Military Sealift and Expanding MAGTF Ground Mobility Procurements

Captain Ronald White, Jr

Expeditionary Warfare School

Maj Thiele

19 February 2008
**Military Sealift and Expanding MAGTF Ground Mobility Procurements**

1. REPORT DATE
   19 FEB 2008

2. REPORT TYPE
   
3. DATES COVERED
   00-00-2008 to 00-00-2008

4. TITLE AND SUBTITLE
   Military Sealift and Expanding MAGTF Ground Mobility Procurements

5a. CONTRACT NUMBER
   
5b. GRANT NUMBER
   
5c. PROGRAM ELEMENT NUMBER
   
5d. PROJECT NUMBER
   
5e. TASK NUMBER
   
5f. WORK UNIT NUMBER

6. AUTHOR(S)
   United States Marine Corps, Command and Staff College, Marine Corps Combat Dev, Marine Corps University, 2076 South Street, Quantico, VA, 22134-5068

7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES)
   United States Marine Corps, Command and Staff College, Marine Corps Combat Dev, Marine Corps University, 2076 South Street, Quantico, VA, 22134-5068

8. PERFORMING ORGANIZATION REPORT NUMBER
   
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)

10. SPONSOR/MONITOR’S ACRONYM(S)
    
11. SPONSOR/MONITOR’S REPORT NUMBER(S)

12. DISTRIBUTION/AVAILABILITY STATEMENT
    Approved for public release; distribution unlimited

13. SUPPLEMENTARY NOTES
    
14. ABSTRACT
    
15. SUBJECT TERMS
    
16. SECURITY CLASSIFICATION OF:
    
   a. REPORT
      unclassified
   
   b. ABSTRACT
      unclassified
   
   c. THIS PAGE
      unclassified

17. LIMITATION OF ABSTRACT
    Same as Report (SAR)

18. NUMBER OF PAGES
    12

19a. NAME OF RESPONSIBLE PERSON
    
Form Approved
OMB No. 0704-0188

Approved for public release; distribution unlimited

Standard Form 298 (Rev. 8-98)
Prepared by ANSI Std Z39-18
Reliable military sealift is a requirement for the United States in the execution of our responsibilities as the global superpower. In fact, since Desert Shield/Desert Storm the national defense establishment has maintained a robust strategic sealift capability to echelon combat power around the world to defend the United States national interest. Moreover, in the 21st century smaller scale regional crises erupt near the littoral regions, as most national capitals are within 100 miles of their coast, over 90 percent of transnational/international trade moves in or around the littoral areas and the sea present the nations who control them with unparalleled access to the rest of the world.

The current United States Maritime Strategy calls for a robust mix of commercial and military maritime locations and resources to maintain control and access to the world’s seas. One vital element to this robust mix is Maritime Preposition Shipping (MPS). MPS is a method by which the Marine Corps forward deploys modern equipment and materiel to support combat operations abroad. This concept is unique in that the equipment is not just pre-loaded on these vessels; the principle end item are managed under a rigorous maintenance strategy and the MPS vessels are always at sea. The combination of the equipment aboard MOS
shipping and the forces flown in from the home station give the combatant commander enormous flexibility and reach.

... The Navy and Marine Corps team provides COCOMs[Combatant Commanders] with their only forcible entry option and provides access, mobility, staying power and a mix of capabilities that uniquely contribute to meeting these evolving operational requirements—all across the changing spectrum of conflict. The ability of the Navy and Marine Corps to respond with precisely the right capability is inherent in Sea Basing and Global Fleet Stationing of their resources, together with their ability to aggregate, disaggregate, and re-aggregate forces at sea, ashore, or as the threats dictate...... 1

In order to maintain military sealift independence the Marine Corps should increase the size of the Maritime Preposition Ship (MPS) Squadron or tailor combat vehicle procurements that conform to MPS load parameters

**Background**

After the fall of the Soviet Union, the threat of a high intensity-global conflict was diminishing; however, the threat of low to medium-intensity regional conflicts was rapidly rising. Yet the United States was reducing its expenditure on the armed forces and forward bases with dedicated forces were closing, presented a daunting challenge to the warfighting establishment.

Moreover, while military resources were diminishing, operational requirements were increasing in number and complexity. Operational requirements relating to Marine
Corps forces are concisely described in the following quote:

Operational requirements are those military capabilities necessary to accomplish the objectives defined in the national security strategy. These operational requirements link means and ends. A regional stability strategy requires multiple operational capabilities including amphibious forces, contingency forces, and follow-on forces. Given the current uncertainty in the world, the U.S. future military strategy may place an even greater emphasis on amphibious capability -- ground forces and the amphibious ships needed to transport them. Amphibious capability provides Marine expeditionary forces the means to seize defended areas, enhancing rapid combat power buildup with follow-on forces. The requirement to seize advanced base facilities to allow contingency and follow-on forces to respond to a crisis should be apparent. Therefore, the existing strategic operational requirement for amphibious assault capability is unlikely to diminish in any future military strategy.\(^3\)

**Current Sealift Capability**

The Marine Corps has since organized its forces into capability sets that allow for the rapid insertion and build-up of combat forces world wide. This construct is based around the smallest form of the Marine air ground task force (MAGTF), the Marine expeditionary unit (MEU), which is constantly afloat aboard the Expeditionary strike group (ESG). The MEU and the amphibious ships that make up the ESG provide a forcible entry capability to any location in the littoral regions of the globe. Once the MEU conducts forcible entry it is then followed by fly-in
echelon (FIE) of forces of the Marine expeditionary brigade (MEB) and one MPS Squadron (MPSRON) that carries the required equipment and material necessary to sustain combat operations for a protracted period of time and through all levels of conflict.

At any given time the Marine Corps has three MEUs and three MPSRONs afloat to answer the requirements of combatant commanders during a crisis response. The 3 X MPF/MEB construct has served the Marine Corps well over the past 16 years.

However, the Marine Corps’ ability to maintain three amphibious ships worth of combat power and deployability is heavily dependent on the Maritime Preposition Ship (MPS) program. The Marine Corps MPS program is made up of three MPS Squadrons (MPSRONs) with approximately five commercial vessels each. Each squadron is filled with the equipment and material needed to sustain a MEB for prolonged combat operations on land.

The MPS fleet is aging and the funding to replace them in the current stagnant ship building environment is difficult to obtain as MPS retrofit funding goals competes with other more pressing naval priorities. Moreover, the ships have experienced problems with weight and balance under current loads.
INCREASE MPS SQUADRON SIZE

At present, a significant shortfall in deck space exists on available MPF ships to accommodate the rise in ground vehicle procurements. The latest “Ground Mobility Study” produced by MCCDC called for an increase in the number of ground tactical vehicles to increase battlespace survivability, lethality, and mobility of the Ground combat element. Even though the final mix of ground mobility improvements is still being deliberated, the Marine Corps is moving forward with the procurement of the Medium Tactical Vehicle Replacement (MTVR) Vehicle, Joint Light Tactical Vehicle (JLTV), Additional Light Armored Vehicle (LAV-25), and the Marine Infantry Carrier (LAV Personnel Variant).

In order to accommodate the additional vehicles, the Navy/Marine Corps needs to procure an additional two ships (AMSEA Class equivalent or greater) per MPS Squadron to make each squadron seven ships each. The additional ships will ensure that the MPS fleet can meet the strategic sealift needs, fulfill proper ship yard maintenance, and provide maximum flexibility to the COCOM through the MAGTF.

The procurement and embarkation of heavier platforms will also cause the MPS ships to exceed maximum weight before filling up deck space. This “weighting out” is not
only detrimental to a vessel’s service life, it is also a waste of deck space.\textsuperscript{4}

**Tailor Combat Vehicles**

Since OIF II, the Marine Corps has needed to update its ground vehicle fleet to support ongoing operations in theater and throughout the world. The increased threat of sniper fire, improvised explosive devices (IEDs), and mines have required survivability enhancements on all combat, combat service support, and ordnance vehicles.

Moreover, as the global threats become more decentralized and spread out, the battlespace is becoming increasingly larger in size. Ground forces are in need of robust vehicle assets that provide adequate ground mobility, agility, and speed.

USMC vehicle procurements are designed to provide enhanced mobility for all ground forces in theater at all times, while maintaining sufficient equipment to respond to a global crisis. The vehicle considers in the overall ground mobility initiative a shown below.

<table>
<thead>
<tr>
<th>Portfolio:</th>
</tr>
</thead>
<tbody>
<tr>
<td>EFV</td>
</tr>
</tbody>
</table>

The current planning guidance suggest that the Marine Corps acquire a mix of vehicles from the above portfolio
that will provide 2 MEBs worth of equipment for forcible entry capability, one MEF-sized element worth of lift to address a regional conflict, and sufficient forces to address irregular warfare threats worldwide.

This includes but, is not limited to, the following mix of vehicles:

“1013 to 573 EFV (8 infantry bns)
Marine Personnel Carrier (MPC) ~700 (3 infantry bns
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 Armored vs unarmored

The total vehicle mix in FY11 is 24,930 Vehicles”

This future procurement plan coupled with the MPS shortfall described above creates and environment that will make it difficult for the MAGTF to maintain its role as a Joint task force enabler. That is to say, the Marine Corps will not be able to bring combat power larger a MEB into play in a given amphibious operating area (AOA) due to current limitations in amphibious shipping.
**Tailor Procurement**

A short-term solution to this dilemma is to tailor these procurements in a way that will ensure each vehicle fits within the MPF embark envelope of the platforms that are being replaced.

In addition, acquisition technology should be used to affect aggressive weight reduction programs that will mitigate excess weighting of the MPS ships caused by previously mentioned enhancements.

**Reasons for not tailoring vehicle procurements**

On its face, it would appear that tailoring vehicle requirements to ensure commonality and interoperability aboard MPS shipping is one sided. Some would argue that the concern of MPS would require the subordination of other more relevant operational concerns such as lethality, speed, armor protection, etc.

However, that is not the assertion of this argument. The recommendations and changes should cause Policy makers at Headquarters Marine Corps, the Acquisitions executors at Marine Corps Systems Command, the MAGTF Integrators at MCCDC, and the ship builders at Naval Sea Systems to bring all amphibious matters into common goals. This will ensure that future ship designs are built with future ground mobility enhancements in mind.
In addition, this argument is not asserting that ground mobility initiative results are incorrect, but that they ignore amphibious shipping requirements.

The ground mobility study conducted by MCCDC deliberately, negated any consider of amphibious lift shortfalls. While this measure was taken to ensure an untainted evaluation of the Marine Corps lift shortfalls, it did not advertise the cost of enhance the ground mobility and agility of the GCE. Moreover, due to the narrow prospective of the Ground Mobility Study, operational agility may be adversely impacted. As the GCE gets accustomed to working with better, more capability, and more abundant assets; they will be hard pressed to adapt to having fewer assets available when they leave the home station and land as a FIE. The exponential growth of ground vehicle will reduce the amount of items that can be carried aboard MPS shipping. This effect is a potential unforeseen consequence of continuing the buy vehicles for an amphibious force, while at the same time doing so in a vacuum form the amphibious ship builders.

**Conclusion**

The current world situation and maritime strategy needed to address the challenges of the 21st century are daunting. The MPS program interwoven with the nation’s overall
maritime policy serve as a key force multiplier in ensuring the United States remains the global superpower in this century. As a Navy/Marine Corps team it is imperative that our effort on the amphibious doctrine and equipment be synchronized through all phases of the requirements and acquisitions process.

In the short term additional MPS vehicles are needed to make up for the added weight and space required by an ever increasing GCE. Also, future amphibious vehicle procurements and commercial ship for MPS operations need to be robust enough to support the current operational requirement of the combatant commanders through the force provided by the Marine Corps.
Bibliography Page

Notes


2. Congressional Budget Office Study “The Future of the Navy’s Amphibious and Maritime Prepositioning Forces” November 2004


4. USMC Command and Staff College, MCCDC, Quantico, VA 1992 Borka, Robert USMC Aviation and Ground Vehicles/Equipment Weight Changes Impact on Large Deck Amphibious Ships NExWE IPT Brief 10 October 2007

5. MCCDC Study on USMC Ground Mobility Requirements 10 August 2006

Bibliography


Word Count 2061 Words