

USMC Combat Vehicles



NDIA Combat Vehicle Conference
21 October 2008

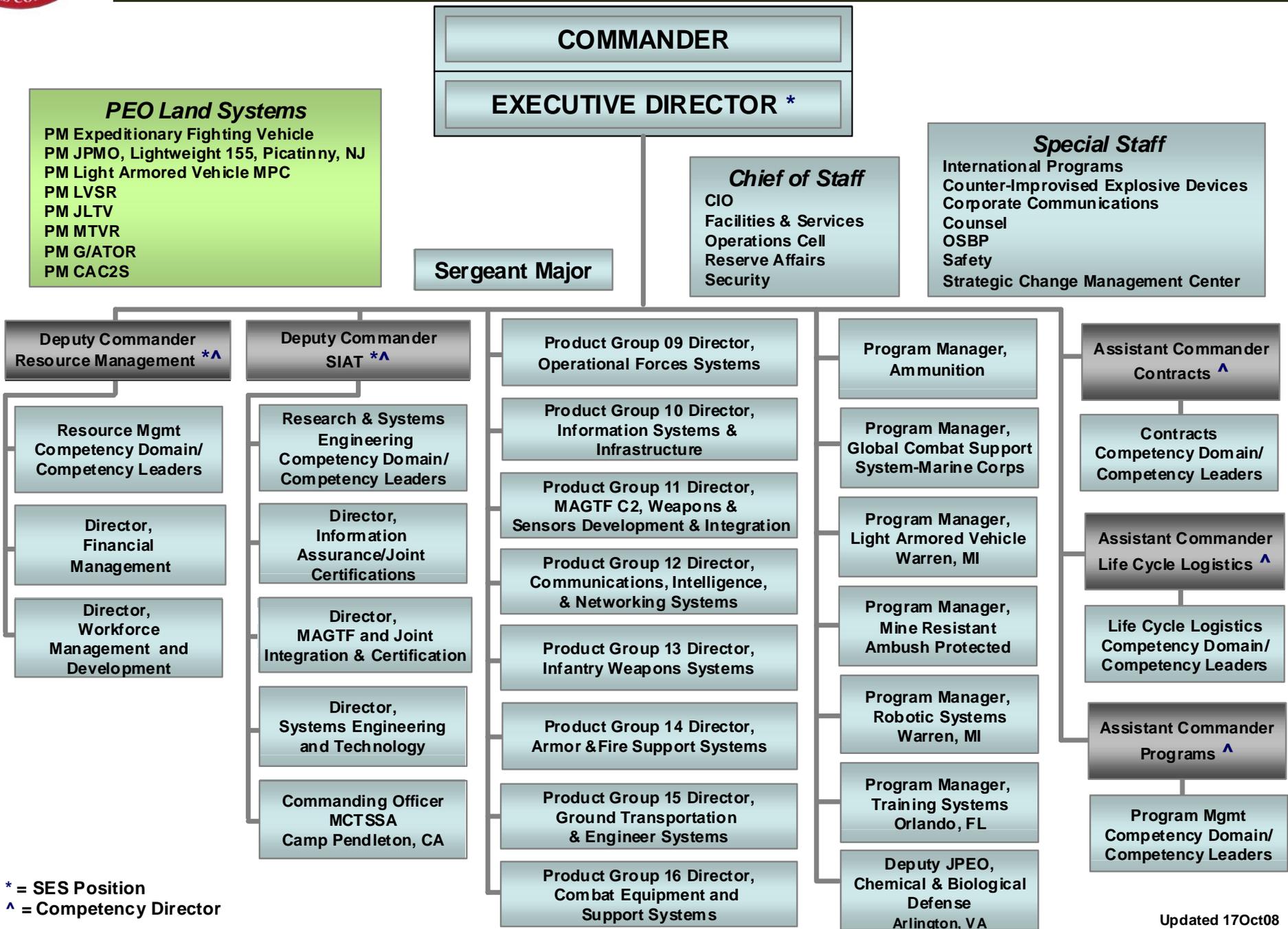
Dr. Robert Lusardi
Deputy Program Manager
Light Armored Vehicles

Agenda

- **USMC Combat Vehicle Organizations**
- **Light Armored Vehicles**
- **Assault Amphibious Vehicles**
- **Tank Systems**
- **Expeditionary Fighting Vehicle**
- **Marine Personnel Carrier**
- **Q&A**



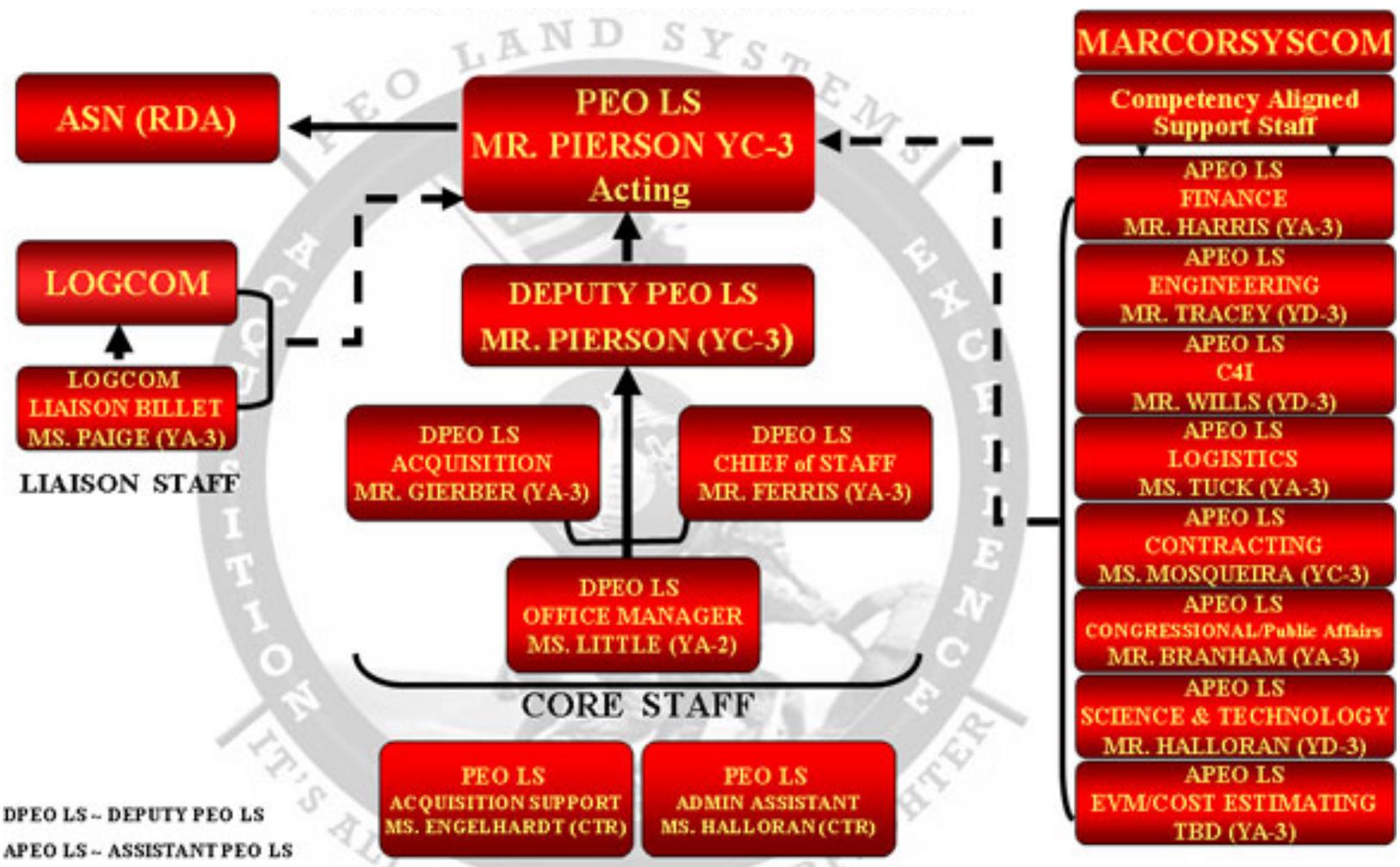
Marine Corps Systems Command



* = SES Position
 ^ = Competency Director



USMC PEO Land Systems



PEO LS PORTFOLIO IS \$9.7B ACROSS THE FUTURE YEARS DEFENSE PLAN (FYDP).

LW155 LVSR MTRV EFV MPC JLTV CAC2S G/ATOR

“Making the Transition to the Future”



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PM LAV

- **PM LAV Mission** - Research, development, acquisition and life cycle support for USMC Light Armored Vehicle family of vehicles.
- **Our Location** – MARCORSSYSCOM 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.

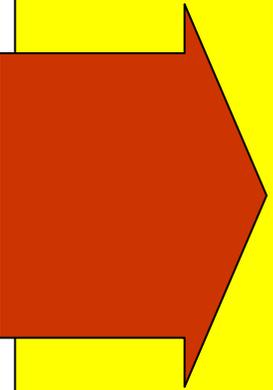
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LAV Modernization Plans

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)

- LAV Rapid Acquisitions & Modifications (RAM)
- LAV Survivability Upgrades - Part II
- LAV Fleet Sustainment Upgrades - EPLS



Past RAM Projects



ALL PROJECTS COME OUT THROUGH:
Federal Business Opportunities
www.FedBizOpps.gov



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LAV Survivability Upgrade – Part II

- 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



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LAV - Closing Remarks

- 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 (CBM+ & Obsolescence are growing issues)
- **The challenge:** How much survivability, lethality and mobility can be packed into an air-transportable, swim-capable LAV?

- **Near Future:**
 - **LAV RAM projects**
 - **LAV Survivability Upgrades**
 - **LAV Sustainment Upgrades**



Marine Personnel Carrier (MPC)



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MPC: System Description

- MPC is part of a portfolio of capabilities that provide closure to real world operational gaps and shortfalls in the ability of the MAGTF to conduct ground based maneuver tasks. The MPC, as the **medium capability category platform**, provides a bridge in capability between the EFV and JLTV and a **balance between the performance, protection and payload attributes**.
- The MPC is an expeditionary **armored personnel carrier** - ideal for irregular warfare - yet **effective across the full range of military operations**. Providing armor-protected mobility for infantry battalion maneuver task forces.
- The MPC **family of vehicles** includes the base armored **personnel** carrier and two supporting mission role variants: a **command & control** variant and a **recovery** & maintenance variant.
- Each vehicle type will be subjected to automotive performance, electromagnetic effects, reliability, live fire and operational tests.
- Although there is no existing Joint application, there are **ongoing discussions between the Marine Corps and the Army** to identify potential points of joint convergence.



Marine Personnel Carrier (MPC) Pre-MS A: The Near Future...

- 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**



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Questions?



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