Marine Corps Combat Development Command & Combat Development and Integration

LtGen Richard Mills
Commanding General and Deputy Commandant
Agenda

- Strategic Setting
- Assured Access
- Amphibious Ships
- Lightening The MAGTF
- Ground Programs
- Working With Industry
- Shift in Training
- Force Optimization Review
• The Nation requires a force that assures access
• Our Naval partnership is unique and positions us to respond to crisis and gain access
• We are organized and equipped to operate across and through the maritime domain
• The “Pivot To The Pacific” further compels us to enhance our Maritime Capabilities
• In order to meet these requirements we require a flexible and balanced set of capabilities

“... we have to develop a smaller and leaner force, but one that has to be more agile, flexible, innovative and creative.”

Secretary Panetta, Defense Strategic Guidance Briefing, Jan 2012
The Marine Corps is America’s Expeditionary Force in Readiness – a balanced air-ground-logistics team. We are forward deployed and forward engaged: shaping, training, deterring, and responding to all manner of crises and contingencies. We create options and decision space for our Nation’s leaders. Alert and ready, we respond to today’s crisis with today’s force…..TODAY. Responsive and scalable, we team with other Services, interagency partners, and allies. We enable and participate in joint and combined operations of any magnitude. A middleweight force, we are light enough to get there quickly, but heavy enough to carry the day upon arrival, and capable of operating independent of local infrastructure. We operate throughout the spectrum of threats – irregular, hybrid, conventional – or the gray areas where they overlap. Marines are always ready to respond whenever the Nation calls...wherever the President may direct.

- General James F. Amos, USMC
  Commandant of the Marine Corps
Global Commons Challenge: Littorals, Chokepoints & Sea Lines

NATIONAL SECURITY ACHIEVED IN THE LITTORAL REGIONS…WHERE SEA CONTROL AND LITTORAL POWER PROJECTION MEET THE HUMAN DOMAIN ASHORE.

ADAPTIVE ADVERSARY
EMPLOYING COMBINED ARMS IN THE LITTORALS

- 75% of people live w/in 200mi of a coast
- 70% of world is water
- 95% of international communications travels via underwater cables
- 30,000 ships are underway daily carrying 93% of the world’s international commerce
- 49% of the world’s oil travels through the major chokepoints
Unifying Perspective: Single Naval Battle

Joint Operational Access Concept

Power Projection

Sea Control

"Area Denial" Threats

"Anti-access" Threats

G-RAMM; Mines; Ground Maneuver Units; AAA; Short range ASCMs.

FW A/C; Long-range ASCM

ASBM; Surface Combatants

TBM; Submarines

Boats; SAMs; RW A/C; UAVs

Space & Cyber attacks on the systems, & networks that support deployment, employment, & sustainment

Continental USA
Amphibious Operations Often Confused With Amphibious Assault

- **Amphibious assault**…the establishment of a landing force on a hostile or potentially hostile shore.

- **Amphibious raid**…a swift incursion into or a temporary occupation of an objective, followed by a planned withdrawal.

- **Amphibious demonstration**…a show of force conducted to deceive with the expectation of deluding the enemy into a course of action unfavorable to him.

- **Amphibious withdrawal**…the extraction of forces by sea in ships or craft from a hostile or potentially hostile shore.

- **Amphibious support to other operations.** A type of amphibious operation which contributes to conflict prevention or crisis mitigation…such as security cooperation, foreign humanitarian assistance, civil support, noncombatant evacuation operations, peace operations, recovery operations, or disaster relief, etc.

Amphibious operations may take place in permissive, uncertain, or hostile environments.
LITTORAL MANEUVER:
GO WHERE WE ARE NOT INVITED IN A SUSTAINABLE WAY

Not This...
Capabilities for an Expeditionary Era

LMSR
Military Sealift Command’s (MSC) large, medium-speed, roll-on/roll-off ship (LMSR), program significantly expands the nation’s sealift capability at prime movers of U.S. military equipment. The ships carry vehicles and equipment to support humanitarian missions, as well as combat missions.

LHA(R)
Lifts and supports over 1300 Marines and the MAGTF command and control nodes — its main base for its fixed (JSF), rotary wing / tilt-rotor, and unmanned aircraft systems. Well deck supports simultaneous landing craft ops. Level II medical capability.

LPD-17
Used to move and support over 700 Marines and their equipment and supplies by embarked LCACs, conventional landing craft, amphibious vehicles and rotary lift craft.

LSD
Largest capacity to operate landing craft in support of MAGTF operations.

Mobile Landing Platform
Leverages Float on—Float Off technology and a has reconfigurable mission deck to attain a vehicle staging area, sideports ramp, large mooring fenders, and LCAC lanes. This provides a pier in the ocean capability that has utility across the Range of Military Operations.

Ship to Shore Connector (SSC)
SSC program intended to provide a modernized replacement for the LCAC fleet.

T-AKE
The T-AKE will primarily contribute to prepositioning a MEB’s supply stocks and sustaining both the sea-based squadron and brigade forces operating afloat.

In future crises, forward-based and forward-deployed amphibious and MPF forces will continue to demonstrate their inherent flexibility and utility by aggregating with surged forces to conduct engagement, crisis response, or forcible entry operations.
<table>
<thead>
<tr>
<th>Issue</th>
<th>End State</th>
<th>Rationale</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Baseline MEB Lift Requirement</strong></td>
<td>Codified in 2009-2010 ASR CBA.</td>
<td>Collaborative effort between Navy and USMC; confirmed by N8 via R3B DM of 28 Mar 11.</td>
</tr>
</tbody>
</table>
| **Assault Echelon Shipping** | Requirement: $17 \times 2 = 34 / .9 = 38$  
Inventory: $15 \times 2 = 30 / .9 = 33$ | Requirement : 38  
Acceptable Risk Inventory: 33 |
| **LX(R) AOA** | Examine full range of available hull forms. 
Build and crew to warship standards. | Last amphib ship recapitalization program in the foreseeable future. Must accommodate MEB and MEU lift requirements. |
| **LHA-8** | Welldeck and Reduced Island  
FY 17 Start | Preserve robust aviation capacity while restoring surface interface capability |
| **MPF Configuration** | 69% capacity; seabasing enabled  
MPSRON 2 (Diego Garcia): 3 x LMSR, 2 x T-AK, 1 x T-AKE, 1 x MLP  
MPSRON 3 (Guam/Saipan): 2 x LMSR, 3 x T-AK, 1 x T-AKE, 1 x MLP | Retains prepositioning cargo ships in full operating status (FOS).  
LMSR/MLP/T-AKE combo provides sea state-3 transfer and selective offload for seabasing enabled capability. |
| **Connectors** | Attain balanced LCAC/SSC, LCU/SC-X, JHSV inventory  
Support SSC POR of 72 craft  
Support Surface Connector X  
Enhance JHSV with sea-state 3 ramp | Complementary capabilities that are critical to naval expeditionary operations and at sea transfer require adequate resourcing. |
Connectors Lift 85% of MAGTF Vehicles

A Naval Connector Strategy is needed to provide ...
Integration Across

Doctrine

- All LTM initiatives through the **Combat Development Integration Board**
- “Lighter” translates to **“more tactical”** in Maneuver Warfare
- Force development is **constrained by available shipping**
- The environment (Strategy, Fiscal, Lessons) is **changing the way we identify gaps** and develop our solutions.
  - Marine Expeditionary Rifle Squad: System of capabilities.

Operations

- Energy Initiatives (GREENS, SPACES, On-Board Vehicle Power, Fuel Efficiency Modifications)

Training

- Assault Element **MEU/MEB...Define T/E...find trade space to ensure combat support is sufficient.**
G-BOSS(E) provides Marine Corps forces with 24-hour persistent ground surveillance to display and track items of interest through the use of unique, high-resolution, day and night cameras and sensors.

Cargo UAS has been added as an initiative to enhance our assault support capabilities and to reduce the vulnerability of ground logistics supporting Marines stationed at remote combat outposts.

COCs present, display, and communicate the commander's intent and required information in support of expeditionary maneuver warfare.

The ACV's Over the Horizon (OTH) launch capability enables the Navy and Marine Corps to project power from the sea base.

The MPC supports expeditionary maneuver warfare and the requirements of the GCE based maneuver task force by providing a platform that possesses a balance of performance, protection, and payload attributes.

HIMARS primarily employs the guided MLRS rocket to provide precision fires in support of maneuver forces.

The ACV's Over the Horizon (OTH) launch capability enables the Navy and Marine Corps to project power from the sea base.

The EHMMWV ECV is the fourth-generation design of the and is replacing the aging fleet of baseline A1 variants and some A2 variants.

The JLTV is the next generation of light tactical vehicles needed to support joint forces across the full range of military operations and provide a vital force enabler, multiplier, and extender.

G/ATOR's expeditionary, multi-role capabilities represent the next generation in ground radar technology and will provide crucial enhancements to warfighting.

The EFSS will afford the MAGTF commander increased flexibility in tailoring his fire-support systems to support the scheme of maneuver.

The LAV A2 Program enhances crew force protection and vehicle survivability and allows the fleet to continue to effectively support air and ground operations.

Cargo UAS has been added as an initiative to enhance our assault support capabilities and to reduce the vulnerability of ground logistics supporting Marines stationed at remote combat outposts.

The EFSS will afford the MAGTF commander increased flexibility in tailoring his fire-support systems to support the scheme of maneuver.
Combat Vehicle Capability Road Map

LEGEND

▼ = Initial Operating Capability
◆ = Full Operating Capability
▼ = Item Exit Date
SLEP or Replace TBD

AAV (1,047) ▼ Upgrade 392

LAV (925) ▼ SLEP

M1A1 (400) ▼ SLEP

M88A2 (99) ▼ SLEP - TBD

HMMWV A2 / ECV (13,000) 2030▼

ITV (241) 2017▼

ABV (66) 2028▼

AVLB (30) 2025▼

M-9 ACE ◆ Modernization (113) 2034▼

R2C (28) ◆ Increment III 2030▼

ACV (573) 2030▼

MPC (579)

JLTV (5,500) 2050▼

2017

2025

2028

2030

2034

2035

2030

2050
Budget Realities and GCTVS Way Ahead

Budget Realities

• Reset and modernized in fiscal austerity

• Make the requirements process better...Systems approach with cost to capability trade-offs in requirements

• Preserve the most important capabilities and maximize the possibility of regeneration

• Focus on sustainment of legacy combat and tactical vehicles

• Become more energy efficient, it is a warfighting enabler

Ground Combat Tactical Vehicle Way Ahead

• Develop and procure JLTV prior to Amphibious Assault modernization

• Sustain HMMWVs to 2030 through IROAN and a HMMWV Mod Line

• Develop a modern ACV

• Initiate an AAV Upgrade as a bridge to ACV

• Continue R&D in MPC through FY14 to identify the most effective portfolio mix of vehicles

• Limit procurement of vehicles to reduced AAO estimates as identified
Working With Industry on The Way Ahead

- **Affordability**
  - Cost to Capability trade-offs early in the requirements process

- **Process**
  - Requirements
  - Acquisitions
  - Systems engineering approach - Integration done in requirement development, not materiel development
  - We must not over-reach on technology

- **Energy Efficient**
  - Energy Solutions e.g. Man-Portable Power and Water Purification

- **Longer Service Life**
  - Maintain, improve what we have to reduce operating costs

"With respect to equipment we should emphasize simplicity, ruggedness and ease of maintenance. And in design and gadgetry the characteristics we demand should be pattern of the necessary rather than the ideal. We shall continue to strive to obtain in a timely manner the best possible combat equipment."

- General David M. Shoup, USMC, CMC, 4 January 1960

Paradigm Shift: Not More Capability; Equal Capability at Less Cost
Shift in Training

**Current Training**
(Prepares for “this war”)
- OEF-focused program and initiatives
- Training and Readiness Manuals tied *subjectively* to readiness

**Future Training**
(Prepares for “any war”)
- Focused training on post-OEF environment and force capabilities (amphibious & expeditionary)
- Coordinated programs and initiatives to enhance efficiency – requires a Service-Level training plan
- Readiness reporting tied to objective standards

---

**Current Training**
Prepares units for a specific mission, enemy and environment in support of Operation Enduring Freedom (OEF).

**Future Training**
Assists commanders in building necessary capabilities to operate across the range of military operations as the *middle-weight expeditionary force-in-readiness*. 
Given projected requirements and resources, optimize the FY17 force to meet global demands ensuring a relevant Marine Corps across the ROMO.

**Purpose**: Provide senior leaders options to reduce risk during the period of austerity.

**Method**: Align capabilities and capacities to requirements and assess them against the 5 pillars of readiness and maintain CMC’s red lines.

**End State**: A globally relevant Marine Corps that mitigates risk during austerity while ensuring reversibility.

---

**Assess against five pillars (focus on two)**

- High Quality People
- Capability/Capacity vs. Requirements
- Infrastructure Sustainment
- Unit Readiness
- Modernization

---

**End State / Objective**
- 182.1K Force
- Globally Relevant
- Postured For Crisis Response
- Mitigates Risk During Period of Austerity

---

**Key Factors**
- Global Relevance
- Decisive, Engaged Leadership
- Affordability