



Project Manager Soldier Lethality

**PRECISION
Is the Standard**

Every Ounce Matters, Every Bullet Counts

Future Force Capabilities Conference

19 September 2022

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PM SOLDIER LETHALITY



Mission

Develop and Deliver Innovative and Relevant Small Arms Lethality to our Warfighters

Vision

Be the premier provider of integrated small arms weapon systems for our Warfighters, and our Allies and Partners

Priorities

1. Take Care of Our **People**
2. **Deliver Lethality** at the Speed of Relevance
3. Foster a culture of **Innovation** for our processes and products

Principles

- Alignment
- Collaboration & Teamwork
- Transparency & Communication
- Empowerment

Every Soldier Armed – Every Formation Ready



Project Manager Soldier Lethality Reorganization

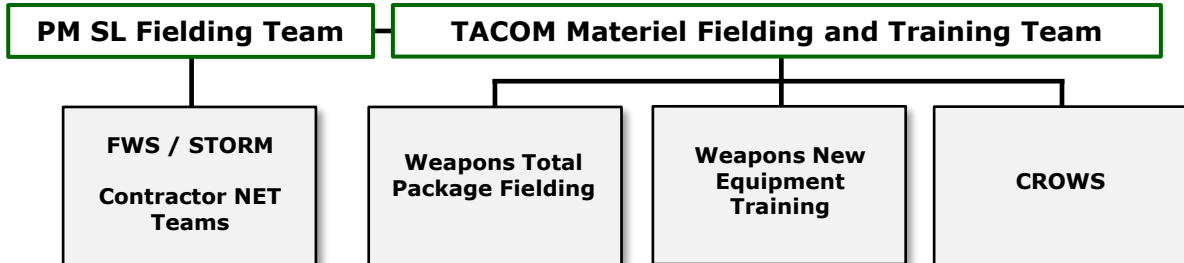
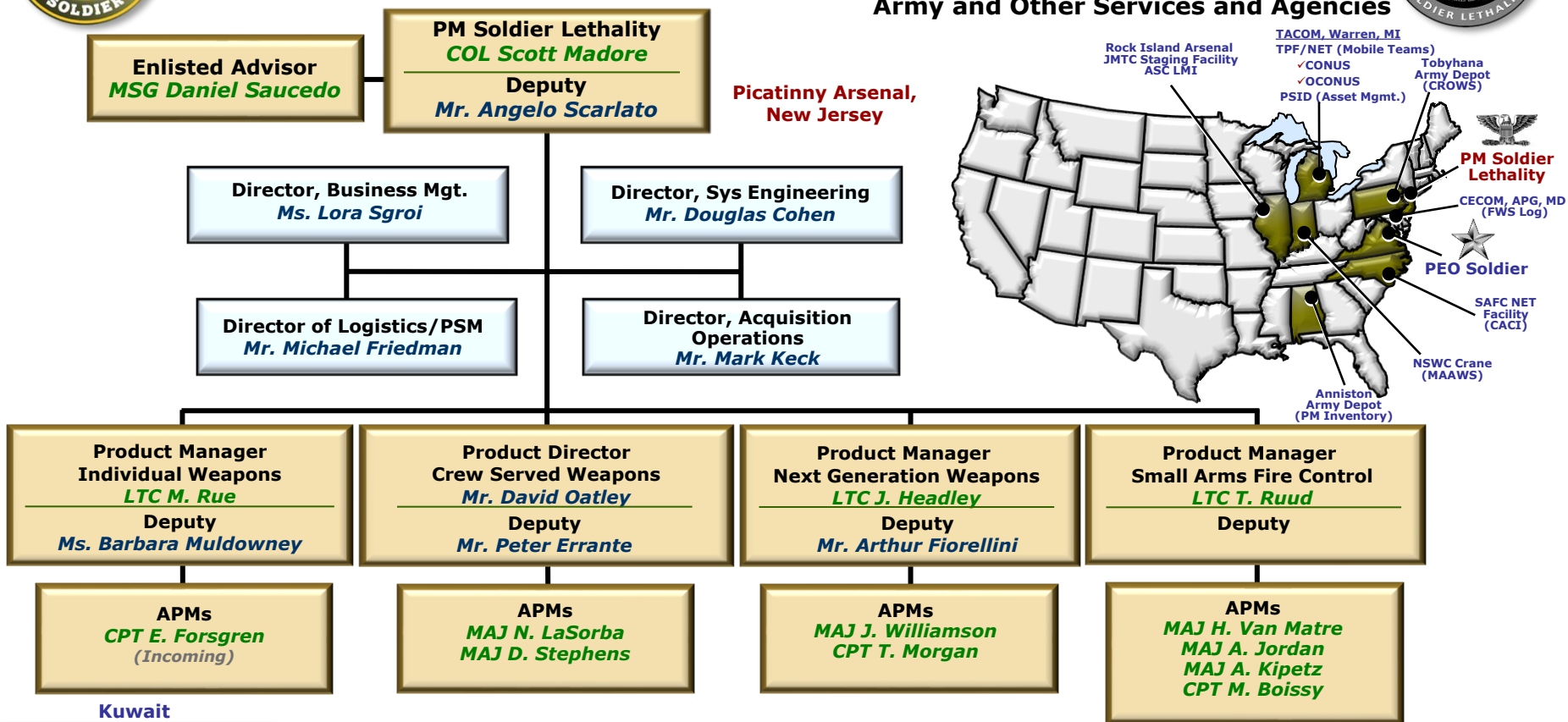


- PEO Soldier Reorg Phase III (Summer 2022)
 - Product Manager Small Arms Fire Control (SAFC) established
 - Product Manager Small Arms Fire Control aligned with PM Soldier Lethality

- Efficiencies/Highlights and Planning Tasks
 - Realigns under PM SL C2:
 - Family of Weapon Sights
 - Other weapons enabler programs
 - Next Generation Squad Weapon - Fire Control
 - PdM SAFC HQs located at Fort Belvoir, VA
 - Next Generation Squad Weapon – Fire Control team remains at Picatinny Arsenal, NJ
 - Realigning programs to optimize unity of effort



Project Manager Soldier Lethality





PM Soldier Lethality Portfolio

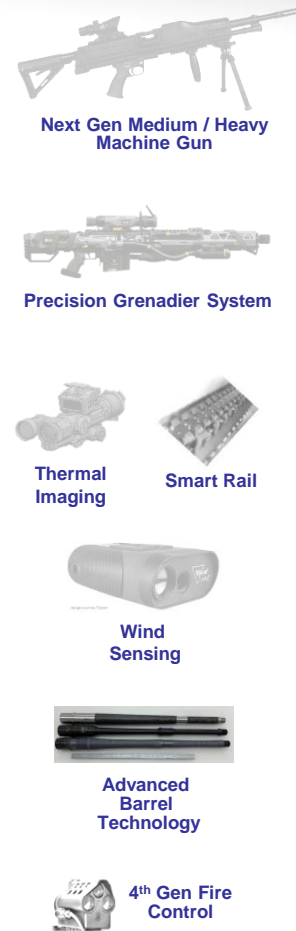


Operations & Support

Production & Deployment

Future

(Notional Images)



Provide premier Soldier weapons systems enabling battlefield dominance



PM SL Technology Focus Areas



- Engaging Targets in Defilade and UAS
- Communication Capability across weapon enablers
- Toxic fumes improvement concepts
- Suppressor technology
- Future Medium Machine Gun technologies
- Remote Weapon System capabilities



PdM SAFC



PdM SAFC Portfolio



Operations & Support



AN/PAS-13(V)3
Heavy Weapon
Thermal Sight
(HWTS)



AN/PAS-13(V)2
Medium Weapon
Thermal Sight
(MWTS)



AN/PAS-13(V)1
Light Weapon
Thermal Sight
(LWTS)

Production & Deployment



AN/PSQ-23B
Small Tactical Optical Rifle
Mounted (STORM)



XM157
NGSW Fire Control



AN/PSQ-23A
Small Tactical Optical Rifle
Mounted (STORM) micro-Laser
Range Finder (mLRF)



**Small Tactical Optical Rifle
Mounted II (STORM II)**



**Family of Weapon
Sights-Sniper
(FWS-S)**



AN/PAS-37
Family of Weapon Sights-Crew
Served (FWS-CS)



AN/PAS-35
Family of Weapon Sights-
Individual (FWS-I)

Future

(images notional)

Power Data Rail



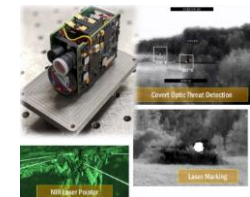
XM157
Thermal Imaging



Wind Sensing



**GEN 4 Fire Control
Aim Augmentation**



**Laser Range Finder
Improvements**



PdM NGW



PdM Next Generation Squad Weapons



Accomplishments:

- ✓ Received Rapid Fielding Authority under the Middle Tier of Acquisition pathway
- ✓ 6 Jan 2022, awarded Vortex Optics a 10-year Other Transaction Agreement (P-OTA) for production of NGSW Fire Control.
- ✓ 19 April 2022, awarded a 10 year contract to Sig Sauer for the production of the NGSW Rifle, Automatic Rifle, and ammunition.

Interest:

- Integrated Thermal Technology
- Interface and integration solutions

Upcoming Opportunities:

- Innovative Designs & Engineering Assessment (IDEA) program has an active announcement on sam.gov to assess innovative technologies, responses due 30 September 2022.



PdM IW



PdM Individual Weapons



■ FY22 Accomplishments:

- ✓ Fielded the first MK22 Precision Sniper Rifles
- ✓ Completed deliveries of the M110A1 Squad Designated Marksman Rifle (SDMR); optimized over 1,500 systems, increasing weapon reliability
- ✓ Completed Army deliveries of the Modular Handgun System

■ Upcoming Opportunities:

- *Precision Grenadier Capability*: The Army is pursuing a requirement to mitigate the squad level counter defilade gap
- *Soldier Enhancement Program*: Identify and procure off-the-shelf items that have the potential to substantially improve weapons and support equipment





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Product Director Crew Served Weapons

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Product Director Crew Served Weapons Portfolio



Medium and Heavy
Machineguns



MAAWS Recoilless
Rifle



Accessories / Optics



Non-Standard
Weapons



Medium Caliber
Weapons



Remote Weapons
Stations (RWS)

Technical Expertise

- Development of weapons
- Lethality
- Fire Control
- Software development
- Integration with RWS and vehicles
- Independent analysis

Efficient Management

- Consolidate requirements for multiple customers
- Single procuring agent vs. multiple
- Economies of scale
- Life Cycle Weapon Management

CSW Services

- Program / IPT Management
- Platform Integration
- Logistics Management
- Configuration Management
- Testing / Qualification / Type Class
- Vendor validation

PdD CSW provides weapon system SOLUTIONS to meet customer needs



FY22 Accomplishments/FY23 Plans



FY22 Accomplishments:

- **CROWS-Javelin** – Fielded CROWS-J to the first Army unit
- **C-UAS** – Demonstrated use of CROWS as C-UAS platform
- **RCV** – Demonstrated wireless CROWS-Tech Refresh on Robotic Combat Vehicle (RCV) Soldier Operational Experiment 2 (SOE 2)
- **M3A1 MAAWS** – Achieved TC Standard for new M3A1 w/ digital fire control
- **Non-Standard Weapons** – Awarded \$21.8M for NSW program
- **CSW Vendor Demo Days** – Held 2nd Annual event
- Procurements of M249, M240, Mk19, and accessories for Army, DoD, and FMS customers

FY23 Plans and Opportunities:

- TC & FMR for HE441E High Explosive Air Burst Munition
- Industry solicitation for .50 caliber weapon systems for a multi-year, competitive contract
- XM152 and XM155 FUE (May 2023) and FMR (Dec 2022)
- CSW Vendor Demonstration Days



CROWS-J / Tech Refresh



- **CROWS-J fielding to 2-4ID SBCT at Fort Carson, CO**
 - First SBCT to receive new Tech Refresh CROWS system architecture
 - Significant lethality upgrade
 - Integrates Javelin missile as secondary effector
- **CROWS-J / Tech Refresh adds additional capabilities:**
 - High Definition (HD) Video
 - Improved Thermal Sensor
 - Situational Awareness Strip
 - Common Interface Bracket
 - Smoke Grenade Launchers
- **CROWS-J fielding to additional SBCTs**
- **Tech Refresh hardware backwards compatible w/ legacy CROWS**





CROWS C-UAS Capability: CROWS-B (Ballistic Low Altitude Drone Engagement)



- Developed by DEVCOM-Armaments Center to **enhance organic armament systems** to counter Group 1-2 UAS
- **Enhances organic armament systems** to counter sUAS threats in addition to conventional targets (Multi-Domain capability)
- **Addresses the entire kill chain** from target acquisition, tracking, fire control to semi-autonomously defeat sUAS (Human-on-the-loop)
- **Low cost per kill; high stowed kills;** maintaining conventional mission capability
- Closed loop **networked, integration** of detection and tracking sensors (fire control radars, EO/IR, etc.) with armament systems



Precision Targeting Capability

C-UAS B-Kit Applique
Precision Fires Radar/ Optical Tracking, Precision Targeting Unit Architecture and Counter Swarming Algorithms



CROWS with M2 0.50 cal



Air & Ground Targets

Bullet correction happens autonomously with user on-the-loop



CROWS w/ conventional target and CUAS capability for Group 1-2 UAS; low cost per kill Brigade and below

Leverages existing infrastructure and platforms to defeat threat



PdD CSW's Vendor Demonstration Days



- 2nd Annual Vendor Demonstration Days held at Close Quarters Tactical, GA, 3-5 May 2022
- Concept:
 - PdD CSW provides range for industry
 - Attendees receive instant feedback
 - Soldier participation on site
 - Informs Government about state of technology
- FY22 Summary
 - Focused on Next Gen Medium MG and Remote Weapons
 - 26 vendors
 - Live Fire and Static demonstrations / exhibits
 - Day and night firing
 - More than 150 attendees
- FY23 event planning underway



Coming soon - check [SAM.gov](https://sam.gov) for FY23!!



MAAWS TC and HE441E



Recent Accomplishments:

- Achieved Type Classification (TC-S) Standard for new M3A1 Weapon system w/integrated digital fire control
- Fielded 1000+ new M3A1 and 300+ M3 weapon systems to date

Near Term Future Accomplishments:

- Type Classification and Full Materiel Release for new programmable air burst HE 441E munition
- Complete fielding of new M3A1 weapon system w/FC planned FY24

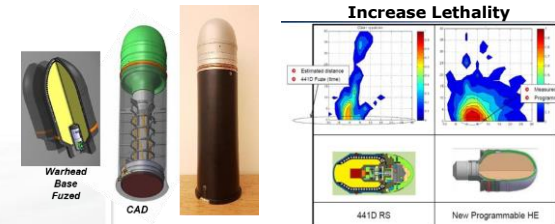
NEW M3A1 w/FCS13-RE Digital Fire Control



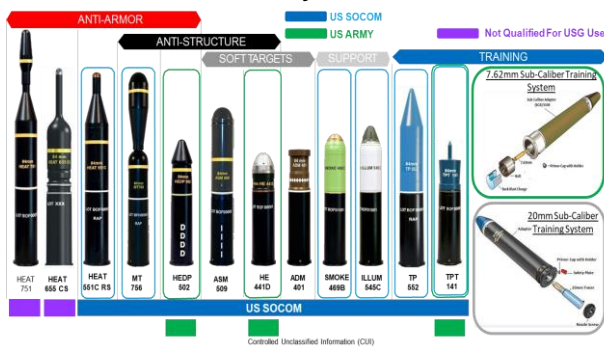
Legacy M3 w/Mechanical PFCD Fire Control



HE441E Programmable Airburst Anti-Personnel



MAAWS Family Of Ammunition





Non-Standard Weapons Program



- NSW program maintains contracts and agreements to provide non-Army standard weapons
- Customers include US Army, FMS, and Other Government Agencies:
 - US Army
 - SOCOM
 - DHS ICE
 - DHS CBP
 - USCG
- \$21.8M awarded to 16 companies (FY22)
 - Weapons/Acessories/Spare Parts
 - In support of 21 FMS cases

