



## MARINE CORPS SYSTEMS COMMAND

Col Paul Gillikin

Program Manager

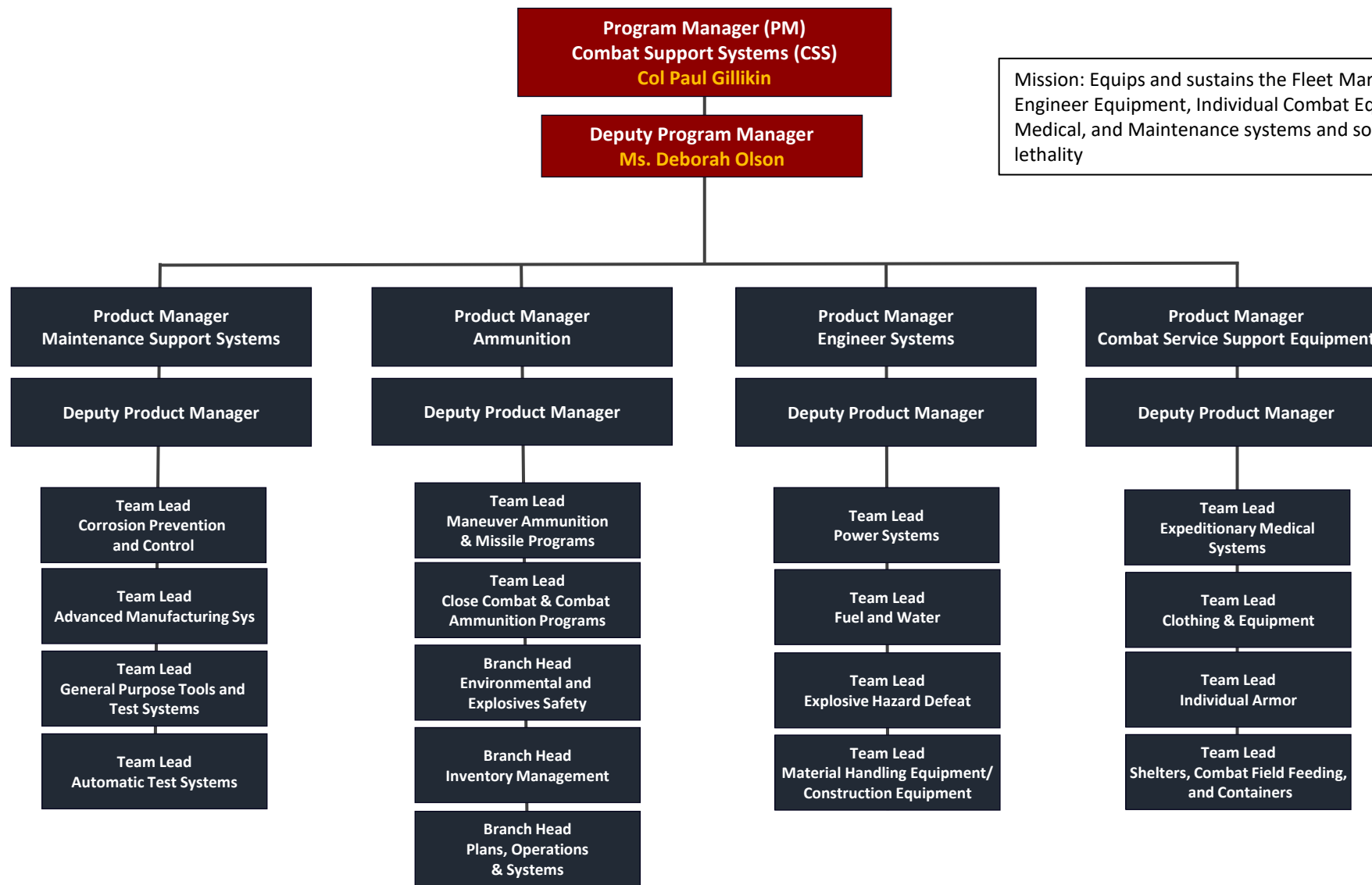
30 April – 2 May 2024



# COMBAT SUPPORT SYSTEMS OVERVIEW



# PM COMBAT SUPPORT SYSTEMS (PM CSS) ORG CHART



Mission: Equips and sustains the Fleet Marine Force with Combat Engineer Equipment, Individual Combat Equipment, Ammunition, Medical, and Maintenance systems and solutions to enable lethality



# PM COMBAT SUPPORT SYSTEMS PORTFOLIO OVERVIEW





# PM COMBAT SUPPORT SYSTEMS FOCUS AREAS

## FY24 FOCUS AREAS

- Test Measurement Systems
- Tools & Diagnostic Systems
- Advanced Manufacturing Systems
- Corrosion Prevention & Control
- Ground Ammunition
- Explosive Safety
- Power Systems
- Fuel & Water Systems
- Explosive Hazard Defeat Systems
- Material Handling & Construction Equip
- Expeditionary Medical Systems
- Shelters, Field Feeding, and Containers
- Individual Clothing & Equipment
- Individual Armor

### PM CSS

- ▶ Respond to Force Design
- ▶ Engagement, Divestment & Investment
- ▶ Logistics in a Contested Environment

### PdM Maintenance Support Systems

- ▶ Condition Based Maintenance Plus (CBM+)
- ▶ Hand-Held Radio Test Set (HRTS)
- ▶ Expeditionary Fabrication (XFAB)- Additive Manufacturing
- ▶ Expeditionary Fluid Analysis System (EFAS)
- ▶ Automated Board Circuit Diagnostic Probing Station (AKA ACCAT)
- ▶ Tactical Radio Intermediate Maintenance Activity Test Set (TRITS)

### PdM Ammunition

- ▶ Presidential Drawdown & Replenishment
- ▶ Fielding Ordnance Information System-Marine Corps Operational Module
- ▶ .50 Cal Polymer Lightweight Ammunition

### PdM Engineering Systems

- ▶ Tractor Rubber Tired Articulated Steering Multi-Purpose (TRAM)
- ▶ Backhoe Loader (BHL)
- ▶ Extendable Boom Forklift (EBFL)

### PdM Combat Service Support Equipment

- ▶ Damage Control Resuscitation, Damage Control Surgery, Battalion Aid Station, Patient Staging and Holding
- ▶ Signature Management, Flame Resistance, Ballistic Protection
- ▶ Alternatives to PFAS for stain resistance and water repellency
- ▶ Hearing Protection/Blast Overpressure Protection
- ▶ Intelligence Community Directive – 705 Deployable Sensitive Compartmented Information Facility



# PROGRAM MANAGER COMBAT SUPPORT SYSTEMS: AREAS WHERE INDUSTRY CAN HELP

- Next Generation Battery & Micro Power Systems
- Low Power Water Purification Systems
- Autonomous Pallet Loader & Pioneer Systems
- Supporting the “Golden Hour” Paradigm Shift
- Advanced Expeditionary Field Feeding Equipment
- Expeditionary Fabrication / Advanced Manufacturing
- AI & ML Technologies to enable predictive maintenance and Improve Productivity, Quality and the User Experience for the Marine Corps Maintenance Community
- Enhancing electronic data collection with robotic AI and ML to improve the diagnostics, testing, repairs, and maintenance of electronic modules and circuit cards



# PRODUCT MANAGER - MAINTENANCE SUPPORT SYSTEMS: AREAS WHERE INDUSTRY CAN HELP

- **Next Generation General Purpose Automatic Test System Request For Information (RFI) 3QFY23 / 4QFY24**
  - Seeking information from industry regarding replacing currently fielded General Purpose Automatic Test Systems (GPATS).
  - The system provides portable test capability that is re-configurable for multi-role operations. GPATS has the capability of powering, screening, testing, and diagnosing electronic, electro-optical and electro-mechanical Line Replaceable Units (LRUs) and Circuit Card Assembly (CCA) for a wide variety of weapon systems and equipment.
  - Initial RFI released 3QFY23; Follow-on RFI to follow this year (estimated 4QFY24)
- **Advanced Circuit Card Automated Tester RFI 4QFY23 / 4QFY24**
  - Seeking information for a Commercial Off-the-Shelf Automated Board Circuit Diagnostic Probing Station solution to reduce testing variations and dramatically increase readiness at the unit level, speed of repairs, precision on assembling and reassembling, and maintenance throughput capacity by the fleet.
  - Initial RFI released 4QFY23; follow-on RFI 4QFY24
- **Augmented Reality/Virtual Enhancement (AR/VE) RFI FY25**
  - Seeking AR/VE capabilities to be employed with the Electronic Maintenance Support System for training and maintenance aids for weapons platforms resulting in decreased maintenance cycle times with step-by-step instructions and fewer mistakes in maintenance tasks.
- **Condition Based Maintenance Plus (CBM+) RFI FY25**
  - Seeking data analytics and visualization for predictive maintenance capabilities for Marine Corps ground platforms



# PRODUCT MANAGER - MAINTENANCE SUPPORT SYSTEMS OPPORTUNITIES

Title	Planned RFP
Advanced Circuit Card Automated Test System	FY25
Maintenance Support Systems IDIQ/MAC	FY25
Next Generation General Purpose Automatic Test System	FY26
Augmented Reality/Virtual Enhancement	FY26
Condition Based Maintenance Plus	FY26
Electronic Maintenance Support System Technical Refresh	FY26



# PRODUCT MANAGER AMMUNITION: AREAS WHERE INDUSTRY CAN HELP

- Lightweight ammunition packaging
- Polymer casing recycling
- 3D printable munitions and energetics
- 3D printable packaging
- Reduced acoustic, thermal and visual signatures of small arms ammunition
- Trace capability for 40mm HV (OWL) (FY24 SBIR Phase 1)
- Increased lethality with 40mm weapons systems
- Variable Angle Anti-Personnel Obstacle Breaching System (FY24 SBIR Phase 2)
- Less hazardous combustion gases
- Rocket motor improvements





# PRODUCT MANAGER – AMMUNITION OPPORTUNITIES

Title	Planned RFP



# PRODUCT MANAGER - ENGINEER SYSTEMS: AREAS WHERE INDUSTRY CAN HELP

- Lithium-Ion Batteries
  - Higher Density/Lower Weight/Faster Charge Rate
- Low Global Warming Potential Refrigerants



# PRODUCT MANAGER - ENGINEER SYSTEMS OPPORTUNITIES

Title	Planned RFP
Tractor Rubber Tired Articulated Steering Multi-Purpose (TRAM)	March 2025
Backhoe Loader (BHL)	March 2025
Extendable Boom Forklift (EBFL)	2026



# PRODUCT MANAGER – COMBAT SERVICE SUPPORT EQUIPMENT: AREAS WHERE INDUSTRY CAN HELP

- Supporting the Golden Hour Paradigm shift of En Route Care capabilities to a contested environment with extended patient holding times
- Medical Equipment with Extended Battery Life of up to 72 Hours
- Disposable Surgical Packs Customized for Various Medical Procedures
- Ballistic Protection – Weight Reduction
- Hearing Protection/Blast Overpressure Protection
- Developments in Conformable Body Armor
- Blast Overpressure Protection
- Signature Management (Individual Clothing & Equipment)
- Flame Resistance
- Alternatives to PFAS (forever chemicals) for stain resistance and water repellency
- Advanced Expeditionary Field Feeding Equipment
- Maintenance Shelter Capability Market Research – FY25-26



# PRODUCT MANAGER – COMBAT SERVICE SUPPORT EQUIPMENT OPPORTUNITIES

Title	Planned RFP
NexGen Marine Corps Combat Utility Uniform	2QFY25
Scalable Combat Field Feeding Systems and Concepts	4QFY25
Cold Weather Cap	4QFY25 (DLA Contract)
Mesh Base Layer	4QFY25 (DLA Contract)
Marine Corps Tropical Combat Uniform, Tropical Boots	4QFY25 (DLA Contract)
Trigger Finger Mitten	4QFY25 (DLA Contract)

# EQUIPPING OUR



# MARINES