



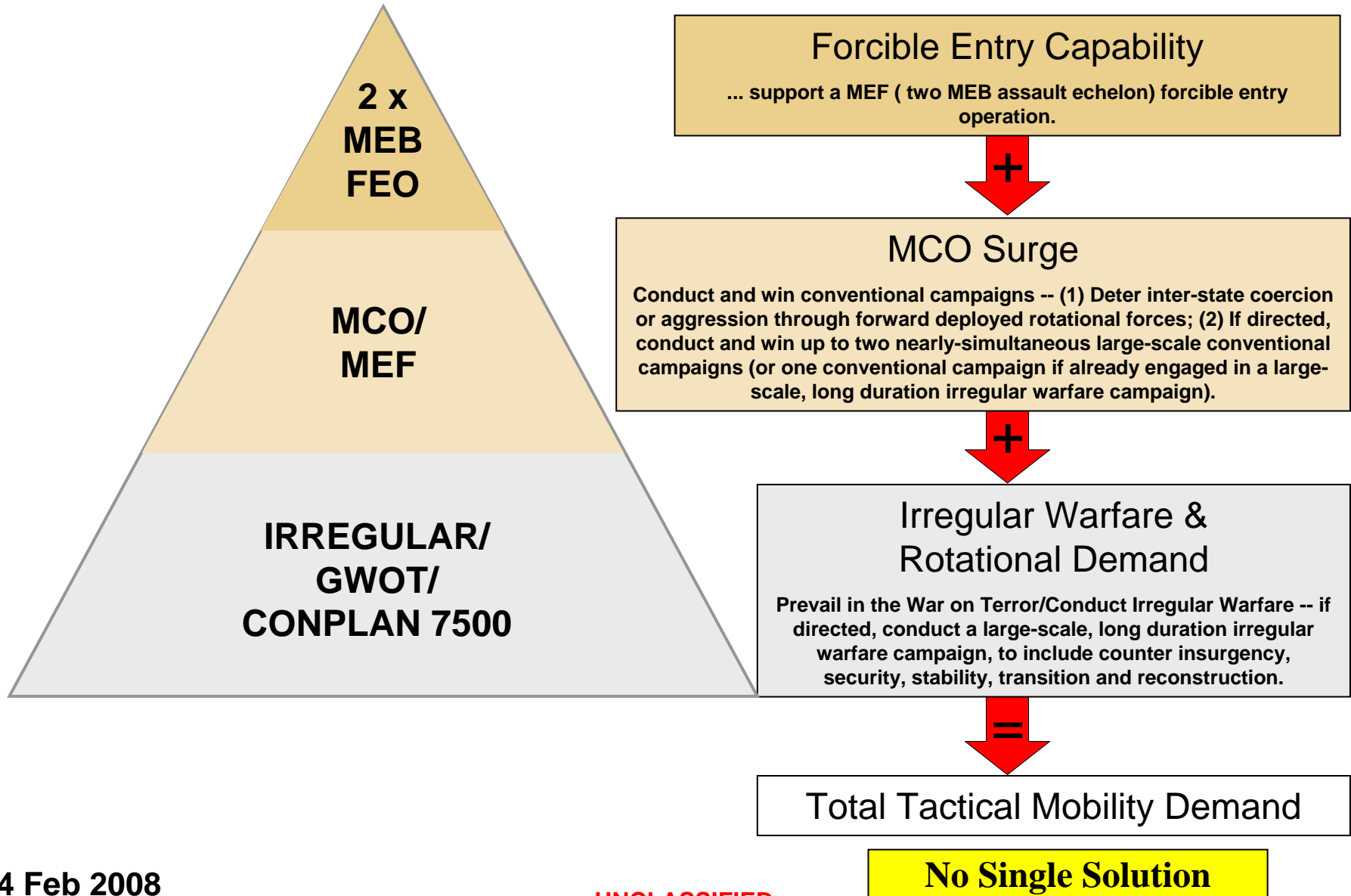
Marine Corps Ground Combat Tactical Vehicle Strategy



Brigadier General Larry Nicholson
Headquarters, U.S. Marine Corps (CD&I)
Quantico, Virginia



How we think about Tactical Mobility





OSD Ground Combat Tactical Mobility Guidance

- Task from Strategic Planning Guidance:
 - P. 10: “(U) The Marine Corps will consider capability alternatives for review by the DAWG to support a single two MEB forcible entry operation. Additionally, the Marine Corps will propose an appropriate mix of ground combat vehicles to support irregular warfare operations.

***Overarching Defense Strategy:
“Shift from conventional to irregular capability.”***



Vehicle Development Considerations

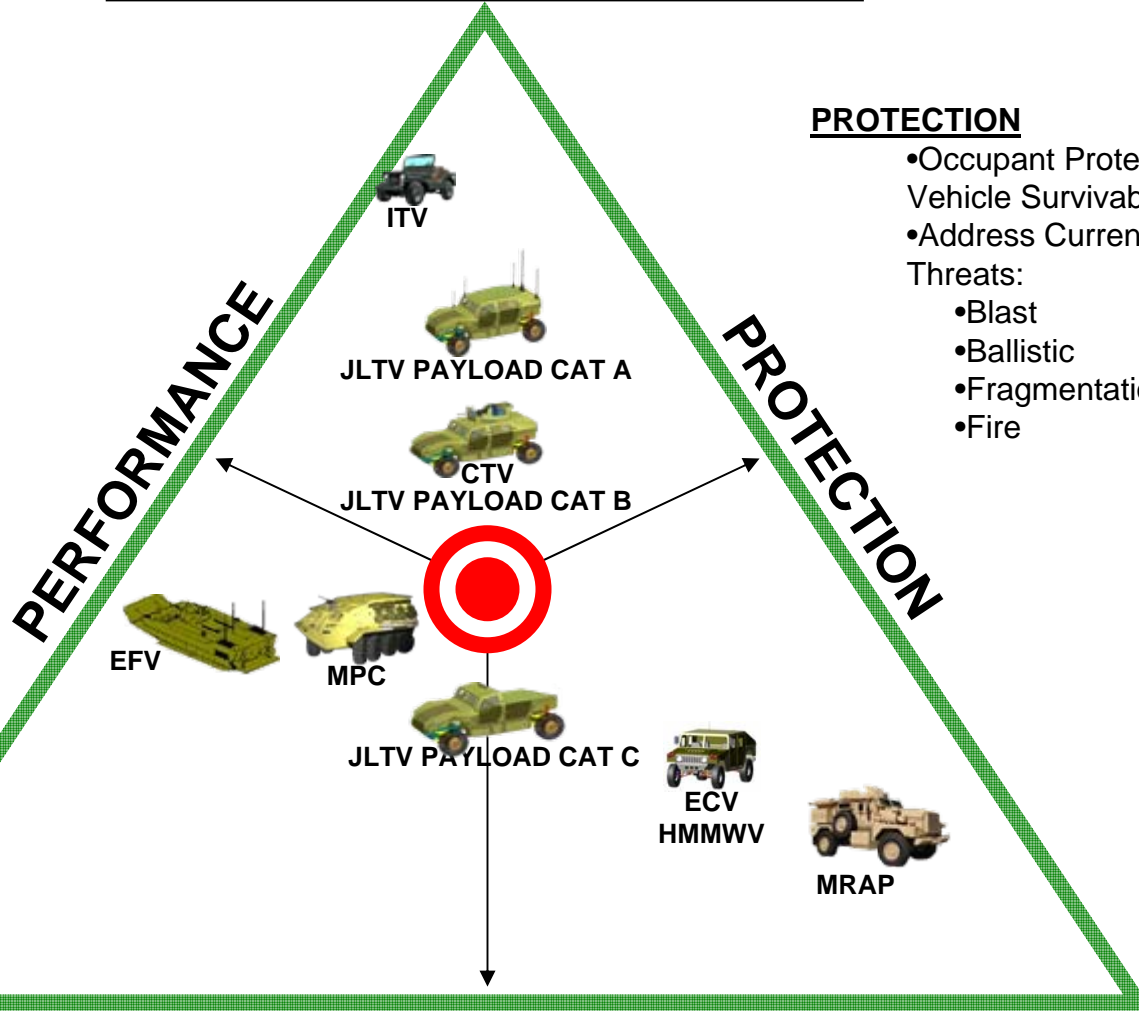
The Iron Triangle

PERFORMANCE

- Mobility
- Transportability
- Commonality Among Variants

PROTECTION

- Occupant Protection ... then Vehicle Survivability
- Address Current and Emerging Threats:
 - Blast
 - Ballistic
 - Fragmentation
 - Fire



PAYLOAD

- Optimized for Concept of Employment and Mission Equipment Packages

PAYLOAD

UNCLASSIFIED



Strategic Transformation & Implementation

- Where we were: A general purpose force organized, trained and equipped principally for traditional threats.
 - **Approached irregular challenges as a subset of MCO.**
 - **Recent experience has highlighted the need for resources focused on irregular warfare.**
 - **QDR and SPG have directed a shift to irregular.**
- Where we are going: A multi-purpose force organized, trained and equipped for irregular and traditional threats.
 - **Risk: Accept risk in strategic agility, while enhancing tactical capability.**
 - **Divestment: Divested resources from EFV program.**
 - **Reinvestment: Reinvested in mobility for an expeditionary multi-purpose force.**



Ground Combat Tactical Mobility Strategy Objectives

To develop a portfolio of mobility capabilities that provides a distribution of assets and **performance, protection, payload** and **transportability** characteristics that:

- 1) Support rapid transition between concentration and dispersion of MAGTF combat power (**tactical flexibility** to balance traditional and irregular threats).
- 2) Support strategic deployment in the context of the Naval Operating Concept (**strategic agility** to preserve global freedom of action).
- 3) Provide capacity to **meet and sustain** worldwide Marine Corps commitments (sustainability for forward presence, security cooperation, preemption and global response).

Endstate: Provide Marine Corps forces with balanced ground combat tactical lift capabilities.

Portfolio: System of systems, family of systems, complementary capabilities



EFV



MPC



JLTV



HMMWV / ECV



MRAP



ITV



Ground Vehicle Capability

- ✓ MEF (2xMEB assault echelon) forcible entry capability
 - EFV 1013 → 573
- ✓ Appropriate mix of ground combat vehicles
 - ✓ Marine Personnel Carrier (MPC) ~600
 - ✓ Internally Transportable Vehicle (ITV) 699 (enhanced mobility of vertical assault force)
 - ✓ Light/Medium vehicle mix
 - Mine Resistant Ambush Protected (MRAP)
 - Joint Light Tactical Vehicle (JLTV)
 - HMMWV / Expanded Capacity Vehicle series (ECV)
 - Levels of protection inherent in each



Internally Transportable Vehicle (ITV)



- The ITV will provide a deployed MAGTF with a ground vehicle that is internally transportable in the MV-22 tilt-rotor aircraft, CH-53, and MH-47 aircraft.
- The vehicle will serve primarily as a high mobility weapons-capable platform to support a variety of operations and provide enhanced mobility for the otherwise foot-mobile vertical assault element.

• **Acquisition Objective = 699**

- IOC: 2009
- FOC: 2015



Expanded Capacity Vehicle

Expanded Capacity Vehicle (ECV)



M1151



M1152



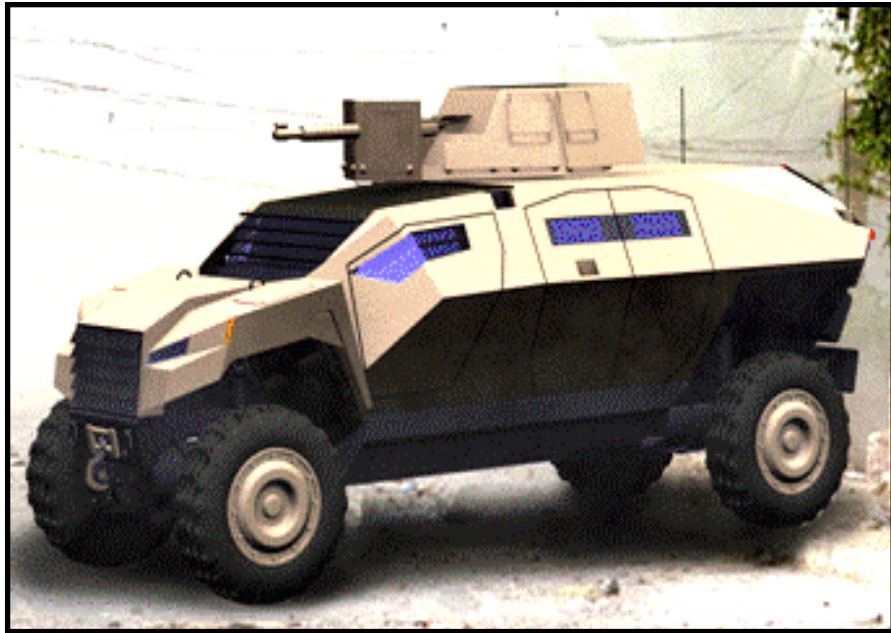
M1165

- Interim replacement for the HMMWVA2 as multi-purpose utility vehicle.

- **Acquisition Objective** = Dependent on JLTV schedule



Joint Light Tactical Vehicle (JLTV)



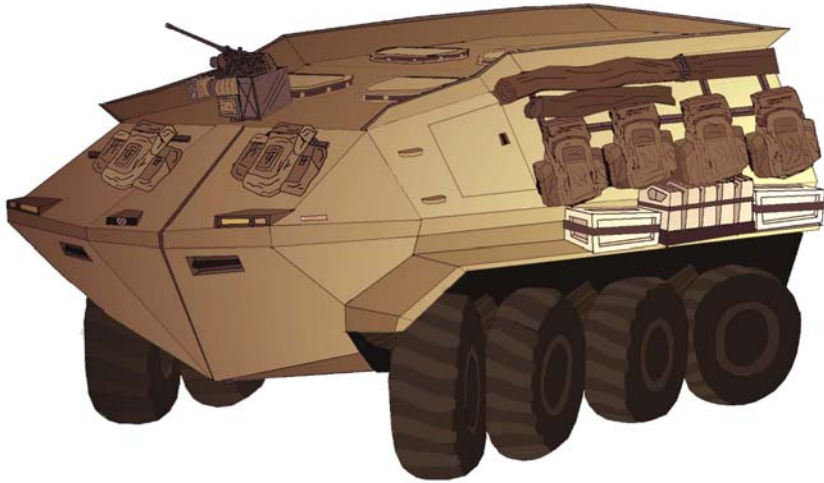
- HMMWV replacement vehicle (over time).
- JLTV Family of Vehicles with multiple Mission Role Variants (MRV) and trailers (Combat, Combat Support, Combat Service Support).
- Supports USMC Ground Mobility Initiative to retain expeditionary nature and multi-purpose capability.
- Increased survivability, mobility, and sustainability in a networked environment.

- Acquisition Objective = 5,500 (Increment 1)

- IOC: 2012
- FOC: 2018 (Estimated)



Marine Personnel Carrier (MPC)



- Provides infantry battalions with general support (ground) mobility across range of military operations.

- Complements EFV by closing operational gaps in our ability to conduct protected maneuver.

- Expeditionary platform that balances the protection, payload, and performance attributes to enable maneuver and to enhance personnel survivability.

- Supports USMC Ground Mobility Initiative to retain expeditionary nature and multi-purpose capability.

- Analysis of Alternatives considered a broad range of light and medium armored vehicle solutions and several concepts of employment.

- Acquisition Objective = ~600

- IOC: 2015

- FOC: 2019 (Estimated)



Mine Resistant Ambush Protected Vehicle (MRAP)



CAT 3: Buffalo (route Clearance)



CAT 1: 6 seats



CAT 2: 10 seats

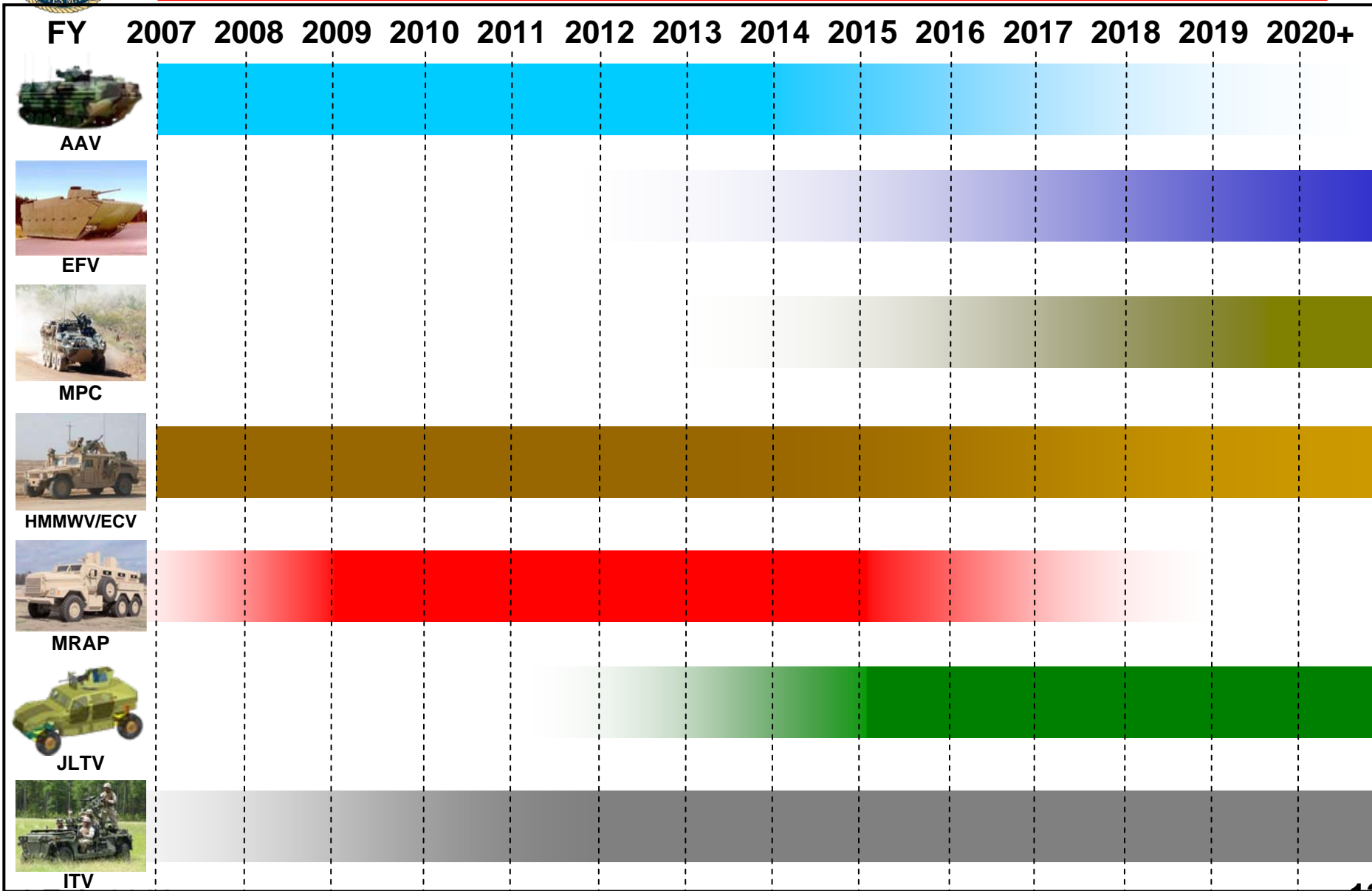
• **USMC Acquisition Objective = 2,225**

• **IOC/FOC: 2008**

- CENTCOM theater requirement.
- Significant increase in force protection over the current tactical wheeled vehicle fleet.
- Expedient answer to a force protection problem but carries with it a host of non-expeditionary characteristics and limitations
- Limited long-term USMC requirement (<500 vehicles) for Engineer/EOD Route Reconnaissance and Clearance.
- Capabilities and limitations of MRAP vehicle underscore the need for a JLTV capability in the TWV fleet.
- The Marine Corps currently has 819 MRAPS fielded in IRAQ



Ground Combat Tactical Mobility Portfolio



4 Feb 2008

UNCLASSIFIED



Questions