



MARINE CORPS SYSTEMS COMMAND

LtCol William Rulli

Product Manager, Ammunition 19 March 2025



SCIENCE AND TECHNOLOGY INITIATIVES

Distribution Statement A: Approved for public release; distribution is unlimited.



PM AMMO PORTFOLIO OVERVIEW

5 Teams/Branches:

- 152.1 Maneuver Ammunition and Missiles
- 152.2 Close Combat and Combat Ammunition
- 152.3 Environmental & Explosives Safety
- 152.4 Inventory Management
- 152.5 Plans, Operations & Systems

FY25 Focus Areas:

- Blast Overpressure
- OIS-MC transition to NEO
- Audit Remediation
- Rebuilding our munitions inventory (currently valued at \$4.5B)
- .50 Cal Polymer Lightweight Ammunition
- 81mm Mortar Maintenance
- Fielding LAW Fire From Enclosure (FFE)
- Emerging C-UA S Munitions

Challenges:

Audit NFR Remediation













SCIENCE & TECHNOLOGY INITIATIVES

- Lightweight ammunition
- Lightweight ammunition packaging
- Increased lethality with 40 mm weapons systems
- 3D printable munitions and energetics
- 3D printable packaging
- Less hazardous combustion gases
- Reduced acoustic, thermal and visual signatures of small arms ammunition
- Warhead improvements
- Rocket motor improvements
- Recycling of Polyphenylsulfone (PPSU) Ammunition Casings



SCIENCE & TECHNOLOGY INITIATIVES

- Stochastic Ammunition model for Lifecycle Logistics
- Anti-Personnel Obstacle Breaching System
- Lightweight, man-portable route clearance with high reliability and effectiveness

Point of Contact is Mr. Matt Bolen, Lead Engineer at matthew.bolen@usmc.mil; (703) 716-3797



PM AMMO S&T SUMMARY

Small Business Innovation Research (SBIR) Programs

- Anti-Personnel Obstacle Breaching System (APOBS) Improvement
 - Eliminate transverse wave in deployment
 - Optimize launch angle for terrain
 - Final Phase I Reports and Phase II Proposal Submitted
 - Phase II Contract Award in May
 - Phase II Objectives:
 - System Upgrade:
 - » Rear Backpack Detachment
 - » Parachute Modification
 - » Energy Absorber
 - » Variable Angle Launch Device
 - Performance Testing
- One-Way Luminescence (OWL) for 40mm Tracer Cartridge
 - Non-incendiary solution
 - Provide mid-flight correcting capability for gunners
 - Phase I Final Reports and Phase II Proposal Submitted
 - Phase II Contract Award in April
 - Phase II Objectives:
 - Luminescent Material Development
 - Scaled Manufacturing Development
 - 40 MM Live Fire Testing







ADDITIONAL FOCUS AREAS

- Emerging munitions
 - Ammunition Technician training
- Lithium Batteries
 - Facilities for storage and recharging
 - Transportation
 - Policy
- Electric Vehicles
- Autonomous Vehicles
- Supply Chain resilience
- Industrial Base modernization



QUESTIONS?

MR. SCOTT ADAMS
SCOTT.ADAMS1@USMC.MIL
(703) 414-9531

EQUIPPING OUR



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