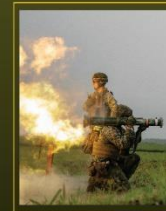


## EOD Army Panel

19 October 2021  
Future Forces Capabilities Conference

**COL Russell Hoff**  
Project Manager  
(973) 724-7041  
[russell.v.hoff.mil@mail.mil](mailto:russell.v.hoff.mil@mail.mil)

**Mr. Joseph Pelino**  
Deputy Project Manager  
(973) 724-3457  
[joseph.pelino.civ@mail.mil](mailto:joseph.pelino.civ@mail.mil)



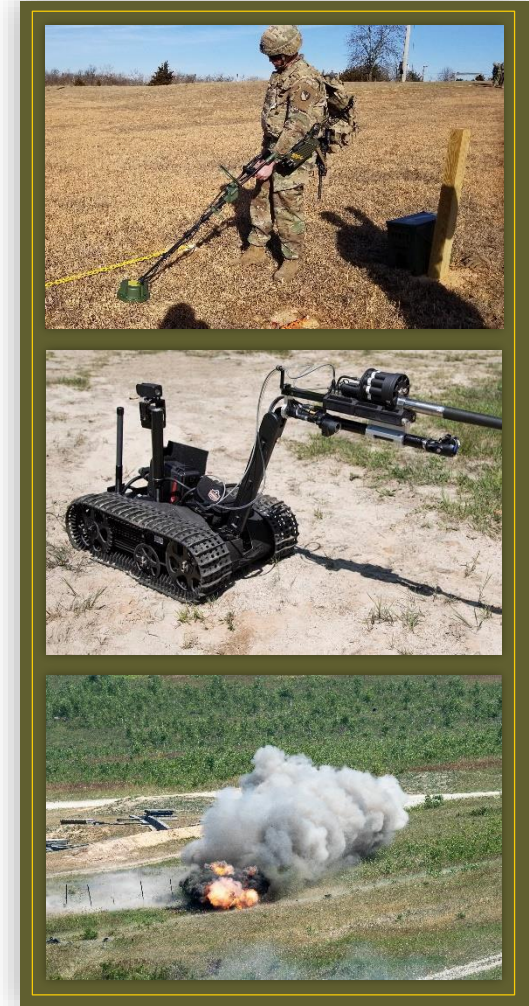
# Agenda



**ON EVERY  
MISSION**

**60 YEARS of ACQUISITION EXCELLENCE**

- PM CCS Overview
- Explosive Hazard Detection Programs
  - AN/PSS-14C Mine Detecting Set
- EOD Programs
  - EOD Tools and Equipment Kit (ETEK)
  - Enhanced Robotic Program Render Safe (ERP RS)
- Demolition Programs
  - RF-RAMS Receivers M17A1/M85A1
  - Anti-Personnel Obstacle Breaching System (APOBS)
  - Mine Clearing Line Charge (MICLIC)
  - Breaching Capability Development - Mounted



- **Manage 44% of the Army's conventional munition lethality**
- **384 products: 316 Class V, 59 Class VII & 9 RDT&E**
- **Average 79 Contracting Actions/Year**
- **Oldest PMO in the US Army, 1961 "PM-Selected Ammunition"**



## **Mission**

**Provide dominant and innovative lethal and protective capabilities for the Joint Warfighter through acquisition excellence**

## **Vision**

**Skilled innovative team, empowered to deliver dominating close combat capabilities**

# Team PM CCS

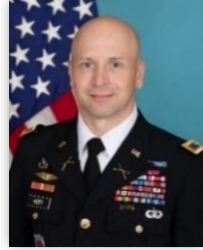


**ON EVERY MISSION**

**60 YEARS of ACQUISITION EXCELLENCE**

*Provide dominant and innovative lethal and protective capabilities for the Joint Warfighter through acquisition excellence*

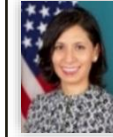
**ON EVERY MISSION**



**Project Manager**  
COL Russell Hoff



**Deputy PM**  
Joe Pelino



**Business Division Manager**  
Anita Polesky



**Chief, Product Support**  
Fred Willecke

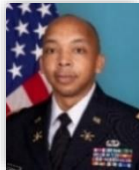


**Director, Program Integration & International Division**  
Michael O'Grady (Actg)



**Manager, Technology Management Division**  
John Esposito

**Product Manager  
Terrain Shaping Obstacles**



**Product Manager**  
LTC Isaac Cuthbertson



**Deputy PdM**  
Ken Heider

**Asst Product Manager(s)**  
CPT (P) Macias (Inbound)

**Branch Chiefs**  
Spider & SAVO: Sean Stevens  
TSO: Eli Vainchenker

**Product Director  
Combat Armaments & Protection Systems**



**Product Director**  
David Millette



**Deputy PD**  
Don Palathinkal

**Asst Product Manager**  
MAJ Pfromm (Inbound)  
**G&PS Branch Chief**  
Tinesha Nicholas

**Team Leads**  
Shoulder Launched: Phillip Lawson  
Grenades: Anthony Sacco (Actg)  
Protection Systems: Derek DeReiter

**Product Director  
Demolitions & Countermeasures**



**Product Director**  
Michael Burke (Actg)



**Deputy PD**  
Hugh MacMillan (Actg)

**Asst Product Manager**  
CPT Fite (Inbound)

**Branch Chiefs**  
Pyrotechnics: Harvard Yuen  
Demolitions: Tim Healy

# PM CCS Portfolio



**ON EVERY MISSION**

**60 YEARS of ACQUISITION EXCELLENCE**

## Grenades



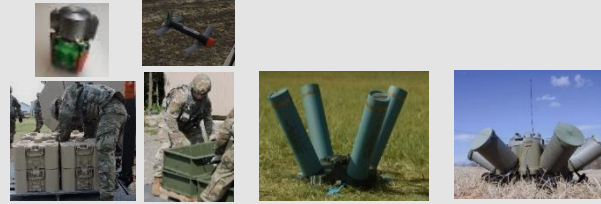
M67 Fragmentation Hand Grenade

M106 SOD-V<sub>R</sub>

M228 Practice Fuze

Smoke Grenades

## Terrain Shaping Obstacle



Close Terrain Shaping Obstacle

Standoff Activated Volcano Obstacle (SAVO)

Spider

## Protection Systems



AN/PSS-14C Hand Held Mine Detector

SNS-RDD

## Intermediate Force Capabilities



SS-ADT

Acoustic Hailing Device

Taser

Munitions

## Demolitions



SLAM

Claymore

Shaped Charge

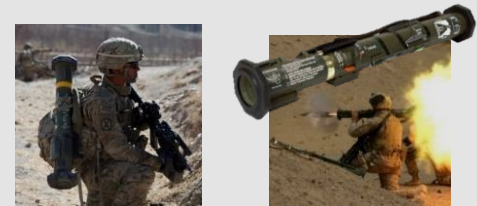
Sheet Explosive

RF-Remote Activation Munition System

Det Cord

C-4 Block

## Shoulder Launched Munitions



Bunker Defeat Munition

AT4 & AT4CS

## Pyrotechnics



Signals

Countermeasure Flares

Simulators

## EOD



Explosive Ordnance Response Kit

Smart Ray Vision (SRV)

## Breaching Systems



APOBS



MICLIC

# AN/PSS-14C Mine Detecting Set



ON **EVERY**  
**MISSION**

60 YEARS of ACQUISITION EXCELLENCE

## Program Description

- Lightweight self-contained handheld mine detector system that is operated by a single Soldier
- The AN/PSS-14B/C is an enabler for Soldier Lethality as it enables soldier maneuver by enhancing the probability and speed of detection of buried landmines and IEDs allowing for increased speed of dismounted operations making the unit more efficient and lethal.
- Vendor: L3Harris

## Performance Capabilities

- AN/PSS-14B consists of a Coupled Ground Penetrating Radar (GPR) and Metal Detector (MD) that provides detection of traditional conventional mines
- AN/PSS-14C consists of a Decoupled GPR and MD, that provides enhanced detection of hard to find, low/no metal IED components, along with traditional conventional mines

AN/PSS-14C hand-held detector is the final configuration for the program of record, providing a more comprehensive capability





# Enhanced Robotic Payloads Render Safe (ERP RS)



ON **EVERY**  
**MISSION**

60 YEARS of ACQUISITION EXCELLENCE

## Program Description

- Approved requirement
- Suite of modular capabilities designed with common interfaces to provide increased standoff, situational awareness, disruption capability and dexterity to respond to current and emergent EOD, CBRN and Engineer requirements. Utilizes open architecture for integration with MTRS Inc. II and CRS-H platforms to form the Army's next generation platform adaptable robotics systems.

## Overview

- **Highly Dexterous Manipulation System (HDMS)**- Provides the ability to remotely manipulate objects with natural human motions and stability in a highly dexterous manner within a defined work area.
- **Multi-shot Disruptor (MSD)**- Standoff disruption tool, compatible with all types of Percussion Actuated Non-electric (PAN) ammunition- including water shot, that enables EOD technicians to remotely select appropriate disruption ammunition to mitigate threat of multiple explosive hazards.
- **Precision Aiming Module (PAM)**- Enables fine adjustments for positioning of multi-shot disruptor into position for disruption and/or render safe of explosive hazards.



Highly Dexterous Manipulation System



Multi-shot Disruptor



Precision Aim Module



# RF-RAMS M17A1 / M85A1



ON **EVERY**  
**MISSION**

60 YEARS of ACQUISITION EXCELLENCE

## Program Description

- The Radio Frequency (RF) Remote Activation Munition System kit is a Demolition Firing Device system that provides dismounted soldier wireless initiation capability of explosives, demolition charges and munitions. The M17A1 is an explosive RF receiver which, after receipt of a wireless coded signal from the MK26 Transmitter (supplied in the M152/MK152 Mod 0 kit), is capable of detonating its own explosive lead/non-electric blasting cap and the attached demolition charge(s)
- Fielding ongoing to Engineer Clearance Companies
- CASCOM to do a close-out brief to the AMRCoC in FY21
- Vendor: Mnemonics Inc. Melbourne FL



## Performance Capabilities

- Packed 6 Expendable Receivers in PA108 container
- M17A1 Rec Field Programmable by M/MK26 Transmitter
- Uses Standard CR123 Battery
- Less Time on Target & reduce exposure to enemy fires
- M85A1 is the inert functional training device for the M17A1



6 Each M17A1 Tactical  
Per PA108 Container

2 Each M85A1 Trainers  
Per PA108 Container

# Anti-Personnel Obstacle Breaching System (APOBS) MK 7 Mod 2



ON **EVERY**  
**MISSION**

60 YEARS of ACQUISITION EXCELLENCE

## Program Description

- The APOBS is a self contained, one shot breaching system. It uses a rocket to deploy a linear demolition charge consisting of 108 grenades spaced on a length of det cord encased in a protective sleeve over a target obstacle.
- APOBS is in the production and sustainment life cycle phase
- Configuration management is owned by the USMC.
- Vendors: Nammo Perry, Inc., Perry FL; Ensign Bickford Aerospace & Defense, Graham, KY

## Performance Capabilities

- Two (2) man portable; 125 pound total tactical weight
- Time delay and command firing modes
- Breaches a footpath 0.6 meter wide, 45 meter long through antipersonnel land mine fields and complex wire obstacles



# APOBS Launchable Reusable Trainer (ALRT) Update



**ON EVERY  
MISSION**

**60 YEARS of ACQUISITION EXCELLENCE**

## Program Description

- The APOBS Launchable Reusable Trainer (ALRT) is DEVCOM developed kit that can be used by Soldiers to deploy an inert line charge using the actual APOBS system allowing them to duplicate actual APOBS operations.
- System has obtained a Safety Confirmation and is being tested in Soldier Evaluations
- DEVCOM/PM CCS is working with User Proponent to generate requirements

## Performance Capabilities

- Allows Soldiers to cost effectively train with the APOBS system without the need to deploy the energetic line charge
- Improve training to fill in the current learning gap to duplicate and launch the system in different tactical and environmental situations without firing tactical system.
- High potential for cost savings due to reusability of the inert line charge



# Mine Clearing Line Charge (MICLIC)



ON **EVERY**  
**MISSION**

60 YEARS of ACQUISITION EXCELLENCE

## Program Description

- The MICLIC is a mounted breaching system. It uses an MK22 rocket to deploy an M58 linear demolition charge consisting of 1800 pounds of C4 explosive over a target obstacle. The rocket is launched from a MK155 launcher mounted to an M200A1 trailer. The M68 is a reusable trainer for the M58.
- MICLIC is in the production and sustainment life cycle phase
- Configuration management is owned by the USMC for class V and Army or USMC depending on variant for class VII
- Vendors: American Ordnance, Middletown IA (M58); NSWC Indian Head, MD (MK22)



## Performance Capabilities

- M58 breaches a vehicle wide, 100 meter long path through mine fields
- M68 trainer can be used up to 3 times
- Ammo also employed from Assault Breacher Vehicle and Amphibious Assault Vehicle (M59 variant)



# Breaching Capability Development Mounted



ON **EVERY**  
**MISSION**

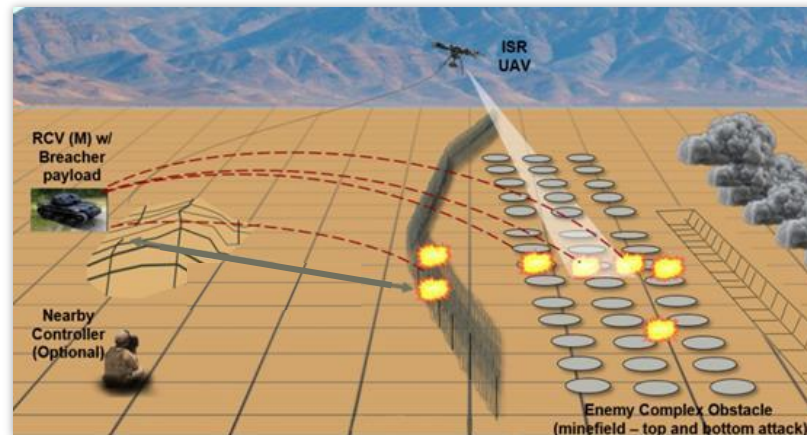
60 YEARS of ACQUISITION EXCELLENCE

## Program Description

- The Explosive Breacher concept is as a modular mission breaching payload.
- Technologies matured through the Next Generation Breaching Technologies S&T effort will be fully developed for fielding and integration initially onto the RCV-M.
- Establishment of a POR is anticipated in FY23.
- The target for fielding is currently matched to the projected fielding date for the RCV-M.

## Performance Capabilities

- High reliability neutralization of modern threat obstacles within a vehicle width, 150 meter long path
- 1-3 km employment standoff from obstacle removes Soldiers from breach
- Scalable/precision effects to customize breach lane dimensions



# FY22 Competitive Opportunities



**ON EVERY MISSION**

**60 YEARS of ACQUISITION EXCELLENCE**

FY22				
Program/ Item/ Description	Planned FY22 Dollars (\$M)	Planned Strategy	Contract Type	Anticipated Final RFP Release Date (QtrFY)
Close Terrain Shaping Obstacle (CTSO)- Inc 1 – Top Attack	\$10.3	C	Stand Alone OTA	1QFY22
M18A1 Claymore	\$9.9	C	IDIQ/FFP	1QFY22
DWEN MK160 & DWEL MK158 Delay Detonator	\$0.50	C	IDIQ/FFP	1QFY22
M456 Detonating Cord	\$ 4.70	C	IDIQ/FFP	1QFY22
Family of Sheet Explosives	\$7.00	C	IDIQ/FFP	1QFY22
M81 Igniter MN08	\$2.40	SBSA	IDIQ/FFP	1QFY22
M88 Volcano Canister	\$8.73	C	IDIQ/FFP	1QFY22
M34/M35 Simulators	\$1.70	C	IDIQ/FFP	2QFY22
XM919 Individual Assault Munition (IAM)	\$23M	C	IDIQ/FFP	2Q/FY22

Contract Strategy:

- C- Competitive
- SBSA - Small Bus Set-Aside
- NTIB - National Technology & Industrial Base

Contract Type:

- DLA- Defense Logistics Agency
- FFP -Firm Fixed Price
- IDIQ - Indefinite Delivery/ Indefinite Quantity
- DOTC - DoD Ordnance Technology Consortium
- CPFF - Cost-Plus-Fixed-Fee



- Continuing to produce, deliver, and field capabilities to warfighter and accelerating when possible: AN/PSS14-C, ETEK, RF RAMS M17A1, MICLIC
- Emerging Technologies: ERP RS Dual Army Dexterity System, MICLIC alternate explosive formulations
- Explosive Breacher – High-TRL solutions for payload delivery system and mine detection sensors are needed in FY22 for evaluation and system integration



ON **EVERY**  
**MISSION**

60 YEARS of ACQUISITION EXCELLENCE

# Questions?