miniature Aiming Systems – Night Sights (MAS-N)

- MAS-N Precision
 - Weapon platforms: SOF precision and anti-material sniper rifles, and advanced sniper rifles
 - Interoperate with MAS-L: Precision Aiming Laser (PAL); and with MAS-D: Precision Variable Power Scope (P-VPS)
 - Target Engagement: 50- 2,000m

ACQUISITION STRATEGY

- Full and Open Competition
- IDIQ Contract

PERIOD OF PERFORMANCE

• 5 Years + 5 option years

• Receive Proposals: 2nd QTR FYXX

RFP Release: TBD

Source Selection: 3rd QTR FYXX

Contract Award: 4th QTR FYXX

POINT OF CONTACT

 USSOCOM SOF AT&L, Engage SOF (eSOF) (813) 826-9482

FUNDING

• TBD

CURRENT CONTRACT/OEM

MILESTONES

• TBD

Miniature Aiming Systems - Night (MAS-N CS)

Miniature Aiming Systems - Night Sights (MAS-N)

- MAS-N Crew Served (CS)
 - Weapon platforms: SOF lightweight medium and heavy machine guns, and grenade machine guns
 - Interoperate with MAS-F: high-power day cameras; MAS-L: non-visible pointer and illuminator spectrums; and with MAS-D: Machine Gun Optic (MGO) if dismounted interoperability is required.
 - Target Engagement: 0- 2,000+m

ACQUISITION STRATEGY

- Full and Open Competition
- IDIQ Contract

PERIOD OF PERFORMANCE

• 5 Years + 5 option years

MILESTONES

- RFP Release: TBD
- Receive Proposals: 2nd QTR FYXX
- Source Selection: 3rd QTR FYXX
- Contract Award: 4th QTR FYXX

POINT OF CONTACT

 USSOCOM SOF AT&L, Engage SOF (eSOF) (813) 826-9482

FUNDING

• TBD

CURRENT CONTRACT/OEM

• TBD

Ground Precision Strike Systems

- Ground based man packable or vehicle mounted Precision Guided Munition
 - Provide organic capability at the unit level to strike static and mobile targets in near-to-far range spectrum in a ground domain while minimizing collateral damage.
 - System must be day and night capable in nearly all weather conditions.
 - Multiple Mode Seeking Capability enabling engagement of enemy in a diverse and fluid operational environment.

ACQUISITION STRATEGY

- Middle Tier Acquisition (MTA) Rapid Prototyping
- Other Transaction Authority (OTA) via Department Of Defense Ordnance Technology Consortium DOTC or Aviation & Missile Technology Consortium

PERIOD OF PERFORMANCE

3 Years

MILESTONES

- Precision Strike AMTC Topic Announcements: 1st QTR FY21.
- Dominant Lethality Capability Demo (DLCD):
 3rd Qtr FY19, 3rd Qtr FY21, and 3rd Qtr FY23.

POINT OF CONTACT

 USSOCOM SOF AT&L, Engage SOF (eSOF) (813) 826-9482

FUNDING

• ~\$10M

- DOTC 19-01-INIT1020
- AMTC-19-10-005



EXPANDING THE COMPETITIVE SPACE

SPECIAL OPERATIONS FORCES INDUSTRY CONFERENCE

LtCol Ray Feltham, Program Manager

FAMILY SPECIAL OPERATIONS VEHICLES



Vehicle Lifecycle Overview

Vehicles in Concept



Joint Light Tactical Vehicle (JLTV)
SOF Mods



Purpose Built
Non-Standard Commercial Vehicle

Vehicles In **Production**



Ground Mobility Vehicle 1.1 (GMV 1.1)



Non-Standard Commercial Vehicle



Light Tactical All Terrain Vehicle- Diesel

Vehicles in Sustainment



GMV 1.0



MRAP-ATV (M-ATV)

Vehicles in Sustainment



MRAP - RG33 A1



MRAP - RG33 AUV



Key Initiatives

- The LTATV is a SOF modified commercial off the shelf (COTS) lightweight vehicle that is internally air transportable via V-22, H-53 and H-47 aircraft. It consists of two and four seat variants with the ability to change configuration based upon mission and/or threat. It's intended to perform a variety of missions to include offset infiltration, reconnaissance and medical evacuation.
- Areas of Interest:
 - Hybrid/Electric
 - Autonomous Capabilities
 - Increased Payload
 - Lifecycle Improvement
 - Modular Kit Capabilities (weapons, tracks, etc.)

ACQUISITION STRATEGY

- Non Developmental Item (NDI)
- Follow-On Contract: Full & Open Competition





PERIOD OF PERFORMANCE

- Sustainment ongoing
- Follow-On Contract: FY20 TBD

MILESTONES

• Pure Fleet Diesel Variant: 4QFY18

POINT OF CONTACT

 USSOCOM SOF AT&L, Engage SOF (eSOF) (813) 826-9482

FUNDING

• ~\$6.5M/year

- Polaris Defense (Medina, MN)
- 5 Year IDIQ: July 2015 July 2020

Non Standard Commercial Vehicle (NSCV)

- The current NSCV is based on commercial vehicle platforms that are enhanced with mission-specific modifications to increase protection, mobility performance, and durability.
- Areas of Interest:
 - Lightweight Armor Materials
 - Lightweight Vehicle Components/Mods
 - C4ISR Integration Cost Reductions
 - Suspension Technology
 - Lifecycle Improvement

ACQUISITION STRATEGY

- NSCV2: Full & Open Competition
- P-Built: Competitive OTA for Prototype (NAMC Consortium), w/ Follow-on Production

POINT OF CONTACT

 USSOCOM SOF AT&L, Engage SOF (eSOF) (813) 826-9482





PERIOD OF PERFORMANCE

- Sustainment Ongoing
- Purpose Built NSCV: FY20 Prototype OTA Award

FUNDING

~\$30M/year (average)

MILESTONES

- NSCV1 Production End: July 18
- NSCV2 IOT&E: March 18
- NSCV2 PQT Completion: 1QFY20

- Battelle Memorial Institute (Columbus, OH)
- 7 Year IDIQ: July 2016 July 2023

Ground Mobility Vehicle 1.1 (GMV 1.1)

- The GMV 1.1 is a highly mobile CH-47 internally transportable Special Operations combat vehicle with the operational flexibility to support a wide range of lethal and non-lethal Special Operations missions and core activities.
- Areas of Interest:
 - Lightweight Armor Material
 - Improved Payload
 - Storage Capacity
 - Vehicle Weight Reduction
 - Terrain Specific Tire Alternatives
 - C4ISR Integration Cost Reductions

ACQUISITION STRATEGY

- Full and Open Competition
- Single Vendor Award
- Produce & Evaluate Test Vehicles
- Full-Rate Production Decision

POINT OF CONTACT

 USSOCOM SOF AT&L, Engage SOF (eSOF) (813) 826-9482



PERIOD OF PERFORMANCE

- PoP: Aug 13 Aug 20
- 5 Years Production

FUNDING

- FY20 is last year of investment funding
- \$16M/yr sustainment funding through FYDP



MILESTONES

- IOT&E: November 2015
- First Unit Equipped: April 2016
- Full Rate Production Decision: March 17
- Initial Operational Capability: September 2020

- General Dynamics Ordnance and Tactical Systems (St. Petersburg, FL)
- 7 Year IDIQ: August 2013 August 2020

Mine Resistant Ambush Protected Vehicle (MRAP/M-ATV)

- The Mine Resistant Ambush Protected (MRAP) family of vehicles currently consists primarily of the MRAP All Terrain Vehicle (M-ATV), and RG-33-A1. Vehicles are modified to meet SOF unique requirements.
- Areas of Interest:
 - Active Reset Operations
 - Obsolescence Management
 - Sustainment Cost Reductions
 - C4ISR Integration Cost Reductions

ACQUISITION STRATEGY

Original Production (JPO MRAP Contracts)



PERIOD OF PERFORMANCE

- Sustainment ongoing
- Reset kicked off in FY19 at RRAD



MILESTONES

In Sustainment

POINT OF CONTACT

 USSOCOM SOF AT&L, Engage SOF (eSOF) (813) 826-9482

FUNDING

• ~\$88M/year

- No Active OEM Production Contracts
- FSR Support: Mantech / Lockheed Martin

Ground Mobility Vehicle 1.0 (GMV 1.0)

- The Ground Mobility Vehicle 1.0
 (GMV 1.0) is a medium class High
 Mobility Multipurpose Wheeled
 Vehicle (HMMWV) with Special
 Operations Peculiar (SO-P)
 modifications. Several variants have
 supported Special Operations
 Operators reliably for over 12 years in
 contingency and combat operations.
- Areas of Interest:
 - Active Reset Operations
 - Lightweight Armor Materials
 - Suspension & Payload Improvements





ACQUISITION STRATEGY

Modified Service Common (MFP-2)

PERIOD OF PERFORMANCE

- Sustainment / Divestiture
- Reset as necessary

MILESTONES

- Production ended in FY06
- Vehicle Reset has been continuous since FY09

POINT OF CONTACT

 USSOCOM SOF AT&L, Engage SOF (eSOF) (813) 826-9482

FUNDING

- Final Resets to be complete in FY20
- Annual Prioritization Process for Reset
- Continue sustainment through OCO

- No Active OEM Contracts
- Reset: Letterkenney Army Depot (LEAD)

Joint Light Tactical Vehicle (JLTV)

- Joint Program Office (JPO) USA/USMC
- To be fielded to SOF Units by Services
- The JLTV's intent is to restore light tactical mobility to combat arms, combat support and combat service support/sustainment of forces by providing: protection (scalable armor); transportability (rotary/fixed wing, expeditionary sealift); mobility (off road, urban areas, all weather); sustainment (reliability, maintainability, onboard and exportable power) and Networking (integrated C4)



Targeting Limited SOF Modifications (C4I/ECMS)

ACQUISITION STRATEGY

- Modified Service Common (P-2)
- SOF Mod Requirements Generation ongoing

PERIOD OF PERFORMANCE

FY20 & beyond

EKIOD OF PEKFORIVIANCE

FUNDING

• TBD (awaiting OP Assessment)

MILESTONES

- SOF Operational Assessment 4QFY19-1QFY20
- SOF C4I Integration kit Design/Testing FY20

CURRENT CONTRACT/OEM

- Oshkosh Corporation (JPO)
- No Active SOCOM Contracts

POINT OF CONTACT

 USSOCOM SOF AT&L, Engage SOF (eSOF) (813) 826-9482

PM FOSOV Technology Insertion Recap of Industry Opportunities

- Lightweight Armor for Ground Mobility Platforms
 - Current armor solutions are heavy, limit available payload options and decrease vehicle durability.
 - Lightweight and cost effective technologies that can replace current armor solutions.
- Lightweight Vehicle Components/Mods
- Low SWAP / High Output Alternators
- Hybrid/Electric Vehicle Capabilities
 - Hybrid/Electric Components (Motors, Batteries)
- Autonomous / Semi-Autonomous Vehicle Capabilities
- Advanced Situational Awareness (MRAP) Battlefield Awareness
- Telepresence for remote vehicle operation and/or Situational Awareness (SA)
- Augmented Reality Maintenance Capabilities



The Iron Triangle

ACTIVE PRODUCTION

- NSCV
- GMV 1.1
- LTATV

ACTIVE SUSTAINMENT

- LTATV (Lifecycle Replacement every 3-4 yrs)
- M-ATV
- GMV 1.0 (SOF HMMWV)

VEHICLES IN CONCEPT

Purpose Built NSCV

Questions?

















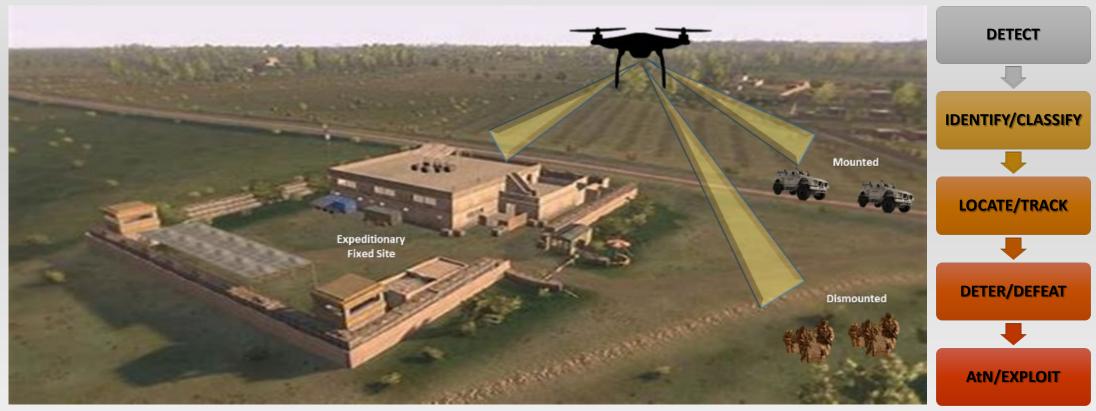
EXPANDING THE COMPETITIVE SPACE

SPECIAL OPERATIONS FORCES INDUSTRY CONFERENCE

LTC R. Ramsey Oliver, Program Manager Counter Proliferation SOF COUNTER UNMANNED AERIAL SYSTEMS



USSOCOM CUAS Objectives



- Family of Counter Unmanned Systems (FOCUS) program provides SOF with the ability to counter current and future unmanned system threats.
- Research, develop, integrate, generate rapid prototypes, test and evaluate, and field/deploy cutting edge Counter-Small Unmanned (Aerial, Ground, & Maritime) Systems.

Autonomous – Man-out-of-Loop/Oversight – Manpower – Minimal: Size, Weight, Footprint, Op Signature - Interoperable

Current Capabilities

Expeditionary Site - Mounted - Dismounted



- Multiple Combat Evaluations (CV) in various environments across the SOF community
- In Line With Executive Agent's CUAS Priorities
- Prioritizing Integrated & Autonomous System of Systems – Maximum Modularity, Tailored to the Mission
- Seeking opportunities to pursue industry developed software, techniques, and algorithms for use in government software/hardware

ACQUISITION STRATEGY

- Lead Systems Integrator (LSI) acquisition strategy in development
- Other Transaction Authority (OTA) via DOD CWMD consort; FAR-based, existing contracts

PERIOD OF PERFORMANCE

10 years

MILESTONES

- JDAT Kinetic Defeat & GNSS Test Event 3QFY20
- CDD / Program of Record Established 4QFY20
- LSI Contract Anticipated 2QFY21

POINT OF CONTACT

 USSOCOM SOF AT&L, Engage SOF (eSOF) (813) 826-9482

FUNDING

• \$150M over FYDP

CURRENT CONTRACT/OEM

Various

Driving the Future – Hyper-Enabled Teams (1 of 3)

• While we know that any course we set into the future will need revectoring over time, we see several trends and technologies that have the potential of evolving and potentially disrupting our current programs. Here are some of those trends and technologies, which affect the Hyper-Enabled Team into 2030:

| Enabler | Operational Narrative |
|--------------|---|
| Zero-PED ISR | Rather than sending raw data back to a cell of intelligence analysts, as processing power increases (either through quantum computing or increases in silicon-based computing) and artificial intelligence (AI) makes significant leaps ahead producing useful capability increases, we see today's processing, analysis, exploitation, and dissemination being done by AI on servers in a team/platoon/squadron's vehicles, and eventually on the individual operator. |

Driving the Future – Hyper-Enabled Teams (2 of 3)

| Enabler | Operational Narrative |
|--------------------|---|
| Zero-Orbit ISR | Rather than putting large pod-carrying drones and aircraft in the sky to provide target identification and confirmation from altitude, we see tactical cyber exploitation of ubiquitous mobile phones and existing civilian infrastructure, paired with fully-autonomous small drones, as providing all the ISR necessary to execute targets. |
| Zero-Signature | Advancements in signature management will make operators and their mobility platforms virtually invisible in both the visual and IR spectrums. As night vision proliferates world-wide, the ability to avoid detection will replace the ability to see at night as a dominant competitive factor. |
| Hyper-Connectivity | In a hyper-connected world we're already seeing a greater sensitivity to not only the local sentiment, but to the optic and narrative on all forms of media. We see objectives becoming increasingly virtual, narrative-based, and targeted more toward sentiment over individuals. |
| Remote-Presence | Drones are already replacing human operators and dogs as the first in the door. As drones become increasingly capable, we see teams of drones executing objectives under the command of humans in increasingly remote locations of relative sanctuary with no presence near the objective. |
| Ubiquitous Flight | Already flying taxi services with hundreds of air-vehicles are launching in Singapore and Dubai, and similar services are in the works in other nations. In the US, flying drone logistics and fully-autonomous ground vehicles are already breaking long-standing policy blockages, paving the way to the same. While flight will probably never make ground transportation obsolete, over the next decade we foresee a need to change the mix of large flying platforms and ground platforms to include smaller manned-unmanned flying platforms with maneuverability and speed characteristics parallel to what will exist where we operate. |

Driving the Future – Hyper-Enabled Teams (1 of 3)

| Enabler | Operational Narrative |
|----------------------------|--|
| Untethered Logistics | As the battlefield becomes more visible to all adversaries, the need to shift bases of operations more frequently and untether from normal logistics processes will increase. As such, we see technologies like water-from-air harvesting, solar/battery systems, and electric vehicles as helping lengthen the time teams can untether from logistics support. Additionally, we see logistics convoys and medevac as fundamentally transforming to autonomous flying and ground vehicles. |
| Mass through Manufacturing | Humans take decades to produce and train, and the morale effect of casualties is only growing in the hyper-connected, always-on world of social media and constant news. As such, drones will move from enabling humans to replacing humans as combatants—drones which can be mass produced in vast quantities by advanced nations, while poor nations will continue to use humans. This trend will drive the need to develop lighter, cheaper anti-materiel weapons as well as driving the development of anti-drone technologies for air, ground, and sea. |
| Urbanization | Already the majority of humanity lives in cities, and this trend will only increase as we see a doubling and potentially tripling in the number of mega-cities over the next decade. Increasingly, operations will take place in cities full of cameras, cyber-monitoring capabilities, hyper-connected opposition groups, and in areas that are increasingly hard for drones to access. |