



Marine Corps Light Armored Vehicles

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"Making the Transition to the Future"



PM LAV

- **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.

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LAV Modernization Plans

Funded Programs

- LAV-C2 Upgrade - Moving towards Milestone-C.
- LAV-AT Upgrade - Moving towards Milestone-B.
- OIF Upgrades, A2 Upgrade, LAV Re-Procurement- Fielding.
- LAV Survivability Upgrades - Part II



Future LAV Projects (FY10-11)

- LAV Rapid Acquisitions & Modifications (RAM)
- LAV Fleet Sustainment Upgrades – EPLS
- LAV-R Upgrades (Crane, Winch, Generator)

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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 - Summary

- 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)



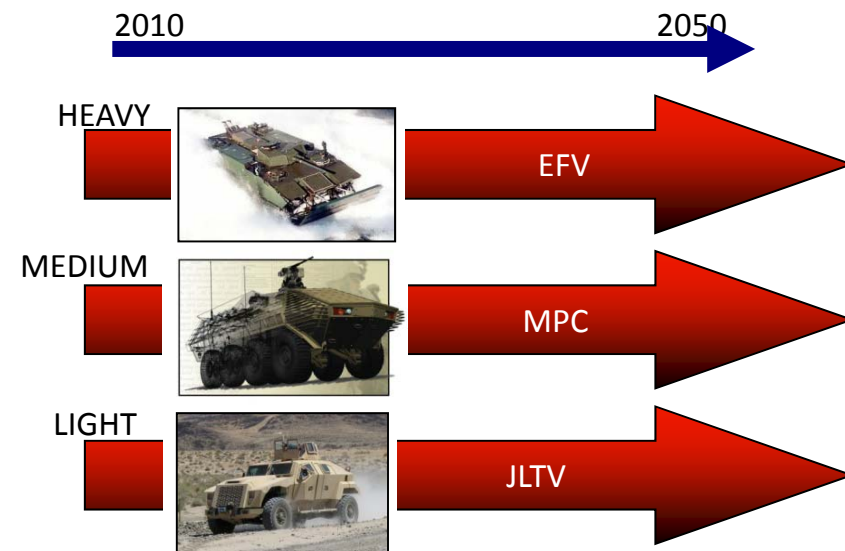
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Where Does the MPC Fit?

Marine Corps future triad of tactical mobility

		MPC Effectiveness Across the ROMO	
Traditional	MCO Major Combat Operations		
	Crisis Response		
I/W	Stability Operations		



- 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 baseline Personnel Carrier and two supporting mission role variants: a Command & Control variant and a Recovery & Maintenance variant.

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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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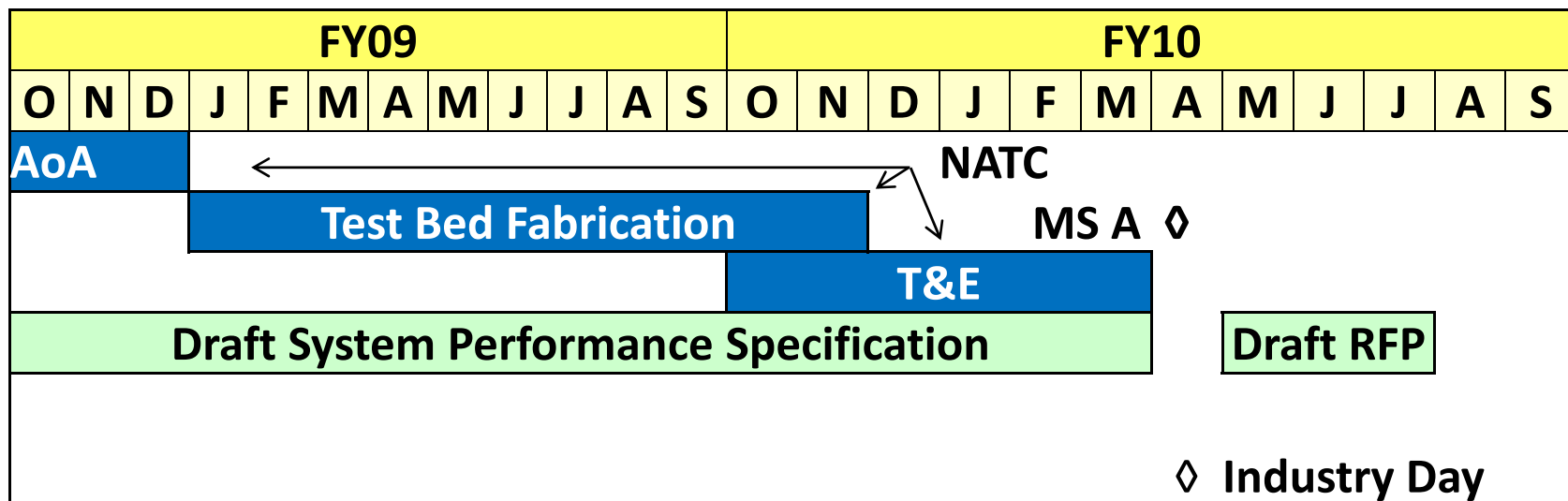


Technology Demonstrator Vehicle

The MPC technology demonstrator vehicle will address:

- Mobility (Powerpack, drivetrain, suspension system)
- Survivability (hull shape, armor, weight effects on mobility)
- Electrical power generation, management and distribution
- C4ISR integration
- Vehicle health monitoring (data bus architecture and capacity)

Nevada Automotive Test Center (NATC): Designer and Integrator



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Questions?



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