

Ground Transportation and Engineer Systems

Product Group 15 Overview

**Mr. Gordon W. Taylor
Product Group Director
(703) 432-3822
Gordon.taylor@usmc.mil**

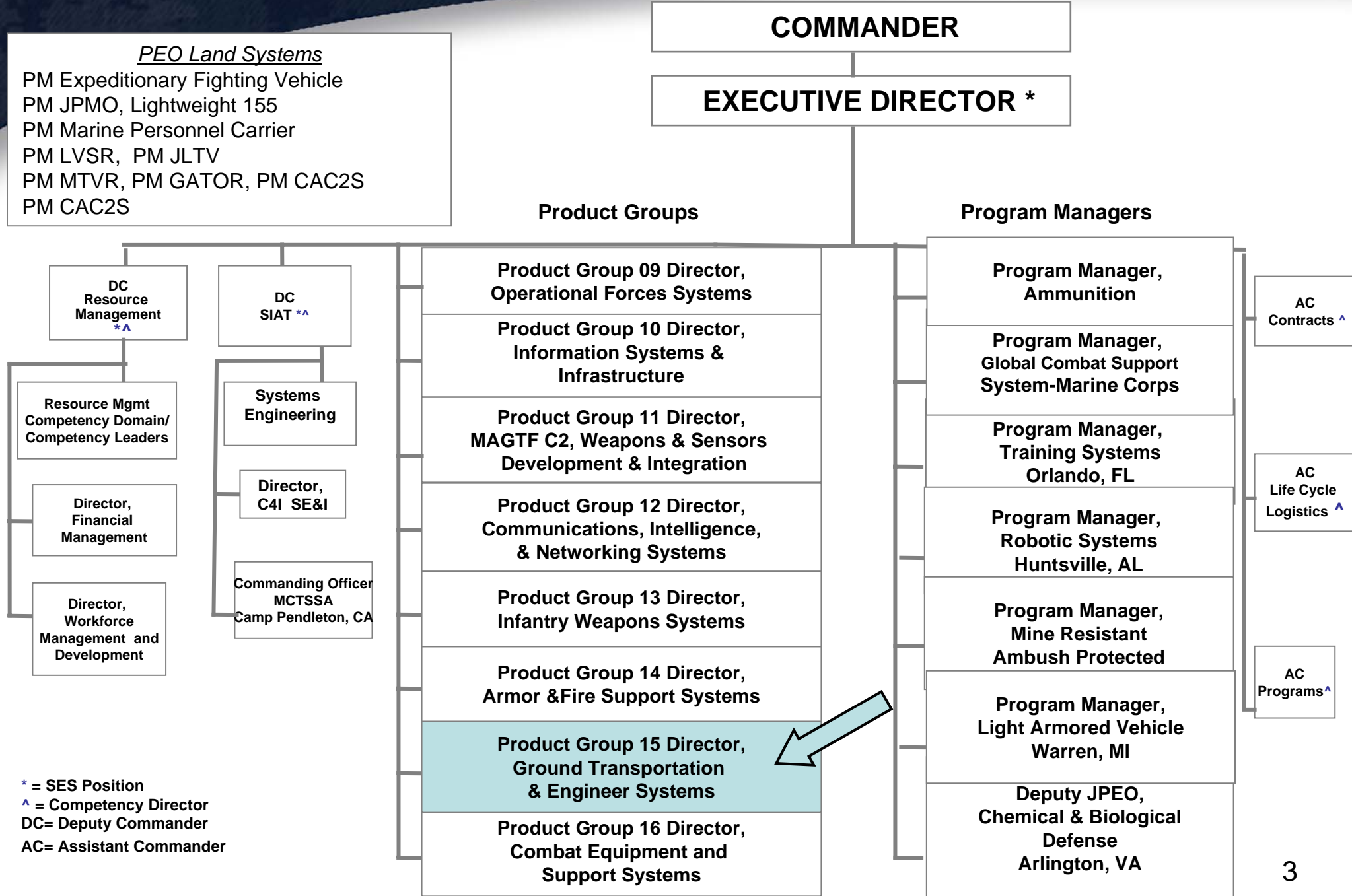




- GTES is the Marine Corps principle agent for system acquisition and total life cycle system management of
 - Ground Transportation (Light, Medium, & Heavy)
 - Combat Mobility (LAV, MRAP)
 - Engineer Systems
 - Expeditionary Power Systems
 - Containers
- Our Program teams have Total Life Cycle Management responsibility for their equipment
- Our external customer is the warfighter and other services
- Our internal customers are MCSC Program Managers who require power generation equipment or a ground transportation or combat mobility platform as part of their system



Where we are located!





Product Group Principals:

PM, Motor Transport: Thomas H. Miller

PM, Engineer Systems: William Macecevic

PM, Expeditionary Power Systems: Michael Gallagher

Competency Alignment Team

- Business Manager: Jack Cave
- Contracts Manager: Stephen Caracciolo
- Lead Financial Manager: Steven Costa
- Lead Engineer: Julie Redfern
- Lead Logistician: Natalie Boddy
- Lead Technologist: William Story



Ground Transportation Portfolio

PM Motor Transport

Light Fleet Tactical Vehicles and Trailers

- HMMWV
- HMMWV Armor
- Interim Fast Attack Vehicle
- Internally Transportable Vehicle
- Organic Trailers



Medium/Heavy Fleet Tactical Vehicles and Trailers

- MTRV Trailer
- 5 Ton Trucks & Trailers
- Flatrack Refueling Capability
- Logistics Vehicle System
- MHET/M870 Family
- P19 Fire Trucks
- M969/970 Refuelers
- P19 Replacement
- MK970 Refueler



Combat Mobility Portfolio

Program Manager, Light Armored Vehicle (LAV) and Marine Personnel Carrier (MPC)



**Light Armored
Vehicle**



**Marine Personnel
Carrier**



Combat Mobility Portfolio

MRAP Family of Vehicles

The Mine Resistant Ambush Protected (MRAP) family of vehicles provides the Operating Forces multiple mission-role platforms capable of mitigating Improvised Explosive Devices (IEDs), Underbody Mines and Small Arms Fire (SAF) threats which are currently the greatest casualty producers in the Global War on Terror (GWOT). MRAP vehicles will support the following missions:

Category I Urban Combat Operations

IDIQ Contracts awarded to nine manufacturers.
All Services Procuring

Concept of Operation:

Small unit combat operations in urban or confined areas - Mounted patrols, reconnaissance, communications, command and control, and direct interaction with civilian population.

Characteristics:

- 4x4
- 6 pax
- Curb Wt: 30,000 lbs
- Cbt Wt: 38,000 lbs
- Payload: 6,000 lbs

Category II Multi-mission Operations

IDIQ Contracts awarded to nine manufacturers.
Army includes Ambulance Variant

Concept of Operation:

Ground logistics support operations - Reconfigurable vehicle capable of convoy security, combat engineering, ambulance, troop & cargo transportation.

Characteristics:

- 4x4 and 6x6 variants
- 10 pax
- Curb Wt: 30,000/38,000 lbs (4x4/6x6)
- Cbt Wt: 38,000/52,000 lbs (4x4/6x6)
- Payload: 6,000/14,000 lbs (4x4/6x6)

Category III Mine/IED Missions

Buffalo procured under sole source contract to FPIL.
Navy and Marine Corps Only

Concept of Operation:

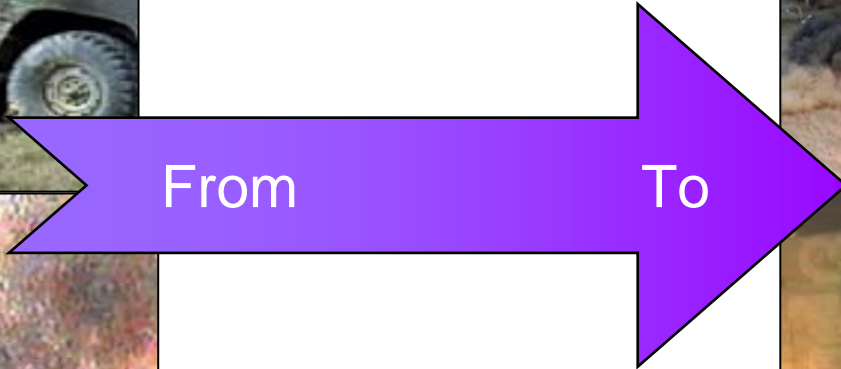
Explosive Ordnance Disposal - Route Clearing; detect and disarm or detonate IEDs, mines and other explosive devices.

Characteristics:

- 6x6
- 6+ pax
- Curb Wt: 45,000 lbs
- Cbt Wt: 80,000 lbs
- Payload: 38,000 lbs



Combat Mobility Portfolio





Combat Mobility Portfolio Currently Fielded Vehicles



MRAP CAT I

- Cougar 4X4 model
- Mine Resistant Utility Vehicle (MRUV)
- Urban Combat Operations
- 4x4
- 6 pax
- Curb Wt: 14,000 lbs
- Cmbt Wt: 16,000 lbs
- Payload: 10,000 lbs



MRAP CAT II

- Joint EOD Rapid Response Vehicle (JERRV)/Cougar
- Multi-mission (convoy escort, troop transport, ambulance, EOD, Cmbt Engr)
- 4x4 and 6x6 variants
- 10 pax
- Curb Wt: 30,000 lbs (4x4)
38,000 lbs (6x6)
- Cmbt Wt: 38,000 lbs (4x4)
52,000 lbs (6x6)
- Payload: 6,000 lbs (4x4)
14,000 lbs (6x6)



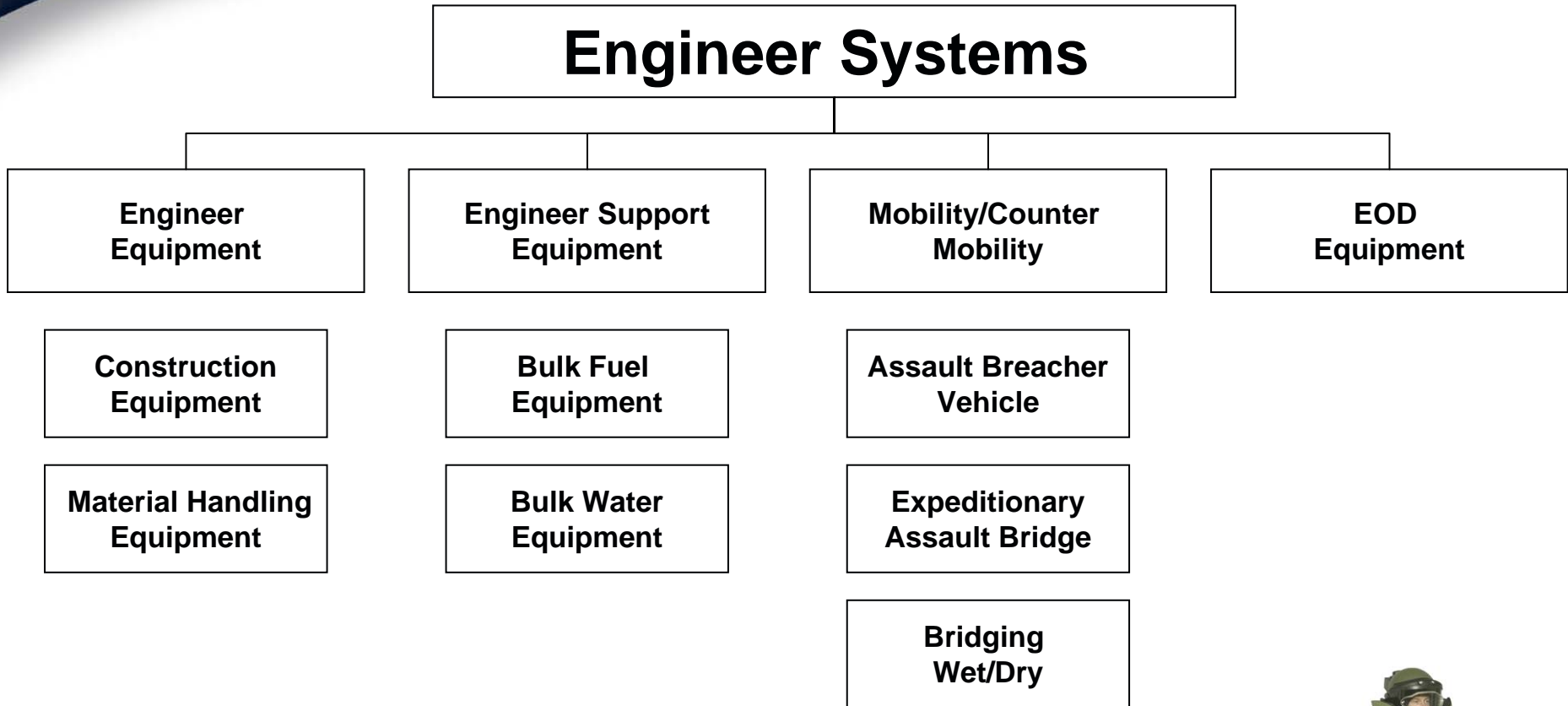
MRAP CAT III

- Buffalo
- Mine/IED Clearance Operations
- 6x6
- 12 pax
- Curb Wt: 45,000 lbs
- Cmbt Wt: 80,000 lbs
- Payload: 38,000 lbs



Engineer Systems Portfolio

Engineer Systems



Expeditionary Power Systems

Program Manager - Expeditionary Power Systems



Advanced Power Sources



Mobile Power Sources



Environmental Control Equipment



Centrally Managed Containers¹¹



	FY08	FY09	FY10	FY11	FY12	FY13
RDT&E	\$2.8M	\$1.3M	\$1.3M	\$0.6M	\$0.6M	\$0.7M
PMC	\$535.2M	\$64.9M	\$55.7M	\$62.0M	\$6.6M	\$7.4M
Motor Transportation Systems	HMMWV/MILMO/LVS					
	MTVR and Family of Tactical Trailers/FLATRACK/					
RDT&E	\$3.7M	\$ -	\$ -	\$ -	\$ -	\$ -
PMC	\$300.4M	\$104.2M	\$162.0M	\$117.4M	\$54.5M	\$56.0M
Engineer Systems	Family of Construction and Material Handling Equipment					
	Tactical Fuel and Water Delivery and Purification Systems					
	Mine Roller and EOD and Demolition Equipment					
RDT&E	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
PMC	\$41.5M	\$28.3M	\$26.1M	\$23.7M	\$30.1M	\$30.0M
Expeditionary Power Systems	Advance Power Sources and Mobile Electric Power					
	Environmental Control Equipment and Family of Containers					



Solicitation to Industry

- Tactical wheeled vehicle solutions that are expeditionary, mobile, ensure force protection, improve survivability, and decrease reliance on fossil fuels **(NEEDED YESTERDAY)**
 - Includes improvements to fielded systems
- Power generation alternatives for a variety of customers and applications **(ON BOARD POWER NEEDED YESTERDAY)**
- Combat Engineer equipment that is aligned with the commercial market



- Next Speaker:

Mr. William P. Maceceivc
Program Manager, Engineer Systems

Ground Transportation and Engineer Systems

**Program Manager
Engineer Systems**

**Mr. William Macecevic
(703) 432-3598**

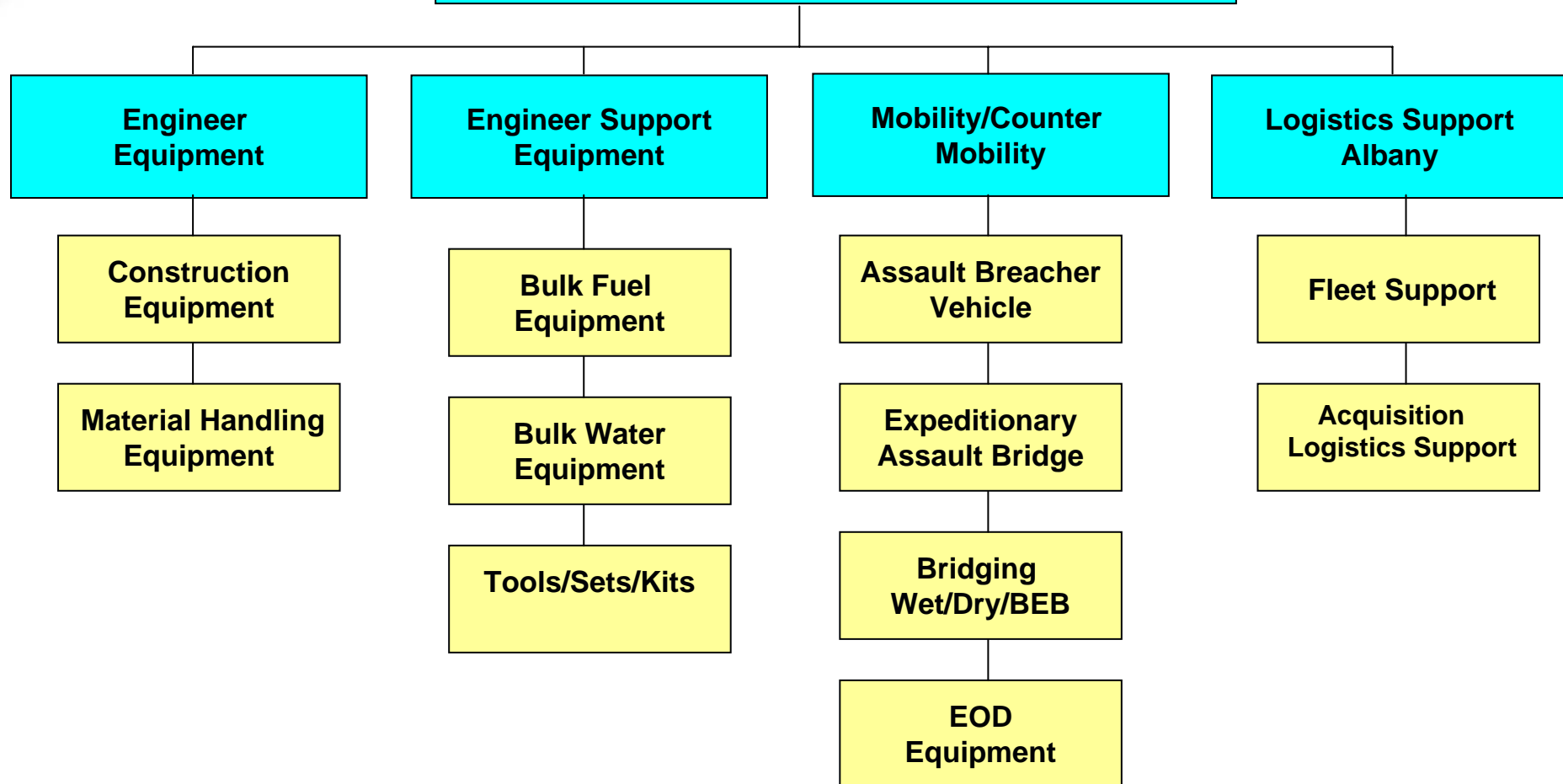
william.macecevic@usmc.mil





PM Engineer Systems Mr. William Macecevic

PM Engineer Systems





PM Engineer Systems Mr. William Macecevic

Near-Term Program Initiatives

- TACTICAL FUEL AND WATER LOGISTICS INTEGRATOR
 - Procure sustainment systems and components for centrally managed fuel and water systems
- SCRAPER
 - Construction Equipment Program
 - Anticipate joint with Army
- Water Packaging System
 - Requirement being defined
 - Anticipate requirement for interoperability with Tactical Water Purification System and Light Weight Water Purification System
- Mine Rollers
 - War loss replacements
- EOD Equipment
 - Recapitalize Family of EOD equipment (Bomb suits, SCBA, Explosive Detectors, Total Containment Vessel)



		FY08	FY09	FY10	FY11	FY12	FY13
MHE/CE	PMC	\$117.6M	\$57.4M	\$89.7M	\$67.5M	\$39.4M	\$40.9M
Engineer Support Equipment	PMC	\$70.2M	\$30.6M	\$51.5M	\$45.9M	\$11.0M	\$10.9M
Mine Counter Mine Systems	RDT&E PMC	\$0.7M \$112.6M	\$16.2M	\$20.8M	\$4.0M	\$4.1M	\$4.2M



PM Engineer Systems Mr. William Macecevic

Future Program Initiatives

- Recapitalization of Construction and material Handling Equipment
 - Equipment master plan outlines out year projected procurements
- Route Clearance Systems
 - Requirement being defined
 - Anticipate multiple systems/capabilities: Detection, Neutralization, Detonation
- EOD Modernization
 - Technology refresh
 - Maintaining the most current technology and capability
- Tactical Fuel and Water Component Upgrades



PM Engineer Systems Mr. William Macecevic

Welcome Product Information !



PM Engineer Systems Mr. William Macecevic

- Next speaker:

Mr. Michael Gallagher
Program Manager
Expeditionary Power Systems

Ground Transportation and Engineer Systems

**Program Manager
Expeditionary Power Systems**

**Michael Gallagher
(703) 432-3572
michael.a.gallagher@usmc.mil**





PM Expeditionary Power Systems Mr. Michael Gallagher

Portfolio

- **Advanced Power Sources**
 - *Radio Power Adaptors*
 - *Battery Management and Support Systems*
 - *On-Board Vehicle Power Systems*
 - *Family of General Purpose Power Supplies*
 - *Auxiliary Power Units*
 - *Renewable Energy Systems*
- **Mobile Electric Power**
 - *Tactical Power Generation (IAW DoD Joint Operating Procedures)*
 - *Mobile Electric Power Distribution*
 - *Integrated Power - Environmental Control - Trailer System (ITEG)*
 - *Floodlights*
- **Environmental Control**
 - *Environmental Control Equipment*
 - *Field Refrigeration Systems*
 - *Unique Power and Refrigeration Toolkits (operator level)*
- **Family of Centrally Managed Containers**



PM Expeditionary Power Systems Mr. Michael Gallagher

Near-Term Program Initiatives / Opportunities

- *Solar Portable Power Adaptors for Comm-Equipment*
- *Family of Container (Tri-Con / Quad-Con / PALCON)*
- *On-Board Vehicle Power (HMMWV class)*
- *Small Field Refrigeration System*
- *Integrated Trailer-ECU-Generator*
 - *HMWV towable*
 - *MTVR towable*
- *Vehicle Auxiliary Power Units (DACP funded)*
- *Radio Power Adaptors (Marine Enhancement Program)*
- *Marine Expeditionary Rifle Squad Power Integration (varied)*



PM Expeditionary Power Systems Mr. Michael Gallagher

Funding Plans

	FY08	FY09	FY10	FY11	FY12	FY13
Advanced Power Sources	\$17.2M	\$1.6M	\$1.7M	\$1.8M	\$3.7M	\$3.8M
Mobile Electric Power	\$7.8M	\$14.7M	\$15.1M	\$15.5M	\$15.1M	\$15.5M
Environmental Control Equipment	\$5.5M	\$5.1M	\$5.3M	\$5.3M	\$5.3M	\$5.4M
Family of Containers	\$8.5M	\$4.1M	\$3.8M	\$0.9M	\$6.5M	\$5.6M
Floodlight Replacement	\$1.2M	\$2.6M				
TOTAL	\$41.5M	\$28.3M	\$26.1M	\$23.7M	\$30.1M	\$30.0M



PM Expeditionary Power Systems Mr. Michael Gallagher

Future Program Initiatives

- *Family of Power Supplies (2012)*
- *Family of Battery Chargers (2011)*
- *Family of Radio Power Adaptors Reset (2011)*
- *Family of Power Supplies (2011)*
- *Family of Environmental Control Units (2013)*
- *Field Refrigeration Systems (2013)*
- *Mobile Electric Power Distribution (2013)*
- *Floodlight Set Rebuy (2013)*
- *Man-Portable Power Generation (ONR Transition)*



PM Expeditionary Power Systems Mr. Michael Gallagher

Discussion Topics

- *DOD Policy for use of Non-Standard Generators*
- *Naval Lithium Battery Safety Policy*
- *Market Research drives Acquisition Strategy*
- *Commonality with other Services*
- *Use of Federal Supply Schedules*
- *Commercial Item Procurement*
 - *Critical Performance Parameters*
 - *Value Added Features*
- *Small Business Set-Aside when applicable*
- *Source Selection*
 - *Best Value Award Determination*
 - *Production Representative Sample Verification*



PM Expeditionary Power Systems Mr. Michael Gallagher

- Next speaker:

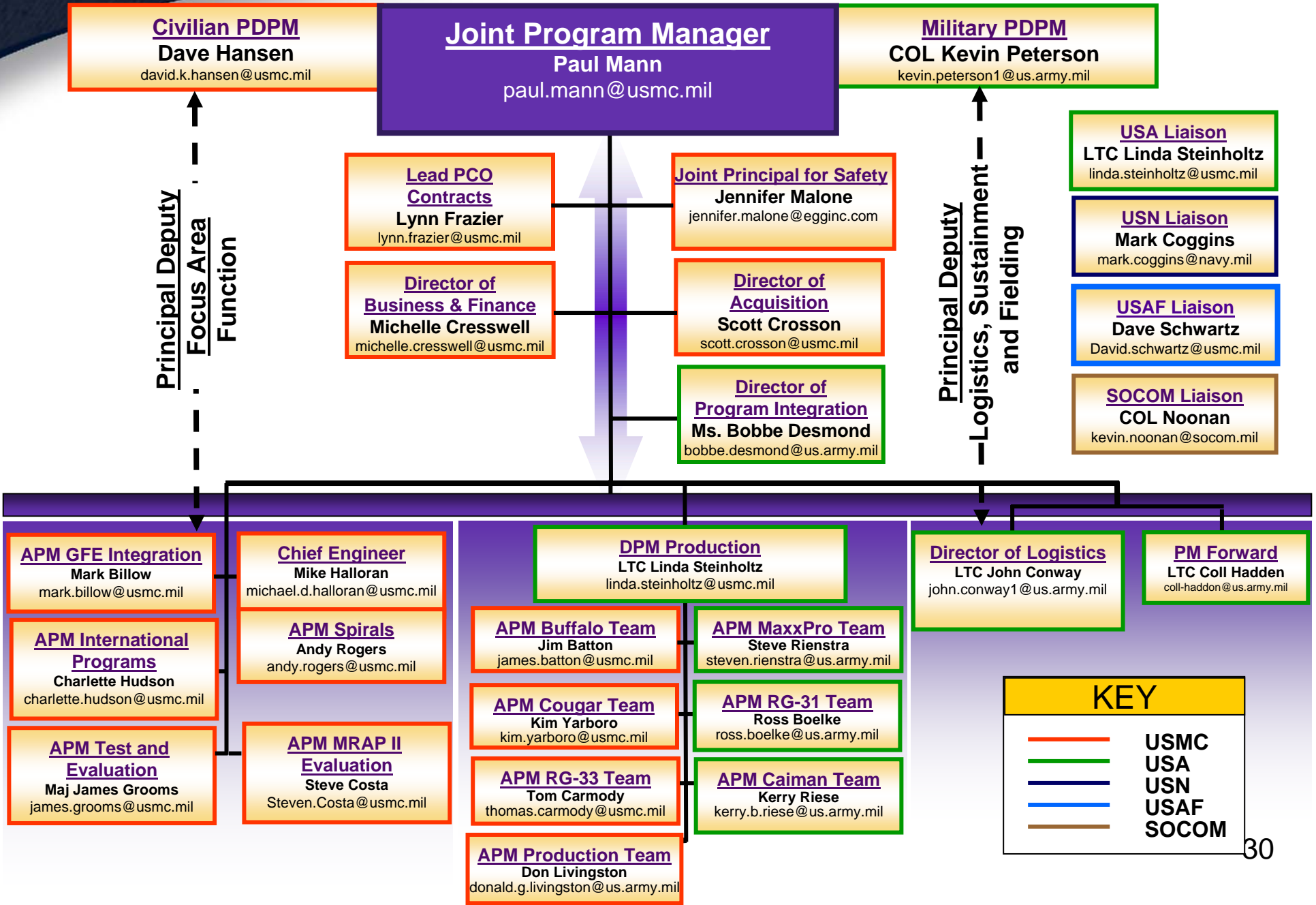
Mr. Paul Mann
Joint Program Manager
MRAP Systems

Joint Mine Resistant Ambush Protected Vehicle Program (JMVP)

**Joint Program Manager
MRAP**

**Mr. Paul Mann
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Principal Deputy
Focus Area
Function

Principal Deputy
Logistics, Sustainment
and Fielding

KEY

- USMC
- USA
- USN
- USAF
- SOCOM



PM MRAP Mr. Paul Mann

Near-Term Program Initiatives

- Production, Integration, Delivery
 - On a steep slope of production ramp-up. Tracking very close to plan.
 - Vehicles being produced at an amazing rate, ~1200 per month vs only 77 in Apr 07
 - Total JROC-approved Acquisition Objective = 14,204 – 19,655 vehicles
- Enhanced Performance: Significant improvements in survivability and automotive capabilities in process. Block upgrade strategy in development.
- Schedule: Continued emphasis on accelerating deliveries to the field across the total program.
 - Production Schedule: Increasing production capacity, constantly improving daily and weekly flow of deliveries to SPAWAR
- GFE Integration: Throughput number of vehicles per day pacing production.
 - Consistently achieving more than 30 per day.
- Sustainment: Expediting movement to hybrid organic-Contractor Logistics Support approach. Joint Logistics Integrator provides theater support.
- Resources: Aggressively expending resources to field and sustain as many MRAP vehicles as quickly as practical based on user requirements/feedback.



JMVP Funding Overview

As of 9 May 08

\$B	FY06/ Prior Funds	FY07 Bridge Supp	FY07 Supp	FY07 ATR	FY08 Amended Request	FY08 Cost Adj	FY09 Bridge Supp
USMC	\$0.043	\$1.031	\$1.303	\$0.119	\$2.784	\$0.020	\$0.436
USA	-	\$0.090	\$1.217	\$0.798	\$1.764	\$11.028	\$1.883
USN	\$0.130	\$0.060	\$0.137	\$0.107	\$0.316	-	\$0.109
USAF	-	-	\$0.139	\$0.031	\$0.758	-	\$0.106
SOCOM	-	-	\$0.259	\$0.110	\$0.160	-	\$0.076
TOTAL	\$0.173	\$1.181	\$3.055	\$1.165	\$5.783	\$11.047	\$2.610

\$22.4B Funded Thru FY08



Notes:

- RDT&E includes qty 100 Ballistic Test Articles
- RDT&E, Procurement, and O&M for Testing, Vehicles, GFE/integration, Spiral Devt/ECPs, Logistics Support and Transportation costs
- FY09/outyear requirements being refined



PM MRAP Mr. Paul Mann

Future Program Initiatives & Needs

- Complete MRAP Vehicle Production and Fielding
 - Gentle Ramp Down of production to complete Nov 08
- Accomplish MRAP Engineering Change Proposals in response to evolving user requirements
 - 50 Mine Resistant Ambush Protected Expedient Armor Program (MEAP) kits completed, enroute to theater
 - Fully integrated EFP protected capable vehicles in production
- Complete Integration of MRAP supply chain with DoD supply efforts
 - Transition to organic supply system
- Program Transition
 - Production to Sustainment
 - Lead-Service Transition Decision points driven by events not calendar
- Potential Program Needs – Business Opportunities
 - Specialized program, engineering and logistics support services
 - Weight, space, power management
 - Survivability and other performance improvement technologies



PM MRAP Mr. Paul Mann

- Next speaker:

Mr. Thomas Miller
Program Manager
Motor Transport

Ground Transportation & Engineering Systems (Product Group #15)/PEO Land Systems Program Manager, Motor Transport

Program Manager:

Thomas H. Miller

PH: 703-432-4436;

Thomas.H.Miller3@usmc.mil





PM Motor Transport Mr. Miller

- PM Motor Transport Portfolio:
 - Light Tactical Vehicles (GTES)
 - USMC HMMWVs and HMMWV Armor
 - Light Tactical Trailers
 - Military Motorcycles
 - Medium/Heavy Tactical Vehicles (GTES)
 - MTRV Trailer
 - Flatrack Refueling Capability (FRC)
 - Medium and Heavy Tactical Trailers
 - Support for Legacy Vehicles:
 - 5 Ton Trucks
 - Logistics Vehicle System Vehicles and Armor
 - PEO Land Systems Programs
 - Medium Tactical Vehicle Replacement (MTRV)
 - Logistics Vehicle System Replacement (LVS)





PM Motor Transport Mr. Miller

- Near term program initiatives –
GTES Programs
 - Flatrack Refueling Capability
 - Logistics Vehicle System Replacement (LVSR) compatible system, dispenses and de-fuels from USMC aircraft and provides refueling capability for the MLG and Division.
 - IOC: 4th Qtr FY09; FOC: 1st Qtr/FY12; AAO: 381
 - Supplier: TBD – conducting market research
 - MTRV Trailer
 - Replaces the current M105, M149, and M353 trailers; matches the MTRV's increased mobility without degrading its operational capabilities.
 - IOC: 1st Qtr/FY10; FOC: 4th Qtr/FY13; AAO: 6,615
 - Supplier: Choctaw Manufacturing, McCallister, OK



PM Motor Transport Mr. Miller

- Near term program initiatives - GTES
 - High Mobility Multi-Purpose Wheeled Vehicles (HMMWVs)
 - Continuing to procure HMMWVs through the Army TACOM
 - Assessing and incorporating safety and RAM upgrades (ex. Vehicle Emergency Egress windows, Fire Extinguisher Systems, Seat Belts, etc.)
 - Assessing armor upgrades with MCLB Albany Maintenance Center and Nevada Automotive Test Center (NATC)
 - Motor T Modifications
 - Funding line to develop and field modifications to improve the operation and safety of fielded Motor T systems (RAM, safety, cost and obsolescence, etc.) as a result of safety hazards, quality deficiency reports, and other initiatives.
 - Request industry's assistance in providing ideas for vehicle/trailer modifications in these areas



PM Motor Transport Mr. Miller

- Future initiatives - GTES

- **P-19 Replacement:**

- Potential new program to procure Aircraft Rescue and Firefighting vehicles to replace the aging A/S32P-19A fleet in support of expeditionary airfield operations and the supporting establishment. The ARFF vehicles will be equipped with fire suppression compounds and extinguishing agents, handheld extinguishers, and specialized rescue tools used by firefighters extinguishing aircraft or structural fires. Add-on armor capability is required. Addresses replacement vehicles for the tactical fleet plus bases & stations. P-19 vehicles (TAMCN D1064) were introduced into service in 1984 with a service life of 12 years.
 - Proposed AAO: 180



		FY08	FY09	FY10	FY11	FY12	FY13	
Light Fleet (GTES)	RDT&E	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
	PMC	\$444.6M	\$30.3M	\$28.2M	\$4.8M	\$3.6M	\$4.3M	
	HMMWV/Military Motorcycles							
	Family of Tactical Trailers							
Medium/Heavy Fleet (GTES)	RDT&E	\$2.7M	\$1.3M	\$1.3M	\$0.6M	\$0.6M	\$0.6M	
	PMC	\$45.6M	\$50.9M	\$50.0M	\$57.2M	\$3.0M	\$3.0M	
	MTVR Trailer/Heavy Trailers							
	Logistics Vehicle System (LVS) Armor							
	Motor Transport Modifications							
*Note: Includes PB09 core funding and requested 08 supplemental; does not include POM-10 funding request.								



PM Motor Transport Mr. Miller

- Near term program initiatives – PEO, LS Programs
 - Medium Tactical Vehicle Replacement (MTVR)
 - Continuation of installing MTVR Armor Systems (MAS)
 - Continuation of MTVR new production for USMC and Navy “Grow the Force” and other requirements
 - Supplier: Oshkosh Corporation
 - Logistics Vehicle System Replacement (LVSR)
 - Full Rate Production Decision Review for Cargo variant (1QFY09)
 - Milestone C for Trailer and Wrecker variants (1QFY09)
 - Cargo IOC: 3rd Qtr/FY09; FOC: 2nd Qtr/FY13; AAO: 1699
 - Supplier: Oshkosh Corporation



PM Motor Transport Mr. Miller

- Future initiatives – PEO, LS

- LVSR:

- Product Improvements, such as an upgraded alternator
- Potential acquisition of Army PLS trailers for tandem tow capability
- Potential future armor improvements (better protection, reduced weight)

- MTRV

- Life cycle cost reduction initiatives, to improve reliability, maintainability, reduce corrosion, etc.
- Continuing armor improvements (better protection, reduced weight)



		FY08	FY09	FY10	FY11	FY12	FY13
MTVR (USMC & Navy)	RDT&E	\$10.0M	\$ -	\$ -	\$ -	\$ -	\$ -
	PMC	\$256.6M	\$30.5M	\$37.9M	\$33.7M	\$45.6M	\$14.1M
		MTVR/MTVR Armor					
		MTVR Modifications					
LVSR	RDT&E	\$2.8M	\$3.4M	\$ -	\$ -	\$ -	\$ -
	PMC	\$28.9M	\$304.6M	\$277.6M	\$215.0M	\$4.8M	\$4.9M
		LVSR Cargo					
		LVSR Tractor					
	LVSR Wrecker						
<p>*Note: Includes PB09 core funding and requested 08 supplemental; does not include POM-10 funding request.</p>							



PM Motor Transport Mr. Tom Miller

- Next speaker:

LtCol Ben Garza
Program Manager
Joint Light Tactical Vehicle
(JLTV)



PEO Land Systems

Joint Light Tactical Vehicle (JLTV)



Program Manager: LtCol Ben Garza



Mission: Jointly develop, produce, field and sustain a safe, reliable, suitable and effective family of Joint Light Tactical Vehicles

Vision: JLTV – Providing our Joint Warfighter with the very best in light tactical vehicle payload, protection and performance



The Balanced Solution – JLTV Family of Vehicles and Trailers

PAYLOAD CATEGORY A

Payload: 3,500
 Performance: Exceed HMMWV
 Transport: 1x EAT* CH 47/53
 2x IAT** C130

Sub-Configurations

General Purpose Mobility
 (4 Seat) - Army/USMC



PAYLOAD CATEGORY B

Payload: 4000/ 4500 lbs
 Performance: Exceed HMMWV
 Transport: 1x EAT* CH 47/53
 1x IAT** C130

Sub-Configurations

- Infantry Carrier, Fire Team (6 Seat)
Army/USMC
- Reconnaissance (6 Seat) - Army
- C2OTM (4 Seat) - Army/USMC
- Heavy Guns Carrier (MP, Patrol, Escort)
(4 Seat+ Gunner) - Army/USMC
- ITAS (TOW) Carrier (4 Seat)
Army/USMC
- Utility (2 Seat) - USMC
- Ambulance (3 Seat+2 Litters)
Army/USMC



PAYLOAD CATEGORY C

Payload: 5,100 lbs
 Performance: Exceed HMMWV
 Transport: 1x EAT* CH 47/53
 1x IAT** C130

Sub-Configurations

- Shelter Carrier / Utility /Prime Mover
(2 Seat) - Army/USMC
- Ambulance (3 Seat+4 Litters)
Army/USMC



* EAT: External Air Transport
 ** IAT: Internal Air Transport

Program focus during Technology Development Phase is on these key configurations build key vehicles, 1 A, 2 B, 1 C



Trailers for each payload category to have equivalent payload and mobility to support prime movers.





JLTV FYDP Investments

	FY08	FY09	FY10	FY11	FY12	FY13
RDT&E	\$41.7M	\$44.0M	\$56.6M	\$74.6M	\$74.9M	\$75.7M
PMC					\$25.0M	\$106.3M
	Technology Development Phase			System Design & Development		

PEO LAND SYSTEMS MARINE CORPS

IT'S ALL ABOUT THE WARFIGHTER



Questions?





PM Joint Light Tactical Vehicle LtCol Ben Garza

- Next speaker:

Col Mike Micucci
Program Manager
Light Armored Vehicle (LAV)
and
Marine Personnel Carrier (MPC)

Program Manager Light Armored Vehicles Overview



Colonel Mike Micucci, USMC





- PM LAV Mission - **Research, development, acquisition and life cycle support** for USMC Light Armored Vehicle family of vehicles.
- Our Location – MARCORSYSCOM program office supported by **TACOM** in **Warren, Michigan**



- LAV – in the **Light Armored Reconnaissance Battalion**.
 - Conduct reconnaissance, security, and economy-of-force operations, limited offensive or delaying operations that exploit the unit's mobility and firepower.
 - Eight-wheeled armored combat vehicle with a **25-year history** to remain in service until to **2025** and possibly beyond.



- MPC – will reside in the **Amphibious Assault Battalion**.
 - Provide armor-protected mobility for infantry battalion maneuver task forces. 2 MPCs will lift a reinforced rifle squad.
 - The MPC program balances vehicle performance, protection, and payload attributes.



Where we are located!

PEO Land Systems

PM Expeditionary Fighting Vehicle
PM JPMO, Lightweight 155

PM Light Armored Vehicles MPC

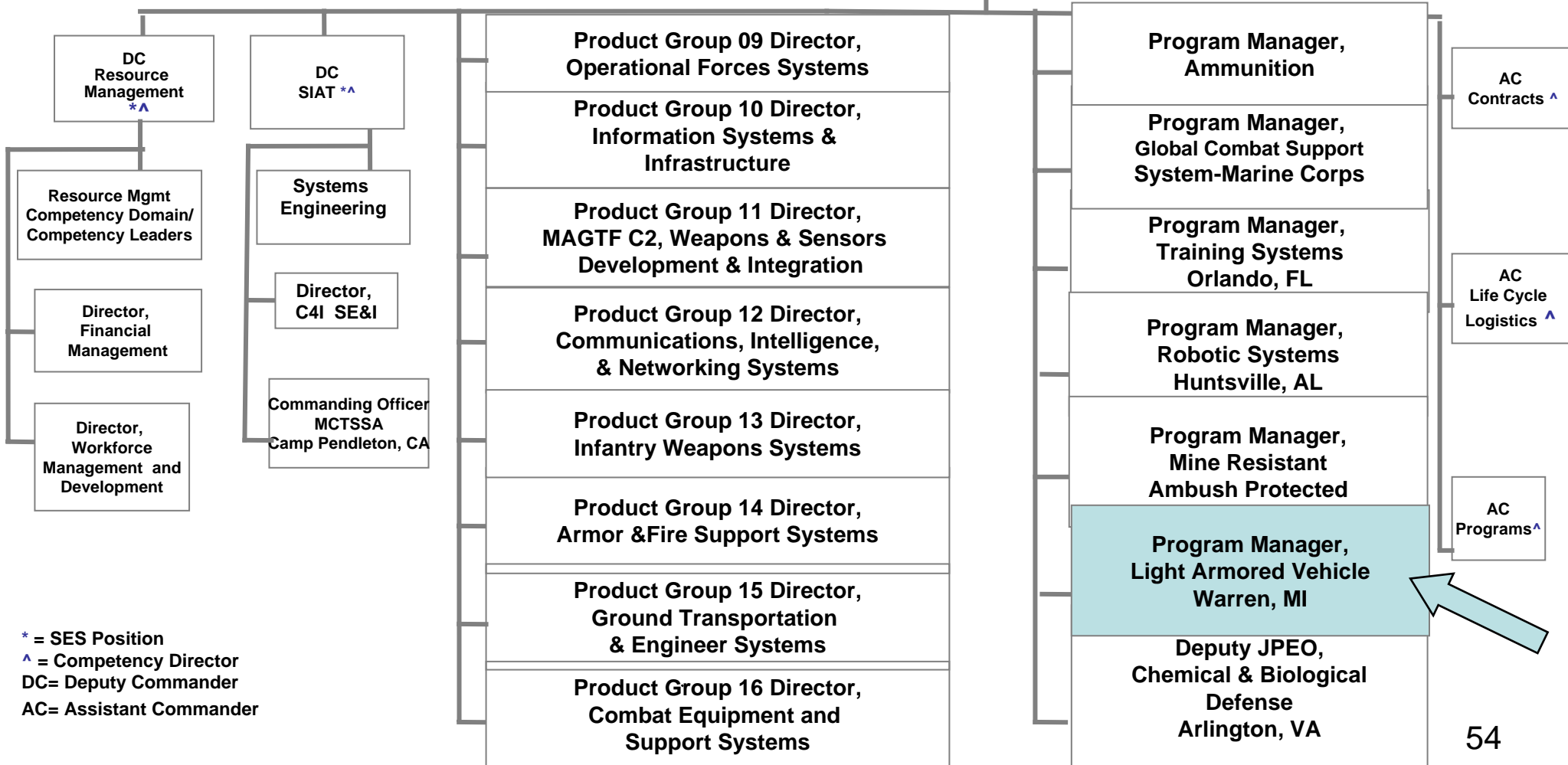
PM LVSR, PM JLTV
PM MTRV, PM GATOR, PM CAC2S
PM CAC2S

COMMANDER

EXECUTIVE DIRECTOR *

Product Groups

Program Managers



* = SES Position
^ = Competency Director
DC = Deputy Commander
AC = Assistant Commander



PM LAV Principals:

PM: *Colonel Mike Micucci, USMC*

Deputy PM: *Dr. Bob Lusardi*

➤ A2 Upgrade Program: *Jim Streberger*

➤ ITSS and Survivability Part II: *Linda Passeri*

➤ C2 Upgrade: *Derald Schnepf*

➤ RAM Team: *John Engbloom*

➤ SANG Program: *Joe Wagner*

➤ MPC: *Bill Ross*

Business/ Financial Manager: *Jan Boatman*

Contracts Manager: *Bill Abramson*

Lead Engineer: *Matt Koneda*

Lead Logistician: *Josephine Polanco*



	FY08	FY09	FY10	FY11	FY12	FY13
RDT&E PMC	\$15.0M \$120.4M	\$11.4M \$65.7M	\$7.6M \$35.7M	\$29.7M \$29.2M	\$87.5M \$5.8M	\$91.3M \$6.0M
LAV Systems	C2 UPGRADE, MARINE PERSONNEL CARRIER, LAV MODIFICATIONS					
	REPROCUREMENT FIELDING, RAPID ACQUISITION MODIFICATIONS					
	SURVIVABILITY UPGRADES II					



- Funded Programs
 - LAV SLEP/ Improved Thermal Sight System (ITSS)- **Fielding.**
 - LAV-C2 Upgrade- **Moving towards Milestone-C.**
 - LAV-25 Lethality Upgrade- **Working.**
 - OIF Upgrades, A2 Upgrade, LAV Re-Procurement- **Fielding.**

- **Future LAV Programs (FY08-FY09)**
 - Marine Personnel Carrier (MPC)
 - LAV Survivability Upgrades - Part II
 - LAV RAM Modifications, upgrades, and Rapid Acquisitions



GDLS-LAV III H



Germany BOXER



MOWAG PIRAHNA



LOCKHEED-PATRIA

Potential Candidates

- Socializing Joint Status with US Army
- Full and Open Competition
- Acquisition Objective: ~600 vehicles
- Family of Vehicles (FOV): includes P, C, R
- Initial Capabilities Document (ICD) validated & approved by MROC
- Analysis of Alternatives (AoA) completed.
- Capabilities Development Document (CDD) under development
- **Milestone A in FY10**
- Currently working Pre-Milestone A activities with Office of Naval Research (ONR)



Singapore TEREX



France - VBCI



- Currently working with ONR to mature technologies that need to be integrated on the MPC
 - Advance Lightweight Armor Materials/ Technologies
 - Advanced Seat Technology for blast resistance, shock mitigation and roll-over protection
 - Active Protection System
 - On-Board Vehicle Power for exportable power
 - Fuel Efficiency & Battlefield Power
 - Advanced Suspension
 - TBD





- Incorporate Floor Spall Liner
- Protection or Relocation of Fuel Tank
- Incorporate Mine Blast Resistant Seating where possible
 - LAV-25
 - VC and Gunner
 - Scouts
 - Mission Role Vehicles
 - VC and staff locations
 - Driver cannot be suspended but will need a reinforced seat and leg protection





“\$5-8 Million dollars per year are provided to PM LAV for the Modifications, Obsolescence Management, Low Cost Upgrades and Rapid Acquisitions in support of the LAV fleet.”



ALL PROJECTS COME OUT THROUGH:

Federal Business Opportunities

www.FedBizOpps.gov



- USMC LAV projected to remain ***in service until 2025***
- LAV family of vehicles must remain
 - ***Effective*** in the face of increasing threat capabilities
 - ***Supportable*** in the face of increasing age (Obsolescence is a growing issue)
- The challenge: ***How much survivability, lethality and mobility can be packed into an air-transportable, swim-capable LAV?***

- **Near Future:**
 - Marine Personnel Carrier (MPC)
 - LAV Survivability Upgrades
 - LAV RAM projects