



SPECIAL OPERATIONS FORCES INDUSTRY CONFERENCE

Accelerating SOF Innovation

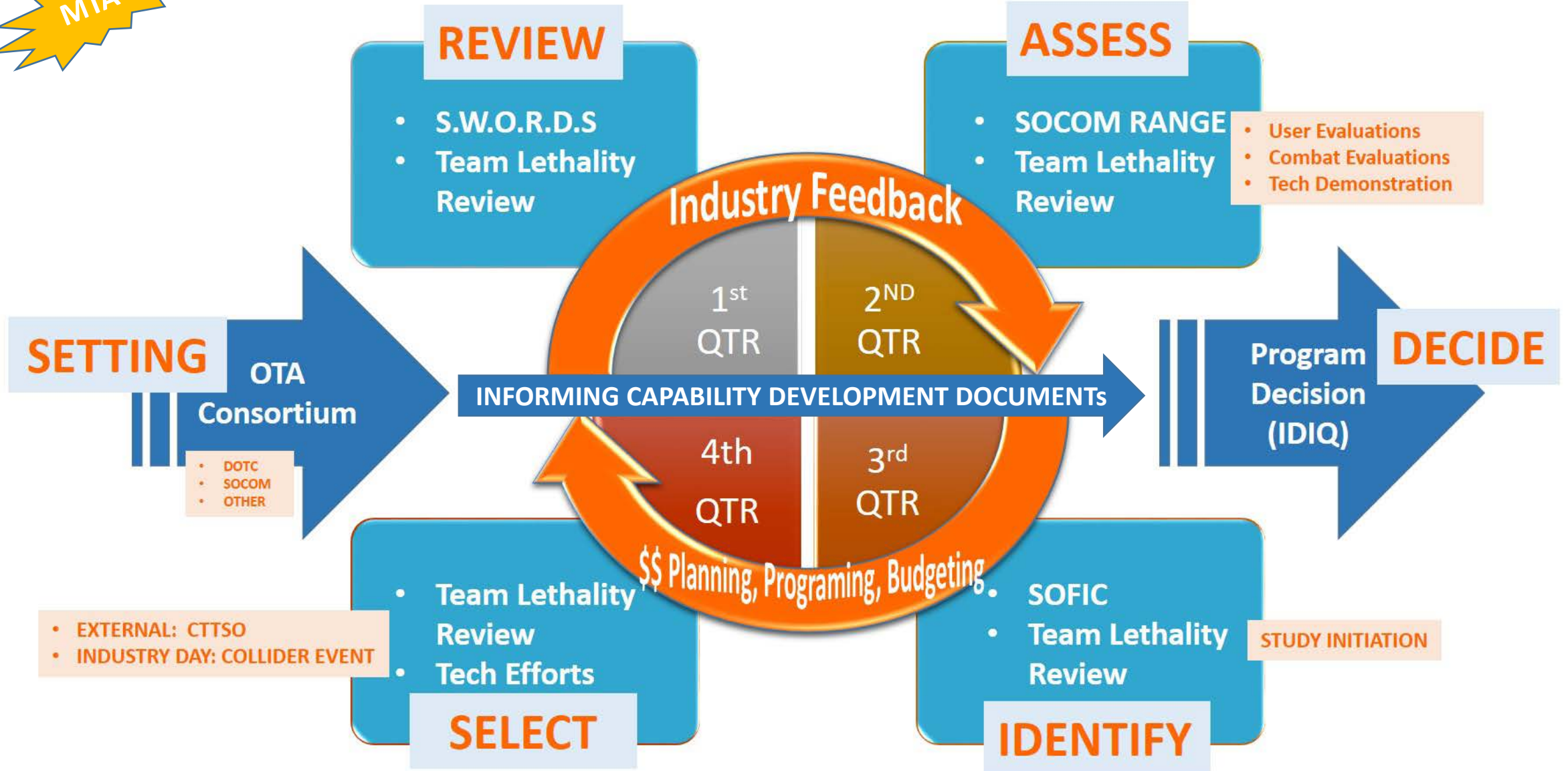
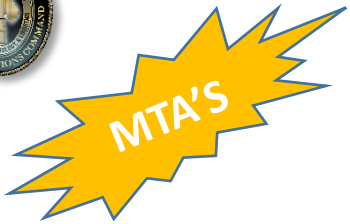
LTC Marcos Cervantes
Program Manager SOF Lethality
“Delivering Dominance”





S.M.A.R.T. Cycle: Capability Set Development

(Simplified Material Acquisition for Rapid Transition)

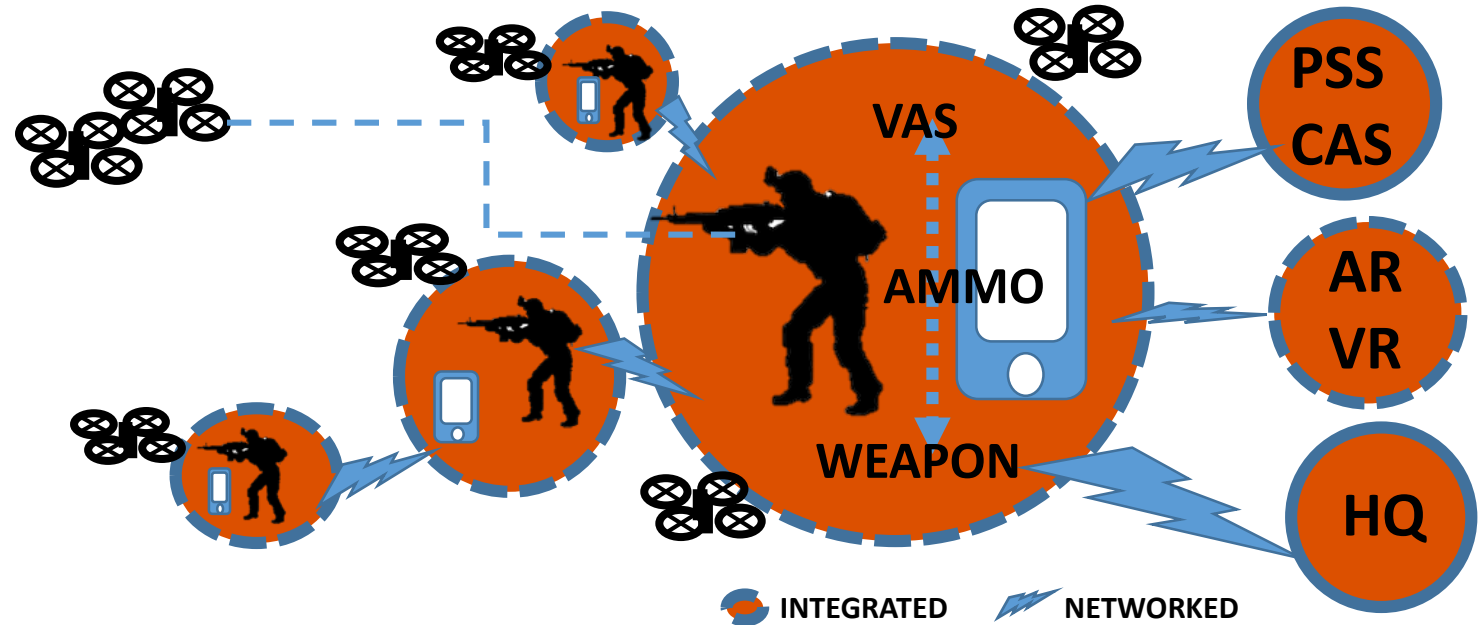
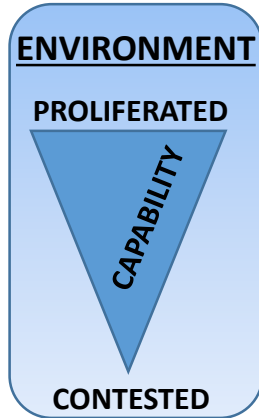


Lethal Integrated Operator – Networked

Tech Interest Items Needed > 2 Years

LION CAPABILITY SET (REQUIREMENTS)

- LION CORE
- LION URBAN
- LION RECCE
- LION ASSAULT-DEMO
- LION MOUNTED



★ Precision Strike (PSS) & Ammunition

- PSS: Loiter Capability (Multiple Attack Flight Profiles)
- PSS: Munition Development (Recoverable)
- PSS: Operate in a GPS Denied Environment
- Breaching
- Riles (Sniper): 6.5 CM, .338 NM, .300 NM
 - Cartridge Types: Precision, Armor Penetration
- Machine Gun: 6.5 CM, .338 NM
 - Ball, One-Way Trace, Reduced Range, Blank, etc.
- Insertion of Lightweight Case Technology (All Cal.)
- Medium / Large Caliber Improved Fusing and Terminal Effects (30mm & 105mm) – Gunships
- Image based guidance

★ Weapons and Accessories

- Assault Machine Gun: 6.5 CM & Rule of “10 Fold”
 - Under 14lbs
 - Increase current barrel life by 10F
 - Reduce Thermal and Decibel Signature by 10F
 - Suppression Technology Increased by 10F
 - Reduce Recoil and Blowback to Operator by 10F
- Kinetic CUAS Target Engagement Systems
 - W/ Ground Applications (i.e. Smart Shooter) Fire Control
 - Directed Energy

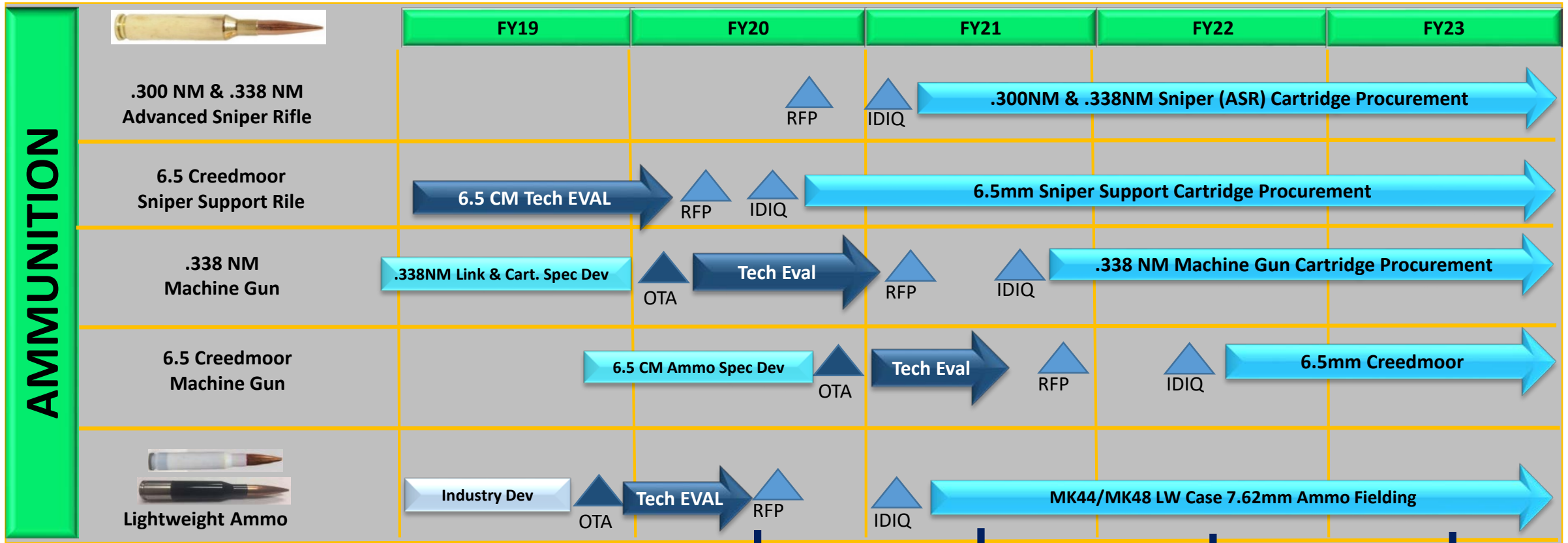
★ Visual Augmentation Systems (VAS)

- Next Generation Identification and Characterization of Targets
- Means to turn information into decision quality data (via Heads up Display)
- Human-machine interface to make the data accessible and usable to all SOF echelons
- Ability to Network systems (Wired and Wireless)
- Reduce Wired Profile of systems
- IFF for Close Air Support (CAS)



Ammunition Portfolio Overview

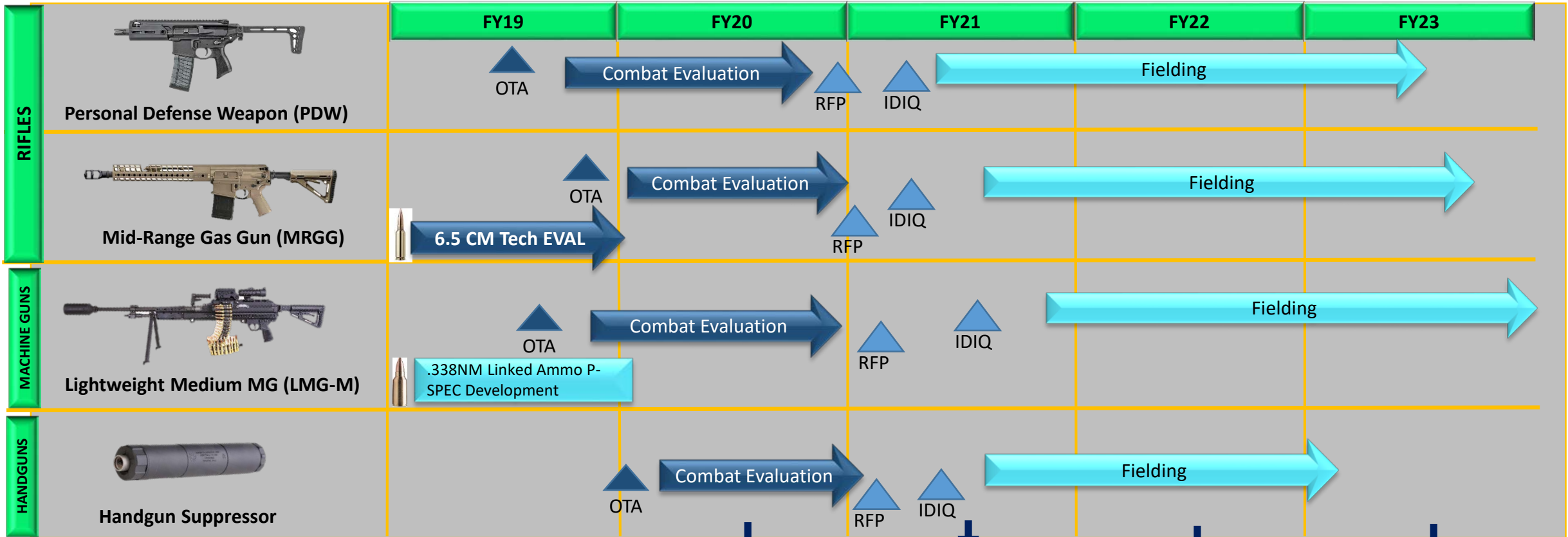
(Air Delivered, Bullet, Demolition & Shoulder Launched)





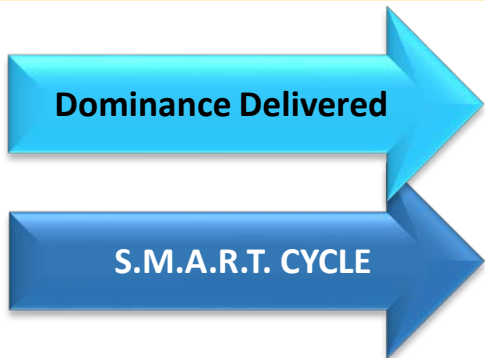
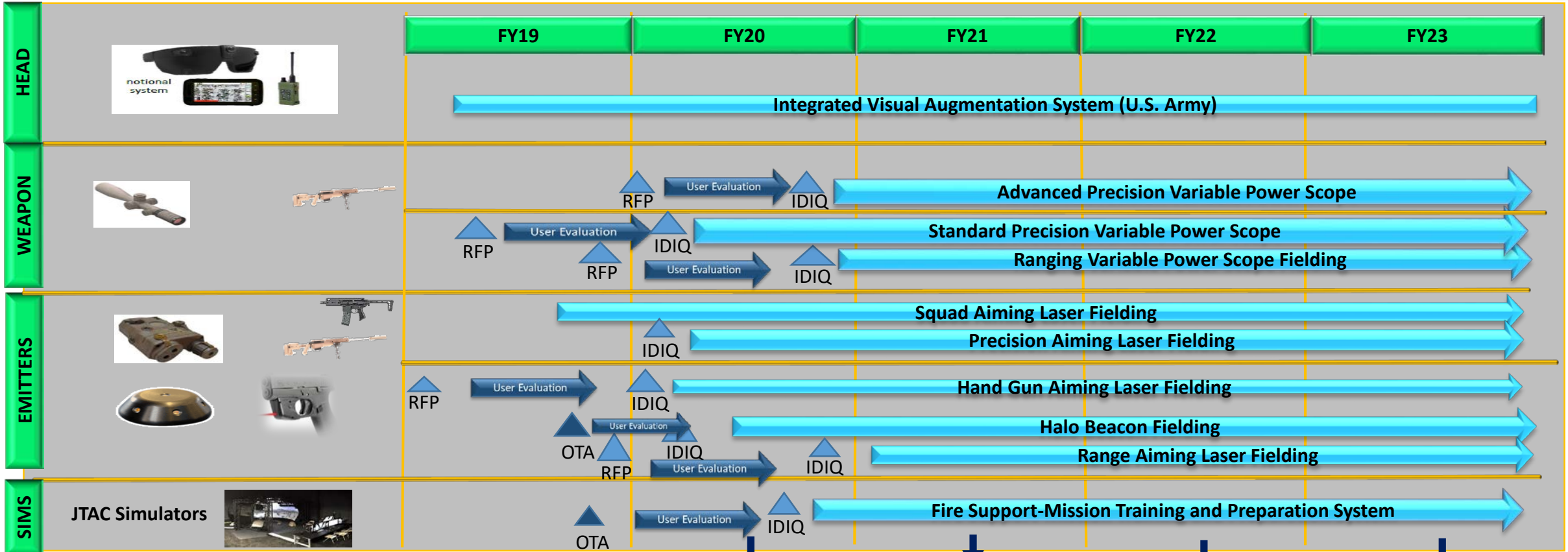
Weapons Portfolio Overview

(Rifles, Machine Guns, Handguns, Ammunition)



Visual Augmentation Systems Portfolio Overview

(Head Mounted, Weapons Mounted, Emitters, One World Simulations)





Organic Precision Strike Systems Overview

(Air, Ground, Maritime)

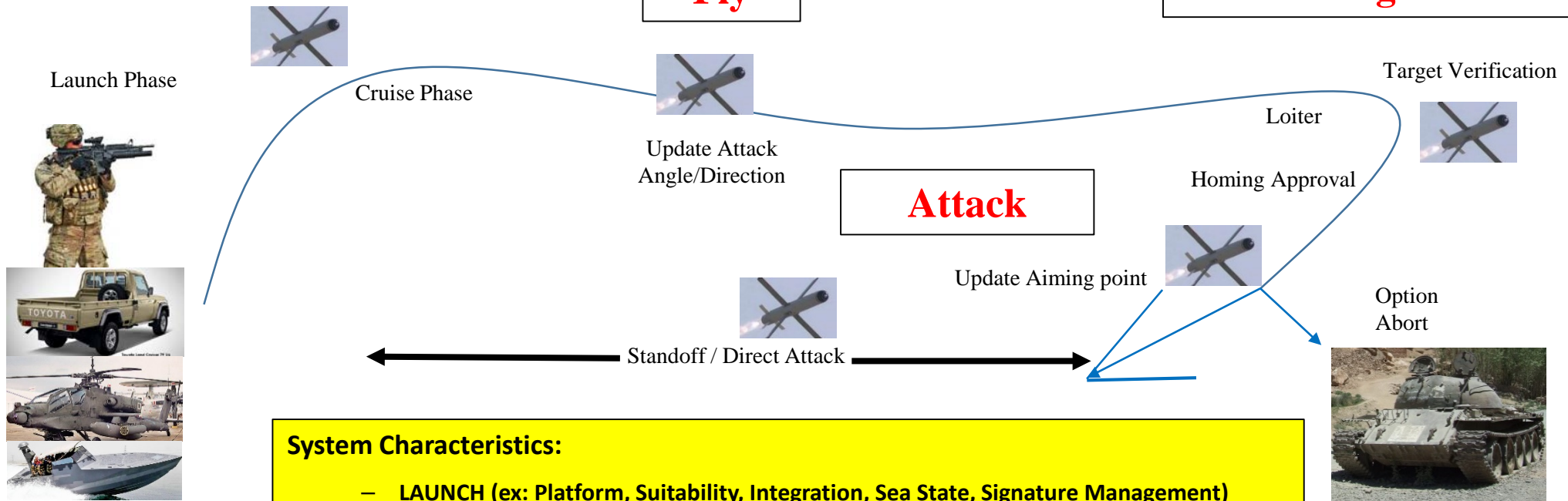


Provide organic capability at the unit level to strike static and mobile targets in near-to-far range spectrum in ground, air and maritime domains while minimizing collateral damage.

Launch

Fly

Target



System Characteristics:

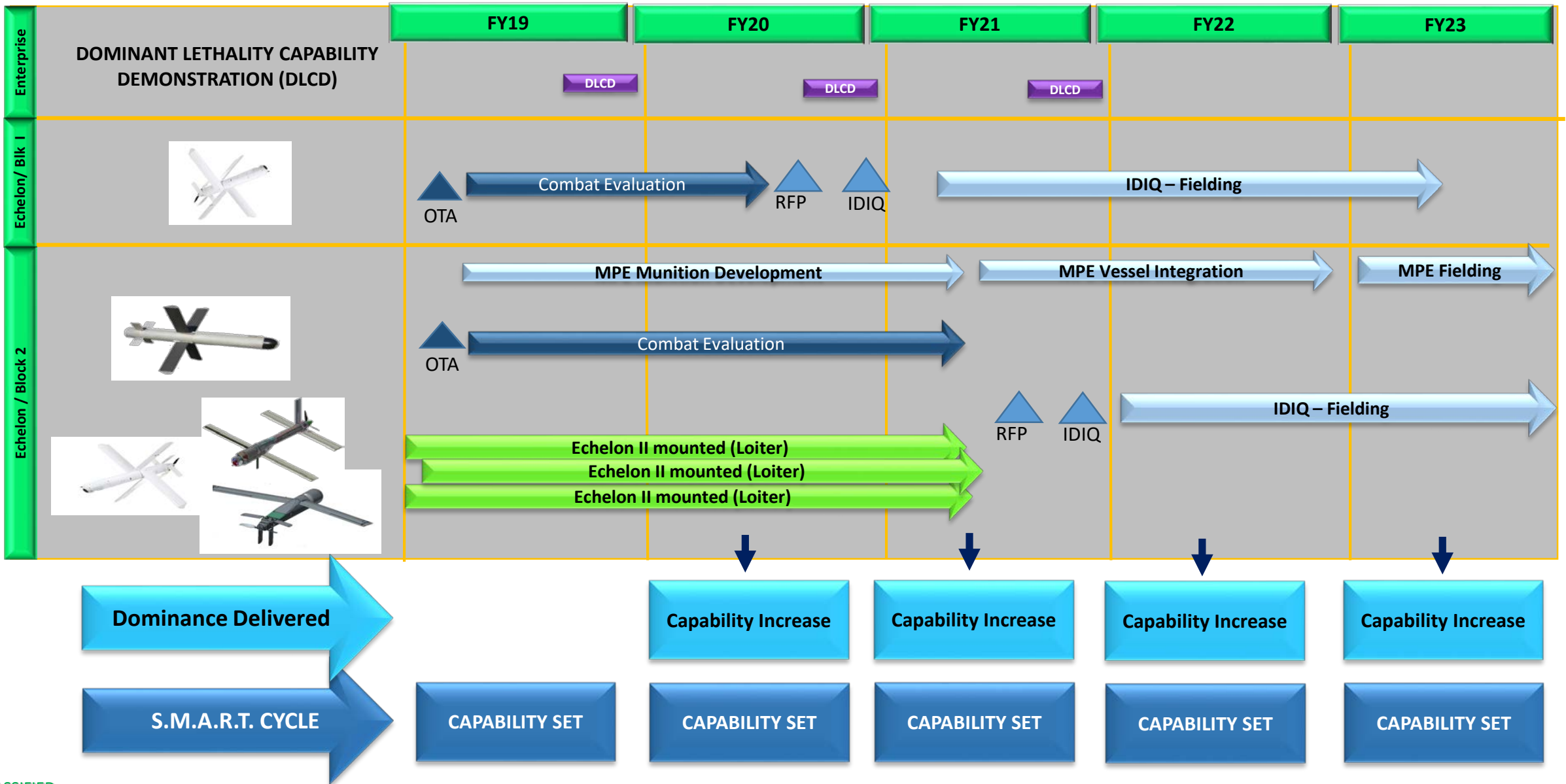
- LAUNCH (ex: Platform, Suitability, Integration, Sea State, Signature Management)
- FLY (ex: Loiter, Speed, Communication, Range, Navigation Denied)
- Target (ex: Mobile vs Fixed and Approach Angle)
- Attack (ex: Waive off, Munition Recoverability, Collateral Damage, Final Flight Profile)



Organic Precision Strike Systems Portfolio Overview



(Air, Ground, Maritime)





Ammo, Demolitions, Breaching: Small Caliber

Advanced Sniper Rifle (ASR) Ammunition

- 2018 National Defense Strategy acknowledged a Gap between US Forces and our adversaries relating to conventional and unconventional weapons
- Contract for procurement of .300 Norma Mag & .338 Norma Mag ammunition
- Ammunition will be built to Government Specifications



ACQUISITION STRATEGY	PERIOD OF PERFORMANCE	MILESTONES
<ul style="list-style-type: none"> • Full and Open Competition • IDIQ Contract 	<ul style="list-style-type: none"> • 5 Years 	<ul style="list-style-type: none"> • RFP Release: 2nd QTR FY20 • Contract Award: 1st QTR FY21
POINT OF CONTACT	FUNDING	CURRENT CONTRACT/OEM
<ul style="list-style-type: none"> • USSOCOM SOF AT&L, Technology & Industry Liaison Office (TILO) (813) 826-9482 	<ul style="list-style-type: none"> • \$20M 	<ul style="list-style-type: none"> • N/A



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
<ul style="list-style-type: none"> • Full and Open Competition • IDIQ Contract 	<ul style="list-style-type: none"> • 5 Years 	<ul style="list-style-type: none"> • RFP Release: 1st QTR FY20 • Contract Award: 3rd QTR FY20
POINT OF CONTACT	FUNDING	CURRENT CONTRACT/OEM
<ul style="list-style-type: none"> • USSOCOM SOF AT&L, Technology & Industry Liaison Office (TILO) (813) 826-9482 	<ul style="list-style-type: none"> • \$20M 	<ul style="list-style-type: none"> • 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
<ul style="list-style-type: none"> • Full and Open Competition • IDIQ Contract 	<ul style="list-style-type: none"> • 5 Years 	<ul style="list-style-type: none"> • OTA Award supporting LMG-M Program: 1st QTR FY20 • RFP Release: 1st QTR FY21 • Contract Award: 3rd QTR FY21
POINT OF CONTACT	FUNDING	CURRENT CONTRACT/OEM
<ul style="list-style-type: none"> • USSOCOM SOF AT&L, Technology & Industry Liaison Office (TILO) (813) 826-9482 	<ul style="list-style-type: none"> • \$20M 	<ul style="list-style-type: none"> • 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
<ul style="list-style-type: none"> • Full and Open Competition • IDIQ Contract 	<ul style="list-style-type: none"> • 5 Years 	<ul style="list-style-type: none"> • OTA Multi-Award for Samples: 3rd QTR FY19 • RFP Release: 2nd QTR FY20 • Contract Award: 1st QTR FY21
POINT OF CONTACT	FUNDING	CURRENT CONTRACT/OEM
<ul style="list-style-type: none"> • USSOCOM SOF AT&L, Technology & Industry Liaison Office (TILO) (813) 826-9482 	<ul style="list-style-type: none"> • \$25M 	<ul style="list-style-type: none"> • N/A



Personal Defense Weapon (PDW)

Personal Defense Weapon (PDW)

- Provide versatile capabilities to SOF Operators for an Integrated Receiver Group (IRG)
- 2018 National Defense Strategy acknowledged a Gap between US Forces and our adversaries relating to conventional and unconventional weapons
- PDW Kit is a concealable .300 Blackout (BLK) upper receiver group and buttstock kit solution for the M4A1 platform
- PDW Kit consists of .300 BLK URG, 7.62 suppressor, folding buttstock, 5.56 training solution, reconfigurable ergonomic components, and 300BLK magazines



ACQUISITION STRATEGY	PERIOD OF PERFORMANCE	MILESTONES
<ul style="list-style-type: none"> • Middle Tier Acquisition 	<ul style="list-style-type: none"> • 3 Years 	<ul style="list-style-type: none"> • Combat Evaluation June 19 – May 20 • Decision based on Evaluation June 20 • Request for Proposal Aug 20 • Contract Award: 1st Qtr. FY21
POINT OF CONTACT	FUNDING	CURRENT CONTRACT/OEM
<ul style="list-style-type: none"> • USSOCOM SOF AT&L, PM SL - Weapons (813) 826-4638 	<ul style="list-style-type: none"> • \$1.3M Prototype • \$2.5M Fielding 	<ul style="list-style-type: none"> • DOTC OTA



Mid-Range Gas Gun - Sniper (MRGG-S)

Mid-Range Gas Gun - Sniper

- The MRGG Project will provide 6.5 Creedmoor sniper support rifle that will decrease weight, increase range, and provide more accuracy over current sniper support 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
<ul style="list-style-type: none"> • Middle Tier Acquisition 	<ul style="list-style-type: none"> • 5 Year IDIQ 	<ul style="list-style-type: none"> • Vendor Shoot & User Down Select Jun 19 • Combat Evaluation Oct 19 – May 20 • Decision based on Evaluation June 20 • Request for Proposal Aug 20 • Contract Award: 2nd Qtr. FY21
POINT OF CONTACT	FUNDING	CURRENT CONTRACT/OEM
<ul style="list-style-type: none"> • USSOCOM SOF AT&L, PM SL - Weapons (813) 826-4638 	<ul style="list-style-type: none"> • \$1.5M Prototype • \$10M Fielding 	<ul style="list-style-type: none"> • 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



ACQUISITION STRATEGY	PERIOD OF PERFORMANCE	MILESTONES
<ul style="list-style-type: none"> • Middle Tier Acquisition 	<ul style="list-style-type: none"> • 5 Year IDIQ 	<ul style="list-style-type: none"> • Combat Evaluation Oct 19 – May 20 • Decision Point Jun 20 • Request for Proposal Oct 20 • Contract Award: 3rd Qtr. FY21
POINT OF CONTACT	FUNDING	CURRENT CONTRACT/OEM
<ul style="list-style-type: none"> • USSOCOM SOF AT&L, PM SL - Weapons (813) 826-4638 	<ul style="list-style-type: none"> • \$1.2M Prototype • \$49M Fielding 	<ul style="list-style-type: none"> • DOTC OTA



Handgun Suppressor

Suppressor

- Replace the current MK27 Handgun Suppressor
- Reduced weight & reduced audible signature
- 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
<ul style="list-style-type: none"> • Middle Tier Acquisition 	<ul style="list-style-type: none"> • 5 Year IDIQ 	<ul style="list-style-type: none"> • MTA Authority Granted Sep 19 • Evaluation for Down Select Jan 20 • Acquisition of Prototypes Feb 20 • Request for Proposal Nov 19 • Contract Award 2nd Qtr. FY 21
POINT OF CONTACT	FUNDING	CURRENT CONTRACT/OEM
<ul style="list-style-type: none"> • USSOCOM SOF AT&L, PM SL - Weapons (813) 826-4638 	<ul style="list-style-type: none"> • \$500K Prototype • \$2M Fielding 	<ul style="list-style-type: none"> • USSOCOM OTA

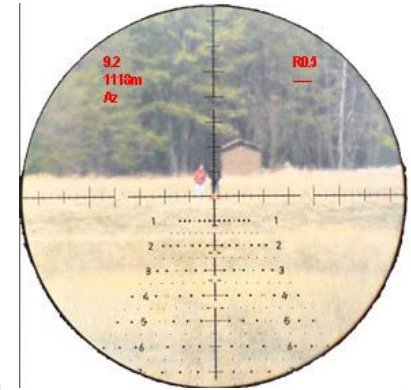


Advanced Precision Variable Powered Scope (P-VPS)



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	PERIOD OF PERFORMANCE	MILESTONES
<ul style="list-style-type: none"> • Full and Open Competition • IDIQ Contract 	<ul style="list-style-type: none"> • 5 Years + 5 option years 	<ul style="list-style-type: none"> • RFP Release: November 2019 • Receive Proposals: 2nd QTR FY20 • Source Selection: 3rd QTR FY20 • Contract Award: 4th QTR FY20
POINT OF CONTACT	FUNDING	CURRENT CONTRACT/OEM
<ul style="list-style-type: none"> • USSOCOM SOF AT&L, Technology & Industry Liaison Office (TILO) (813) 826-9482 	<ul style="list-style-type: none"> • \$49M 	<ul style="list-style-type: none"> • N00164-18-R-JQ60

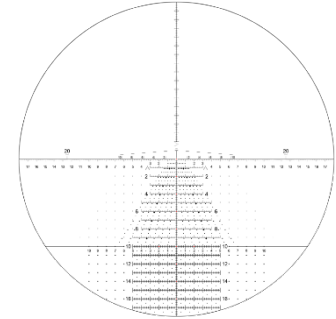


Standard Precision Variable Powered Scope (P-VPS)



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.
- T3 reticle
- First Focal Plane
- Variable power
 - Standard: 3-7X to greater or equal to 24X continuous zoom
 - Long Range: 3-7X to greater or equal to 32X continuous zoom

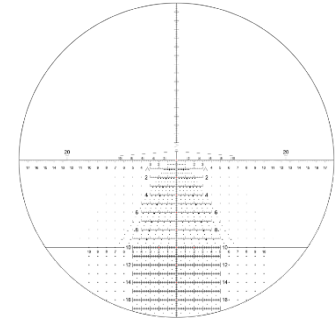


ACQUISITION STRATEGY	PERIOD OF PERFORMANCE	MILESTONES
<ul style="list-style-type: none"> • Full and Open Competition • IDIQ Contract 	<ul style="list-style-type: none"> • 5 Years + 5 option years 	<ul style="list-style-type: none"> • RFP Release: February 2019 • Receive Proposals: April 2019 • Source Selection: 4th QTR FY19 • Contract Award: 1st QTR FY20
POINT OF CONTACT	FUNDING	CURRENT CONTRACT/OEM
<ul style="list-style-type: none"> • USSOCOM SOF AT&L, Technology & Industry Liaison Office (TILO) (813) 826-9482 	<ul style="list-style-type: none"> • \$49M 	<ul style="list-style-type: none"> • N00164-19-R-JQ57

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



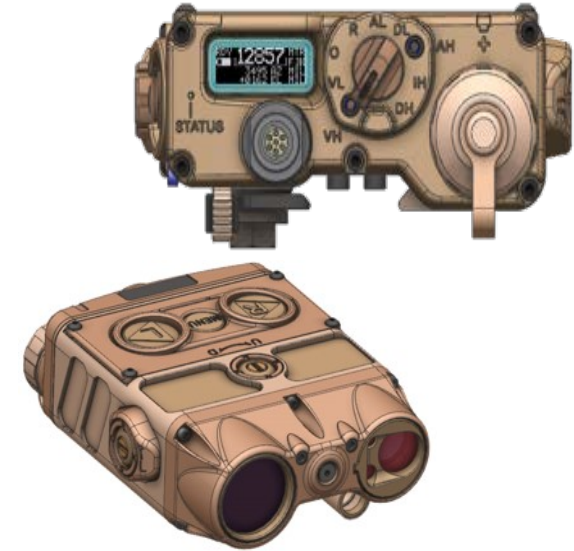
<p>ACQUISITION STRATEGY</p>	<p>PERIOD OF PERFORMANCE</p>	<p>MILESTONES</p>
<ul style="list-style-type: none"> • Full and Open Competition • IDIQ Contract 	<ul style="list-style-type: none"> • 5 Years + 5 option years 	<ul style="list-style-type: none"> • RFP Release: 4th QTR FY19 • Receive Proposals: 1st QTR FY20 • Source Selection: 2nd QTR FY20 • Contract Award: 4th QTR FY20
<p>POINT OF CONTACT</p>	<p>FUNDING</p>	<p>CURRENT CONTRACT/OEM</p>
<ul style="list-style-type: none"> • USSOCOM SOF AT&L, Technology & Industry Liaison Office (TILO) (813) 826-9482 	<ul style="list-style-type: none"> • \$45M 	<ul style="list-style-type: none"> • N00164-20-R-JQ71



Precision Aiming Laser (PAL)

Miniature Aiming System – Laser (MAS L)

- Tactical laser for the Advanced Sniper Rifle (ASR) and Anti-Material Rifle (AMR)
- Compatible with clip-on night sensors and air platform night sensors to effectively define target locations during engagements
- Combines the range finder with a ballistics and environmental sensor/processor to include wind-sensing from the shooter to the target
- Tactical laser for the Advanced Sniper Rifle (ASR) and Anti-Material Rifle (AMR)
- The ballistics and environmental processing function could be embedded within the laser device, detached as a module, or provided by a handheld instrument.
- Capability is necessary for “smart-scope” integration on SOF small arms.



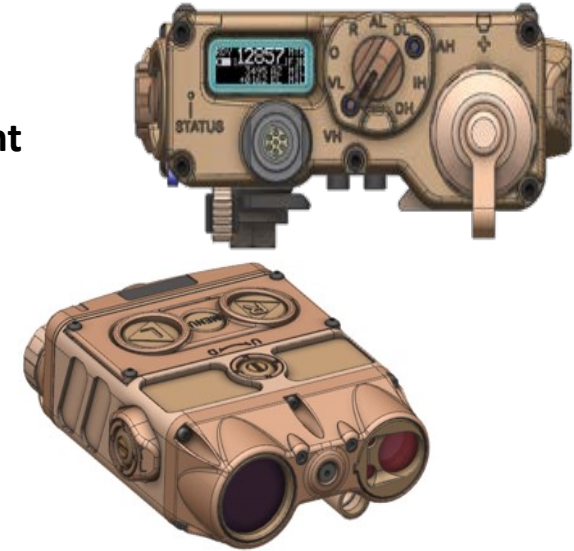
ACQUISITION STRATEGY	PERIOD OF PERFORMANCE	MILESTONES
<ul style="list-style-type: none"> • Full and Open Competition • IDIQ Contract 	<ul style="list-style-type: none"> • 5 Years + 5 option years 	<ul style="list-style-type: none"> • RFP Release: 10 Dec 2018 • Receive Proposals: 30 April 2019 • Source Selection: 4nd QTR FY19 • Contract Award: 1st QTR FY20
POINT OF CONTACT	FUNDING	CURRENT CONTRACT/OEM
<ul style="list-style-type: none"> • USSOCOM SOF AT&L, Technology & Industry Liaison Office (TILO) (813) 826-9482 	<ul style="list-style-type: none"> • \$35.3M 	<ul style="list-style-type: none"> • N00164-18-R-JQ56



Ranging Aiming Laser (RAL)

Miniature Aiming System – Laser (MAS L)

- Aiming, Illuminating Lasers and Laser Range Finder (LRF) for the Lightweight Machine Guns (MK46, MK48, M249, M240B), combat rifles (MK17, M4), and sniper support rifles (M110A1, MK20, MRGG-S)
- Compatible with clip-on night sensors and air platform night sensors to effectively define target locations during engagements
- LRF acquisition to 1000m



ACQUISITION STRATEGY	PERIOD OF PERFORMANCE	MILESTONES
<ul style="list-style-type: none"> • Full and Open Competition • IDIQ Contract 	<ul style="list-style-type: none"> • 5 Years + 5 option years 	<ul style="list-style-type: none"> • RFP Release: 4th QTR FY19 • Receive Proposals: 1st QTR FY20 • Source Selection: 2nd QTR FY20 • Contract Award: 4th QTR FY20
POINT OF CONTACT	FUNDING	CURRENT CONTRACT/OEM
<ul style="list-style-type: none"> • USSOCOM SOF AT&L, Technology & Industry Liaison Office (TILO) (813) 826-9482 	<ul style="list-style-type: none"> • \$44.9M 	<ul style="list-style-type: none"> • N00164-18-R-JQ(TBD)



Handgun Aiming Laser (HAL)

Miniature Aiming System – Laser (MAS L)

- Near Infrared laser device
- Family of Low Visibility and Concealable Pistols (FLVCP)
- New requirement within VAS portfolio



ACQUISITION STRATEGY

- Full and Open Competition
- IDIQ Contract

PERIOD OF PERFORMANCE

- 5 Years + 5 option years

MILESTONES

- RFP Release: 10 Dec 2018
- Receive Proposals: May 2019
- Source Selection: 4th QTR FY19
- Contract Award: 1st QTR FY20

POINT OF CONTACT

- USSOCOM SOF AT&L, Technology & Industry Liaison Office (TILO)
(813) 826-9482

FUNDING

- \$5.5M

CURRENT CONTRACT/OEM

- N00164-18-R-JQ48



JTAC Fire Support-Mission Training & Preparation (FS-MTPS)

JTAC Immersive—

Realistic, high fidelity, interactive, immersive training & mission rehearsal system for Tactical Air Control Party (TACP) and Combat Controller (CCT) Joint Terminal Attack Controllers (JTACs)



ACQUISITION STRATEGY

- Full and Open Competition
- IDIQ Contract

PERIOD OF PERFORMANCE

- 5 Years

MILESTONES

- RFP Release: 4th QTR FY19
- Receive Proposals: 4th QTR FY19
- Source Selection: 2th QTR FY20
- Contract Award: 3rd QTR FY20

POINT OF CONTACT

- PEO-STRI

FUNDING

- \$49M

CURRENT CONTRACT/OEM

- None

Maritime Precision Engagement (MPE)

- **Maritime Precision Engagement (MPE) Munition**
 - MPE will be mounted on SOF Combatant Craft Medium (CCM) and Combatant Craft Heavy (CCH) Maritime Vessels.
 - 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

- AMTC Topic Announcement and Industry Day: 1st QTR FY19.
- Dominant Lethality Capability Demo (DLCD): 3rd Qtr FY19, 3rd Qtr FY20, 3rd Qtr FY21.

POINT OF CONTACT

- USSOCOM SOF AT&L, Technology & Industry Liaison Office (TILO)
(813) 826-9482

FUNDING

- \$53M

CURRENT CONTRACT/OEM

- DOTC 19-01
- AMTC GM 002



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 ground, air and maritime domains 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

- AMTC Topic Announcement and Industry Day: 1st QTR FY19.
- Dominant Lethality Capability Demo (DLCD): 3rd Qtr FY19, 3rd Qtr FY20, 3rd Qtr FY21.

POINT OF CONTACT

- USSOCOM SOF AT&L, Technology & Industry Liaison Office (TILO)
(813) 826-9482

FUNDING

- \$10M

CURRENT CONTRACT/OEM

- DOTC 19-01
- AMTC GM 002