

EXPANDING THE COMPETITIVE SPACE SPECIAL OPERATIONS FORCES VIRTUAL INDUSTRY CONFERENCE

COL Joel Babbitt, Program Executive Office
SOF WARRIOR OVERVIEW





UNCLASSIFIED

Program Executive Office SOF Warrior (SW)



Support to All Components



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 pose Munitions & Explo -Visual Augmentation Systems (VAS) - Fire Support/Non-Lethal - SOF Enablers - Mobility -Tactical Comms -Tgt Engagement -Medical Ops Finish Exploit

PEO Oversight & Support for JSOC

Key Initiatives

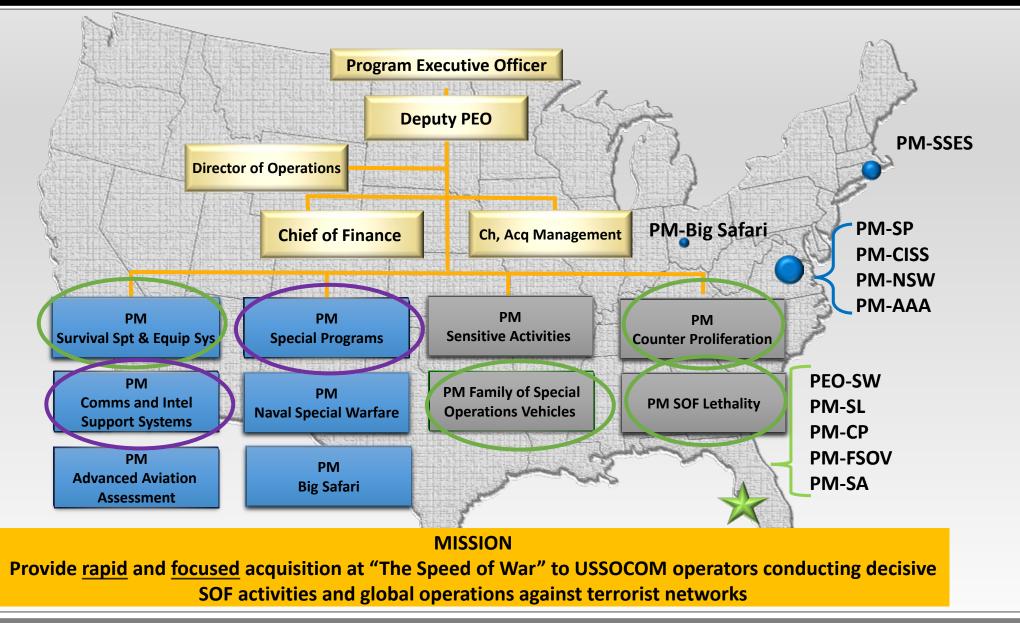
Drivers

- 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

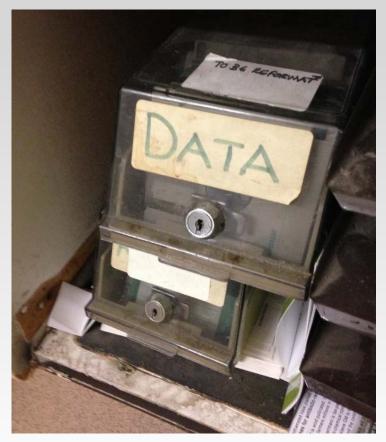
Needs:

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

<u>**photo credit**:</u> 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-71REW8-6LgNcRaMbw5H-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-cZUPKak7hXk-8UxCTj-6SCANd/

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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.

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

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Goals of NGIA

Core Technology Components/Capabilities:

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

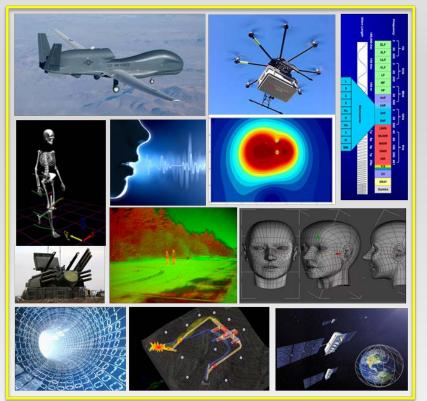
End User Capability:

- 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

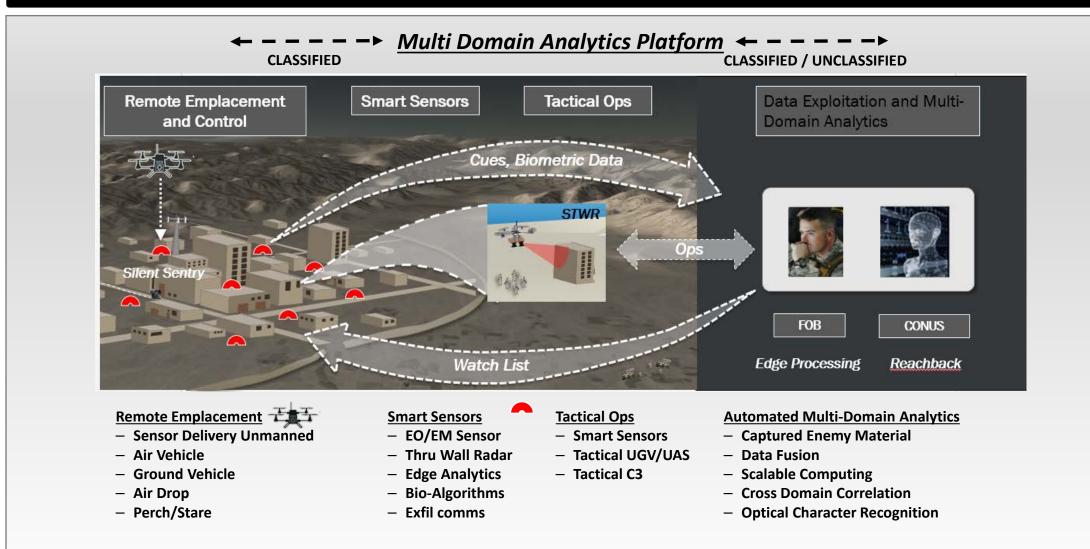


Opportunities

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.

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Next Generation Identification Awareness (NGIA) "Technology Interoperability"



NGIA Collaborative Approach

Acquisition Approach

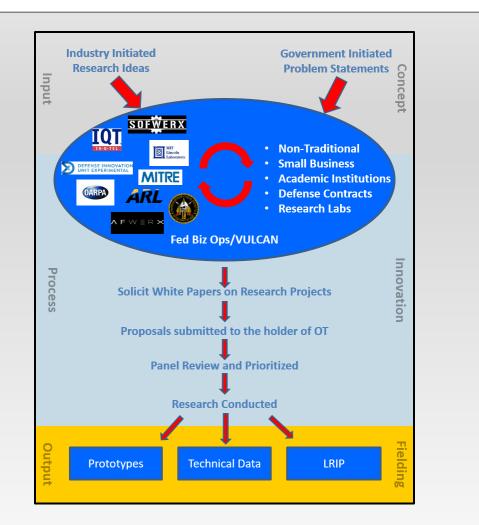
- NGIA using Other Transaction Authority forms a sphere of technology excellence to conduct rapid prototyping
- Full and open advertisement
- Agreements established under <u>Participant Basic Agreement</u>
- Participants are vetted based on:
 - Merit of technology
 - Operational relevance

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

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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: richard.w.totten2.civ@mail
 - MAJ William Taylor: <u>william.l.taylor118.mil@mail.mil</u>
- 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



Helmets



Hard Armor

- 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	PERIOD OF PERFORMANCE	MILESTONES
 Addition to Existing IDIQ Federal Procurement List 	• FY2000 - TBD	 FY19/20 Temperate Uniform FY20 Artic Evaluations
POINT OF CONTACT	FUNDING	CURRENT CONTRACT/OEM
• USSOCOM SOF AT&L, Engage SOF (eSOF) (813) 826-9482	 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	PERIOD OF PERFORMANCE	MILESTONES
• Addition to Existing IDIQ	• FY 19-FY24	• FY19 Evals • FY20 Arctic Evals
POINT OF CONTACT	FUNDING	CURRENT CONTRACT/OEM
 USSOCOM SOF AT&L, Engage SOF (eSOF) (813) 826-9482 	• 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	PERIOD OF PERFORMANCE	MILESTONES
• Addition to Existing IDIQ	• FY17-22	• FY18 Addition of improved Airops Harness
POINT OF CONTACT	FUNDING	CURRENT CONTRACT/OEM
• USSOCOM SOF AT&L, Engage SOF (eSOF) (813) 826-9482	• 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	PERIOD OF PERFORMANCE	MILESTONES
• 5 Year IDIQ (+2 Year Option)	• FY14-25	 FY16 – FY19 Market Research 4th QFY19 Solicitation 4th QFY20 Contract Award
POINT OF CONTACT	FUNDING	CURRENT CONTRACT/OEM
 USSOCOM SOF AT&L, Engage SOF (eSOF) (813) 826-9482 	 FY19 - \$16.418M O&M FY20 - \$10.272M O&M FY21 - \$5.075M O&M 	• 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	PERIOD OF PERFORMANCE	MILESTONES
• 5 Year IDIQ	• FY18-23	3QFY22 Solicitation
POINT OF CONTACT	FUNDING	CURRENT CONTRACT/OEM
• USSOCOM SOF AT&L, Engage SOF (eSOF) (813) 826-9482	 FY19 - \$16.418M O&M FY20 - \$10.272M O&M FY21 - \$5.075M O&M 	• 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

ACQUISITION

STRATEGY

• 5 Year IDIQ (Ground)

• 5 Year IDIQ (+2 Yr





MILESTONES

• FY19 Contract Awards

Solicitation FY23 or 25

• FY19 - \$2.089M O&M

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

Ground Helmet

Solicitation FY23

Coxswain Helmet

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	PERIOD OF PERFORMANCE	MILESTONES
• Part of Helmet Solicitation / Contract	• Part of Helmet Contract / Solicitation	• Same as Ground and Coxswain helmet

CURRENT CONTRACT/OEM

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

Option) (Coxswain) (Coxswain)

PERIOD OF

PERFORMANCE

• FY19-24 (Ground)

• FY19-24 or 26

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

Communication Headsets/Hearing Protection

Suite of hearing protect communications heads • Maritime • Land • Wireless		
ACQUISITION STRATEGY	PERIOD OF PERFORMANCE	MILESTONES
• IDIQ Contracts	• Maritime – FY17-22 • Land – FY19-24	 FY15-FY17 Maritime Recompete FY18-19 Land Re-compete
POINT OF CONTACT	FUNDING	CURRENT CONTRACT/OEM
 USSOCOM SOF AT&L, Engage SOF (eSOF) (813) 826-9482 	 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

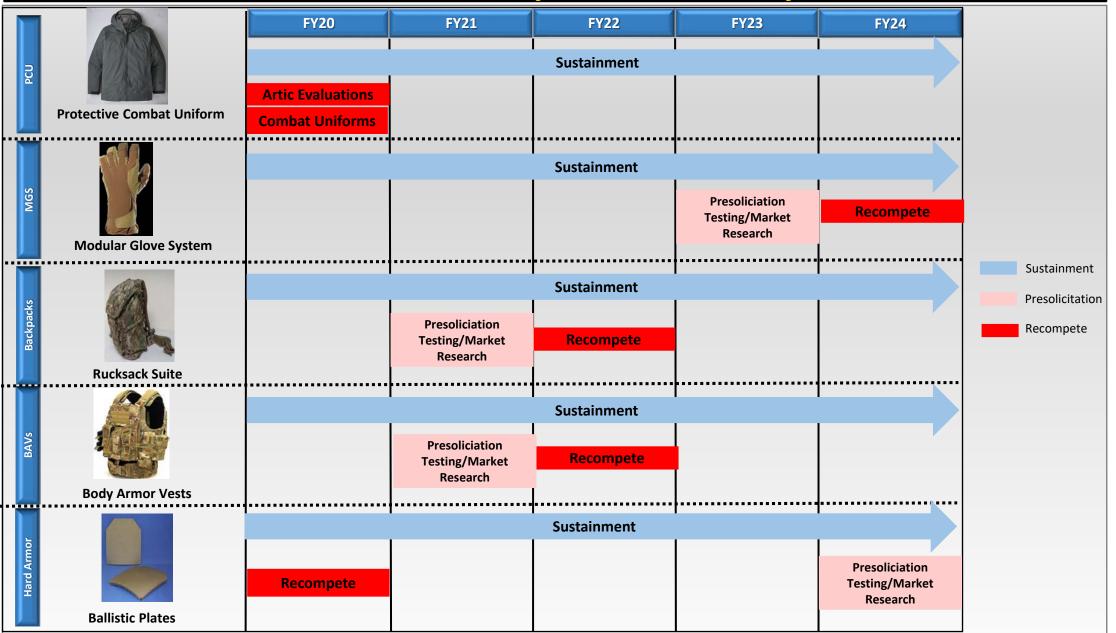


ACQUISITION STRATEGY	PERIOD OF PERFORMANCE	MILESTONES
• Addition to existing IDIQ	• FY19-24	 FY18-20 Arctic Goggle Market Research User evaluations as appropriate
POINT OF CONTACT	FUNDING	CURRENT CONTRACT/OEM
 USSOCOM SOF AT&L, Engage SOF (eSOF) (813) 826-9482 	• FY19 - \$0.484M O&M • FY20 - \$0.398M O&M • FY21 - \$0.200M O&M	OakleySmith OpticsRevision

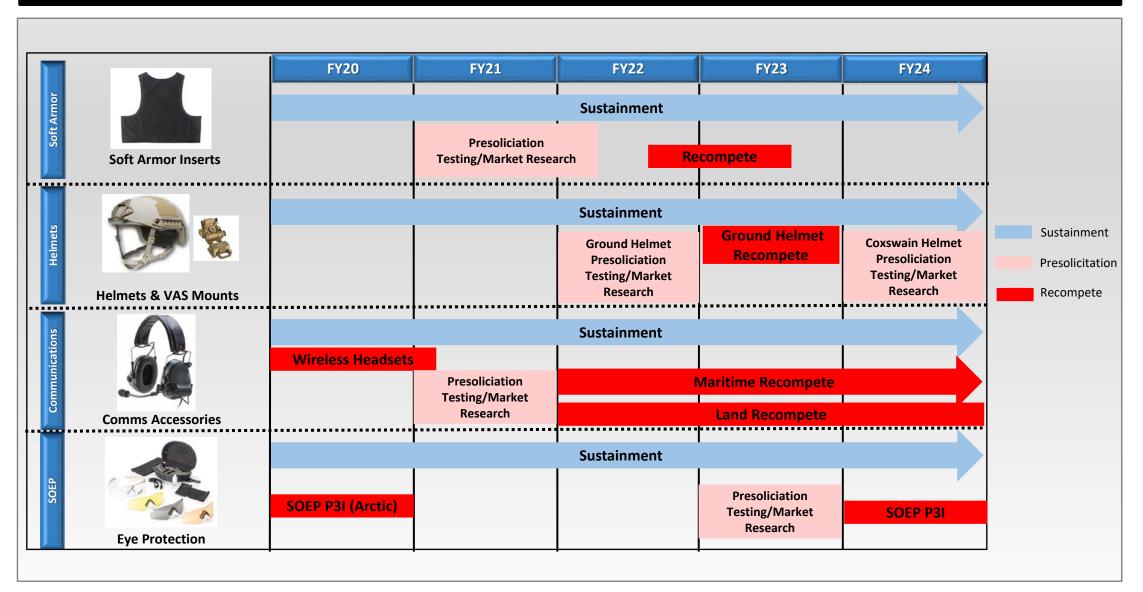
Capability Areas of Interest

- 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

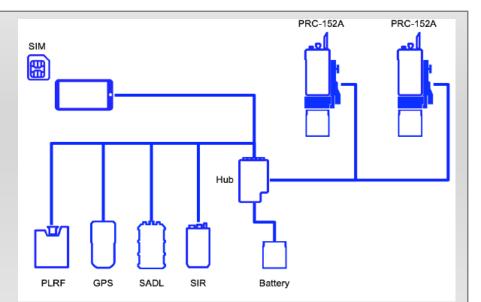


SPEAR Recompete Roadmap



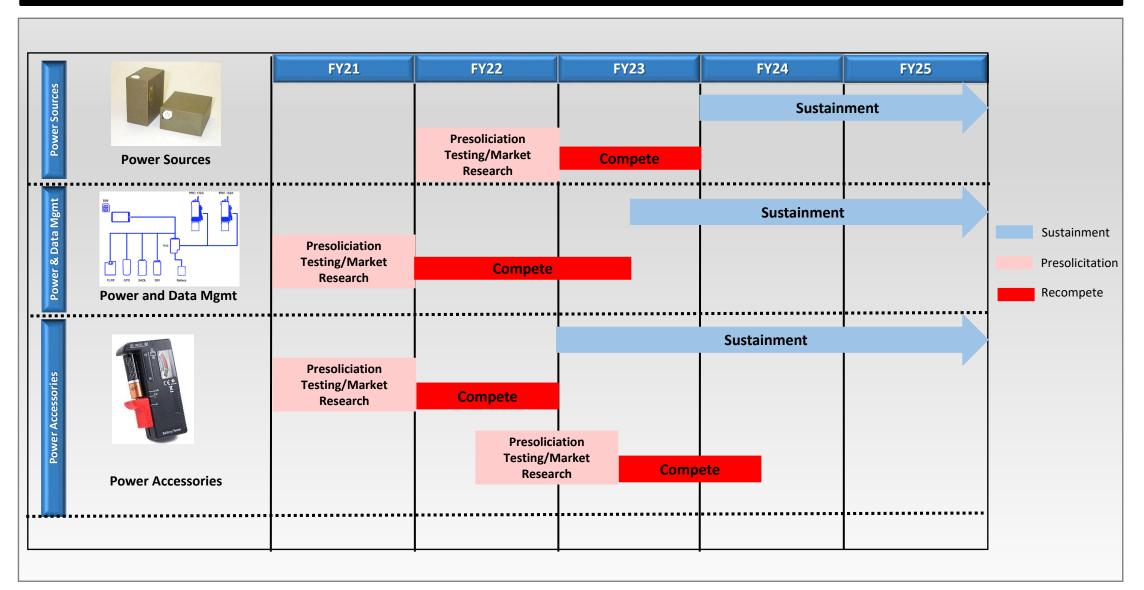
Power for SOF Equipment

- 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



ACQUISITION STRATEGY	PERIOD OF PERFORMANCE	MILESTONES
• IDIQ Contracts	• FY20-26	 FY20-21, Baseline power testing of Operator equipment FY21, Begin user evaluations
POINT OF CONTACT	FUNDING	CURRENT CONTRACT/OEM
 USSOCOM SOF AT&L, Engage SOF (eSOF) (813) 826-9482 	• FY20 - \$0.500M RDT&E	• None currently

Power Compete Roadmap



Tactical Casualty Combat Care (TCCC) Operator Kit

- Improved Self and Buddy Aid •
- Life Threatening ullet**Hemorrhage Control**
- **Airway Management** ۲
- Pain Management / ۲ Infection Prevention
- Fluid Resuscitation ٠
- **Blast Exposure Monitoring System** ۲

ACQUISITION STRATEGY

Prime Vendor Contracts

(813) 826-9482

• IDIQ or Other Transactional Agreement (Blast **Exposure Monitoring System)**

Operator Operator **Kit Items Kit Pouch PERIOD OF PERFORMANCE MILESTONES** • Milestone C – 25 Sept 07 Sustainment through FY25 • BEMO Fielding FY22-26 Continuous Configuration Updates as Required **POINT OF CONTACT CURRENT CONTRACT/OEM FUNDING** USSOCOM SOF AT&L, Engage SOF (eSOF) • FY20 - \$2.279M O&M • Cardinal Healthcare • FY21 - \$3.340M O&M • DMS Pharmaceuticals • FY22 - \$2.267M O&M

Tactical Casualty Combat Care (TCCC) Medic Kit

 Advanced Airway Intervention Intravenous Medications Hypothermia Prevention Advanced Monitoring / Diagnostics Intraosseous Infusion 	<image/> <image/> <image/>	<image/>
ACQUISITION STRATEGY	PERIOD OF PERFORMANCE	MILESTONES
Prime Vendor Contracts	• Sustainment through FY25	 Milestone C – 25 Sept 07 Continuous Configuration Updates as Required
POINT OF CONTACT	FUNDING	CURRENT CONTRACT/OEM
• USSOCOM SOF AT&L, Engage SOF (eSOF) (813) 826-9482	 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

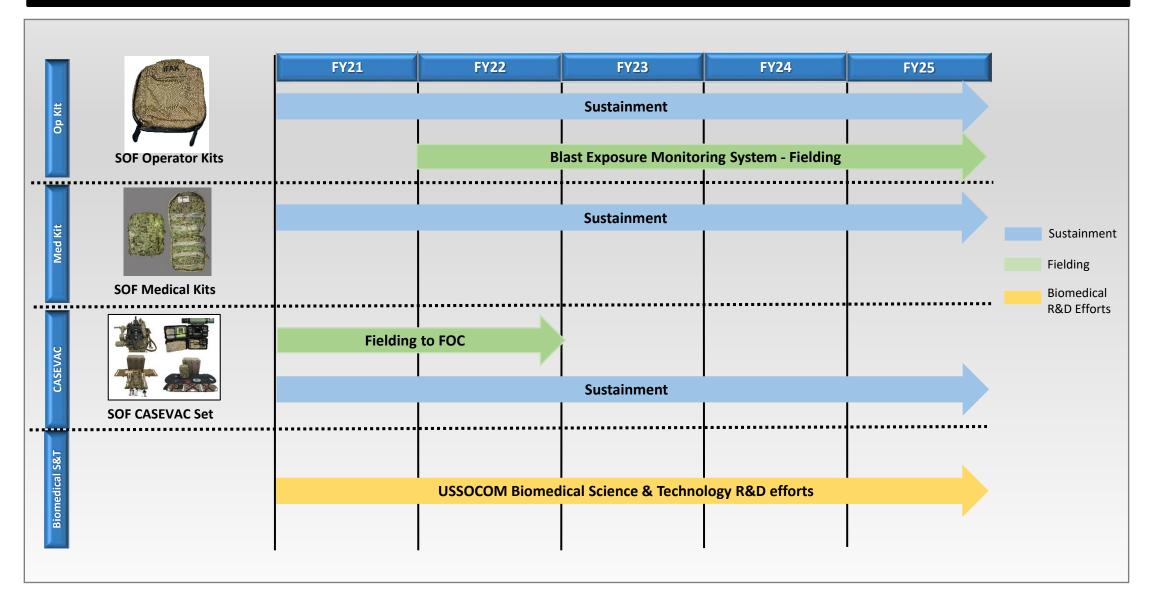
- Extract
- Stabilize
- Treat
- Monitor
- Transport





ACQUISITION STRATEGY	PERIOD OF PERFORMANCE	MILESTONES
 Existing IDIQ Contract Recompete through GSA is ongoing 	 Contract through FY20 Follow-on award TBD 	• Milestone C – 7 Jul 2011
POINT OF CONTACT	FUNDING	
	FONDING	CURRENT CONTRACT/OEM

Medical Portfolio Roadmap





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	PERIOD OF PERFORMANCE	MILESTONES
Full and Open Competition IDIQ Contract	• 5 Years	 • RFP Release: 4th QTR FY20 • Contract Award: 1st QTR FY21
POINT OF CONTACT	FUNDING	CURRENT CONTRACT/OEM
 USSOCOM SOF AT&L, Engage SOF (eSOF) (813) 826-9482 	• \$20M	• 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	PERIOD OF PERFORMANCE	MILESTONES
 Full and Open Competition IDIQ Contract 	• 5 Years	 OTA Award supporting LMG-M Program: 3rd QTR FY20 RFP Release: 2nd QTR FY21 Contract Award: 4rd QTR FY21
POINT OF CONTACT	FUNDING	CURRENT CONTRACT/OEM
 USSOCOM SOF AT&L, Engage SOF (eSOF) (813) 826-9482 	• \$50M	• N/A

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	PERIOD OF PERFORMANCE	MILESTONES
 Full and Open Competition IDIQ Contract 	• 5 Years	 OTA Multi-Award for Samples: 3rd QTR FY19 RFP Release: 4rd QTR FY20 Contract Award: 21nd QTR FY21
POINT OF CONTACT	FUNDING	CURRENT CONTRACT/OEM
 USSOCOM SOF AT&L, Engage SOF (eSOF) (813) 826-9482 	• \$25M	• 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	PERIOD OF PERFORMANCE	MILESTONES
• Middle Tier Acquisition	• 5 Year IDIQ	 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	FUNDING	CURRENT CONTRACT/OEM
 USSOCOM SOF AT&L, Engage SOF (eSOF) (813) 826-9482 	 \$XXM Prototype \$XXM Fielding 	• 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

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ACQUISITION STRATEGY	PERIOD OF PERFORMANCE	MILESTONES
• Middle Tier Acquisition	• 5 Year IDIQ	 Combat Evaluation MAR 2020 – MAR 2021 Request for Proposal: 1Q FY21 Safety: 2QFY21 Military User Assessment: 3Q FY21 Contract Award: 4Q FY21
POINT OF CONTACT	FUNDING	CURRENT CONTRACT/OEM
 USSOCOM SOF AT&L, Engage SOF (eSOF) (813) 826-9482 	• \$1.2M Prototype • \$49M Fielding	• 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	PERIOD OF PERFORMANCE	MILESTONES
• Middle Tier Acquisition	• 5 Year IDIQ	 RFP: 2QFY21 Collider: 3QFY21 Vendor Shoot & Safety: 4QFY21 Combat Evaluation: 1QFY22 Contract Award: 2Q FY23
POINT OF CONTACT	FUNDING	CURRENT CONTRACT/OEM
 USSOCOM SOF AT&L, Engage SOF (eSOF) (813) 826-9482 	• \$1.2M Prototype • \$49M Fielding	• 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





ACQUISITION STRATEGY	PERIOD OF PERFORMANCE	MILESTONES
 Full and Open Competition IDIQ Contract 	• 5 Years + 5 option years	 RFP Release: TBD Receive Proposals: 2nd QTR FYXX Source Selection: 3rd QTR FYXX Contract Award: 4th QTR FYXX
POINT OF CONTACT	FUNDING	CURRENT CONTRACT/OEM
 USSOCOM SOF AT&L, Engage SOF (eSOF) (813) 826-9482 	• \$49M	• 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

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ACQUISITION STRATEGY	PERIOD OF PERFORMANCE	MILESTONES
Full and Open Competition IDIQ Contract	• 5 Years + 5 option years	 RFP Release: 1st QTR FY20 Receive Proposals: 2nd QTR FY20 Source Selection: 4th QTR FY20 Contract Award: 2nd QTR FY22
POINT OF CONTACT	FUNDING	CURRENT CONTRACT/OEM
• USSOCOM SOF AT&L, Engage SOF (eSOF) (813) 826-9482	• \$45M	• N00164-20-R-JQ71

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	PERIOD OF PERFORMANCE	MILESTONES
 Full and Open Competition IDIQ Contract 	• 5 Years + 5 option years	 RFP Release: TBD Receive Proposals: 2nd QTR FYXX Source Selection: 3rd QTR FYXX Contract Award: 4th QTR FYXX
POINT OF CONTACT	FUNDING	CURRENT CONTRACT/OEM
 USSOCOM SOF AT&L, Engage SOF (eSOF) (813) 826-9482 	• TBD	• 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	PERIOD OF PERFORMANCE	MILESTONES
 Full and Open Competition IDIQ Contract 	• 5 Years + 5 option years	 RFP Release: TBD Receive Proposals: 2nd QTR FYXX Source Selection: 3rd QTR FYXX Contract Award: 4th QTR FYXX
POINT OF CONTACT	FUNDING	CURRENT CONTRACT/OEM
 USSOCOM SOF AT&L, Engage SOF (eSOF) (813) 826-9482 	• TBD	• 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	PERIOD OF PERFORMANCE	MILESTONES
 Full and Open Competition IDIQ Contract 	• 5 Years + 5 option years	 RFP Release: TBD Receive Proposals: 2nd QTR FYXX Source Selection: 3rd QTR FYXX Contract Award: 4th QTR FYXX
POINT OF CONTACT	FUNDING	CURRENT CONTRACT/OEM
 USSOCOM SOF AT&L, Engage SOF (eSOF) (813) 826-9482 	• TBD	• 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	PERIOD OF PERFORMANCE	MILESTONES
 Middle Tier Acquisition (MTA) Rapid Prototyping Other Transaction Authority (OTA) via Department Of Defense Ordnance Technology Consortium DOTC or Aviation & Missile Technology Consortium 	• 3 Years	 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	FUNDING	CURRENT CONTRACT/OEM
 USSOCOM SOF AT&L, Engage SOF (eSOF) (813) 826-9482 	• ~\$10M	• DOTC 19-01-INIT1020 • AMTC-19-10-005



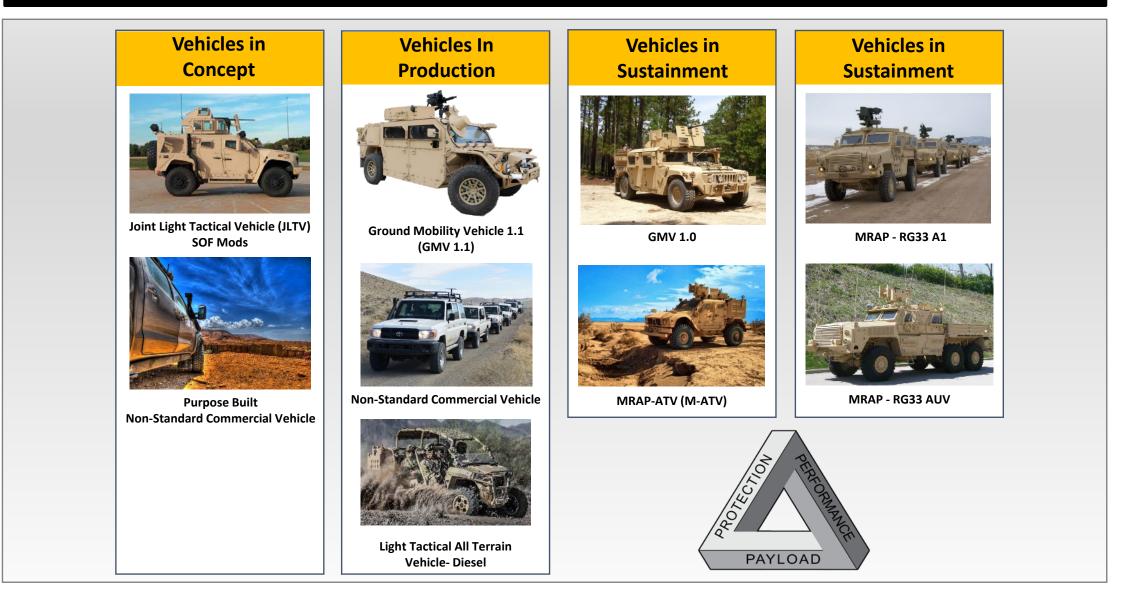
EXPANDING THE COMPETITIVE SPACE SPECIAL OPERATIONS FORCES INDUSTRY CONFERENCE

LtCol Ray Feltham, Program Manager FAMILY SPECIAL OPERATIONS VEHICLES



UNCLASSIFIED

Vehicle Lifecycle Overview



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

• Sustainment ongoing

• Follow-On Contract: FY20 – TBD

• ~\$6.5M/year

CURRENT CONTRACT/OEM

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

• Pure Fleet Diesel Variant: 40FY18

MILESTONES

POINT OF CONTACT

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

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	PERIOD OF PERFORMANCE	MILESTONES
 NSCV2: Full & Open Competition P-Built: Competitive OTA for Prototype (NAMC Consortium), w/ Follow-on Production 	 Sustainment Ongoing Purpose Built NSCV: FY20 Prototype OTA Award 	 NSCV1 Production End: July 18 NSCV2 IOT&E: March 18 NSCV2 PQT Completion: 1QFY20
POINT OF CONTACT	FUNDING	CURRENT CONTRACT/OEM
• USSOCOM SOF AT&L, Engage SOF (eSOF) (813) 826-9482	• ~\$30M/year (average)	 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

CURRENT CONTRACT/OEM

- 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	PERIOD OF PERFORMANCE	MILESTONES
• Original Production (JPO MRAP Contracts)	 Sustainment ongoing Reset kicked off in FY19 at RRAD 	• In Sustainment
POINT OF CONTACT	FUNDING	CURRENT CONTRACT/OEM
 USSOCOM SOF AT&L, Engage SOF (eSOF) (813) 826-9482 	• ~\$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	PERIOD OF PERFORMANCE	MILESTONES
• Modified Service Common (MFP-2)	 Sustainment / Divestiture Reset as necessary 	 Production ended in FY06 Vehicle Reset has been continuous since FY09
POINT OF CONTACT	FUNDING	CURRENT CONTRACT/OEM
 USSOCOM SOF AT&L, Engage SOF (eSOF) (813) 826-9482 	 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	PERIOD OF PERFORMANCE	MILESTONES
 Modified Service Common (P-2) SOF Mod Requirements Generation ongoing 	• FY20 & beyond	 SOF Operational Assessment – 4QFY19- 1QFY20 SOF C4I Integration kit Design/Testing – FY20
	FUNDING	
POINT OF CONTACT	FUNDING	CURRENT CONTRACT/OEM
• USSOCOM SOF AT&L, Engage SOF (eSOF) (813) 826-9482	• TBD (awaiting OP Assessment)	 Oshkosh Corporation (JPO) No Active SOCOM Contracts

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	ACTIVE SUSTAINMENT	VEHICLES IN CONCEPT
• NSCV • GMV 1.1 • LTATV	 LTATV (Lifecycle Replacement every 3-4 yrs) M-ATV GMV 1.0 (SOF HMMWV) 	• 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	PERIOD OF PERFORMANCE	MILESTONES
 Lead Systems Integrator (LSI) acquisition strategy in development Other Transaction Authority (OTA) via DOD CWMD consort; FAR-based, existing contracts 	• 10 years	 JDAT Kinetic Defeat & GNSS Test Event - 3QFY20 CDD / Program of Record Established - 4QFY20 LSI Contract Anticipated - 2QFY21
POINT OF CONTACT	FUNDING	CURRENT CONTRACT/OEM
 USSOCOM SOF AT&L, Engage SOF (eSOF) (813) 826-9482 	• \$150M over FYDP	• 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 (3 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.	