



**STRATEGY  
RESEARCH  
PROJECT**

The views expressed in this paper are those of the author and do not necessarily reflect the views of the Department of Defense or any of its agencies. This document may not be released for open publication until it has been cleared by the appropriate military service or government agency.

**AMPHIBIOUS LIFT FORCE STRUCTURE – IS 3.0 THE ANSWER?**

**BY**

**COMMANDER MICHAEL P. TAYLOR**  
United States Navy

**DISTRIBUTION STATEMENT A:**  
Approved for Public Release.  
Distribution is Unlimited.

20020806 142

USAWC CLASS OF 2002



**U.S. ARMY WAR COLLEGE, CARLISLE BARRACKS, PA 17013-5050**

USAWC STRATEGY RESEARCH PROJECT

**AMPHIBIOUS LIFT FORCE STRUCTURE – IS 3.0 THE ANSWER?**

by

Commander Michael P. Taylor  
United States Navy

Colonel G. K. Cunningham  
Project Advisor

The views expressed in this academic research paper are those of the author and do not necessarily reflect the official policy or position of the U.S. Government, the Department of Defense, or any of its agencies.

U.S. Army War College  
CARLISLE BARRACKS, PENNSYLVANIA 17013

**DISTRIBUTION STATEMENT A:**

Approved for public release.  
Distribution is unlimited.



## ABSTRACT

AUTHOR: Michael P. Taylor

TITLE: Amphibious Lift Force Structure – Is 3.0 the answer?

FORMAT: Strategy Research Project

DATE: 09 April 2002

PAGES: 32

CLASSIFICATION: Unclassified

Since 1990, the Department of the Navy has stated a 3.0 Marine Expeditionary Brigade Assault Echelon warfighting requirement. The Navy and Marine Corps subsequently agreed to a fiscally constrained 2.5 lift requirement and have been pursuing this long term goal through the procurement of 12 San Antonio class Amphibious Transport Dock ships. Given the current National Security Strategy and National Military Strategy, the nation cannot afford a larger amount of amphibious lift, and should restate the amphibious lift requirement as 12 fully capable Amphibious Ready Groups to meet the nations national security requirements.



## TABLE OF CONTENTS

<b>ABSTRACT .....</b>	<b>iii</b>
<b>TABLE OF CONTENTS.....</b>	<b>v</b>
<b>LIST OF ILLUSTRATIONS.....</b>	<b>vii</b>
<b>AMPHIBIOUS LIFT FORCE STRUCTURE – IS 3.0 THE ANSWER?.....</b>	<b>1</b>
<b>1990 DEPARTMENT OF THE NAVY LIFT STUDY .....</b>	<b>1</b>
<b>BACKGROUND / AMPHIBIOUS HISTORY .....</b>	<b>2</b>
<b>TITLE 10 REQUIREMENTS .....</b>	<b>2</b>
<b>OPERATION DESERT SHIELD / DESERT STORM.....</b>	<b>3</b>
<b>OPERATION RESTORE HOPE/UNITED SHIELD.....</b>	<b>4</b>
<b>CURRENT TRENDS.....</b>	<b>5</b>
<b>LHD-8 PROGRAM STATUS.....</b>	<b>5</b>
<b>LPD-17 PROGRAM STATUS .....</b>	<b>6</b>
<b>CURRENT LIFT CAPABILITY .....</b>	<b>6</b>
<b>CURRENT POLICY .....</b>	<b>7</b>
<b>NATIONAL SECURITY STRATEGY.....</b>	<b>7</b>
<b>NATIONAL MILITARY STRATEGY .....</b>	<b>9</b>
<b>NAVAL STRATEGY.....</b>	<b>10</b>
<b>The Maritime Concept .....</b>	<b>10</b>
<b>Marine Corps Strategy 21.....</b>	<b>12</b>
<b>FORCIBLE ENTRY CAPABILITY .....</b>	<b>13</b>
<b>MARINE CORPS ORGANIZATION.....</b>	<b>15</b>
<b>CONCLUSIONS .....</b>	<b>17</b>
<b>ENDNOTES .....</b>	<b>19</b>
<b>BIBLIOGRAPHY.....</b>	<b>23</b>



## LIST OF ILLUSTRATIONS

FIGURE 1. VEHICLE LIFT.....	7
FIGURE 2. THE MARITIME CONCEPT.....	12
FIGURE 3. EXPEDITIONARY MANEUVER WARFARE.....	13
FIGURE 4. NOTIONAL LIFT REQUIREMENTS .....	17



## AMPHIBIOUS LIFT FORCE STRUCTURE – IS 3.0 THE ANSWER?

Since the end of the cold war, the world has witnessed a dramatic increase in regional conflict and humanitarian suffering. As the world's only superpower, America is becoming increasingly involved in more of these operations, either as a result of unilateral action, or as part of a multinational force under the auspices of an international organization such as the United Nations. In meeting these requirements, the nation is calling more and more on the United States Marine Corps, the Nation's 911 force. As an expeditionary force, the Marine Corps principal means of getting to the action is via amphibious shipping. In this modern era, how much is enough?

### 1990 DEPARTMENT OF THE NAVY LIFT STUDY

On 6 March 1989, the Secretary of the Navy tasked the Chief of Naval Operations and the Commandant of the Marine Corps as follows:

In order to effectively address future POM issues affecting naval forces, I am hereby directing the completion of a combined USN/USMC study within the Department of the Navy to determine certain future program requirements and priorities within anticipated budget constraints. To this end, this study should define lift requirements as well as support requirements, including air support, in scenarios ranging from low intensity conflicts to general war. The concepts of operations should provide sufficient detail to define specific requirements, including any USMC air requirements which are distinct from integrated MAGTF/CVW operations.<sup>1</sup>

This study developed three mission levels to address lift requirements across likely future operations. The Navy-Marine Corps board directed the study to examine the requirements based on: (1) minimum peacetime capability (Contingency I), (2) peacetime plus insurance (Contingency II), and (3) wartime capability (Regional War). At the lowest end of the spectrum Contingency I provides the ability for two forward-deployed Amphibious Ready Groups/Marine Expeditionary Units (ARG/MEUs) with a 3:1 rotation, 1 ARG/MEU forward deployed in the Western Pacific theater of operations, and one Marine Expeditionary Brigade (Assault Echelon) capable of sailing within 168 hours.<sup>2</sup> Contingency II accounts for those forces listed under Contingency I along with an additional Marine Expeditionary Brigade (Assault Echelon) capable of sailing within 168 hours. It also assumed that one forward-deployed ARG/MEU would be the lead element of a Marine Expeditionary Brigade.<sup>3</sup>

Regional war provides the amphibious lift for the assault echelons of one Marine Expeditionary Force and one Marine Expeditionary Brigade. The operational premise is that there must be sufficient forces to sustain a regional war, probably arising out of a Contingency II

operation. Forces that support the war effort would rotate periodically with maintenance cycles stretched out. During a regional war, the Navy would provide minimum capabilities for other theaters.<sup>4</sup>

During the study, its members determined that the most likely challenges to U.S. interests would come from Third World conflicts, without direct Soviet involvement— hence a medium threat level was the focus for the three mission level capabilities.<sup>5</sup> With the completion of the 1990 Integrated Amphibious Operations and USMC Air Support Requirements Study, the naval services have stated a warfighting requirement to be able to lift three Marine Expeditionary Brigades (Assault Echelon). This rested on the assumption of a medium threat level, applying to Contingency II levels of capability. Over the past decade, each subsequent Chief of Naval Operations and Commandant of the Marine Corps have reinforced this requirement.

Due to fiscal constraints in the early 1990s, the Department of Defense reduced the three Marine Expeditionary Brigades (Assault Echelon) lift requirement to 2.5. To provide budgetary savings in the interim years, and to provide for future ship procurement and current force maintenance, the Navy developed the Amphibious Lift Enhancement Plan to address the shortfall in amphibious lift within the active fleet. The Navy added five Amphibious Cargo Ships (LKAs) and four Tank Landing Ships (LSTs) in the ready reserve fleet with activation ranging from 5 to 180 days. Reserve crews were established and a training cycle was developed to ensure that each ship would be outfitted with a qualified crew without the need to take from active fleet units.<sup>6</sup> With the combination of 12 active Amphibious Ready Groups and the 9 ships in the Amphibious Lift Enhancement Plan, the Navy could meet the 2.5 lift requirement pending the complete delivery of the LPD-17 class.

## **BACKGROUND / AMPHIBIOUS HISTORY**

### **TITLE 10 REQUIREMENTS**

The Marine Corps, within the Department of the Navy, shall be so organized as to include not less than three combat divisions and three air wings, and such other land combat, aviation, and other services as may be organic therein. The Marine Corps shall be organized, trained, and equipped to provide fleet marine forces of combined arms, together with supporting air components, for service with the fleet in the seizure or defense of advanced naval bases and for the conduct of such land operations as may be essential to the prosecution of a naval campaign. In addition, the Marine Corps shall provide detachments and organization for service on armed vessels of the Navy, shall provide security detachments for the protection of naval property at naval stations and bases, and shall perform such other duties as the President may direct. However, these additional duties may not detract from or interfere with the operations for which the Marine Corps is primarily organized. The Marine Corps shall develop, in

coordination with the Army and the Air Force, those phases of amphibious operations that pertain to the tactics, techniques, and equipment used by landing forces.<sup>7</sup>

Since the early part of the twentieth century, the Marine Corps has focused its core competencies along the amphibious/expeditionary warfare concept. In World War II, the Marine Corps conducted numerous large-scale amphibious landings in the island hopping campaign across the Pacific to defeat the Japanese and bring about the conditions necessary for the end of hostilities. In the aftermath of World War II, the Marine Corps conducted one large-scale amphibious landing during the Korean War with the Inchon Landing. Of note, that action was less than a year after General Omar N. Bradley, the Chairman of the Joint Chiefs of Staff stated, "Large scale amphibious operations ... will never occur again."<sup>8</sup> Since Korea, the Marine Corps has conducted numerous smaller scale operations from Vietnam through current operations ongoing in Afghanistan. Two recent examples include Operation DESERT SHIELD/DESERT STORM in the Persian Gulf and Operations RESTORE HOPE/UNITED SHIELD in Somalia.

#### OPERATION DESERT SHIELD / DESERT STORM

Operation DESERT SHIELD/DESERT STORM was the first post Cold-War conflict that brought together a significant multinational coalition against aggression. The forces represented the largest assembly of amphibious forces since the Inchon Landing and comprised thirty-one amphibious ships carrying 17,800 Marines, 39 tanks, 112 amphibious assault vehicles and sixty-three attack aircraft.<sup>9</sup> Starting on 7 September 1990 with the arrival of the 13<sup>th</sup> Marine Expeditionary Unit (Special Operations Capable) (MEU(SOC)), amphibious forces flowed into theater and provided General Norman Schwarzkopf with a sustainable force capable of actions to help shape the battlefield. While CENTCOM did not conduct a large-scale amphibious landing, that capability existed throughout the struggle to liberate Kuwait.

Operations conducted by the Marine Forces Afloat consisted of four landing exercises conducted under the "Sea Soldier" exercise period to refine the landing plan, as well as a Noncombatant Evacuation Operation (NEO). On 2 January 1991, when the situation in Somalia became dangerous and the US Ambassador requested assistance, elements from the 4<sup>th</sup> Marine Expeditionary Brigade formed a Special Purpose MAGTF and conducted a NEO, Operation EASTERN EXIT, utilizing forces embarked on the USS TRENTON (LPD-14) and the USS GUAM (LPH-9). The NEO ended on 6 January. Other operations conducted included participation of amphibious forces in the maritime interdiction operations to isolate Iraq including the seizure of the Ibn Khaldoun "peace ship." When Operation DESERT SHIELD became Operation DESERT STORM in the early hours of 17 January, Marine amphibious forces

continued their participation. The 13<sup>th</sup> MEU(SOC) conducted Operation DESERT STING, a raid on Umm Al Maradim Island with a company-sized force that collected documents and equipment for intelligence exploitation while destroying all remaining ordnance. The raid on Umm Al Maradim continued to reinforce the presence of an amphibious threat in the minds of the Iraqi leaders. As a result, at least six infantry divisions with four heavy divisions in reserve defended the coast of Kuwait against a possible landing. "The strength of the Iraqi defenses, insufficient maneuver room, trouble sweeping mines, fear of collateral damage of Kuwait, and the need for a I MEF reserve led to the decision to rely on amphibious deception rather than making a landing."<sup>10</sup> In the end, a force of less than 18,000 Marines had tied up more than 80,000 Iraqi troops in static defenses far from the main attack that occurred deep in the desert.<sup>11</sup>

#### OPERATION RESTORE HOPE/UNITED SHIELD

In the latter years of the 1980s, the country of Somalia began to experience wide spread dissention and mistrust of the Siad Barre government. Beleaguered by accusations of fraud, graft, and corruption, President Siad Barre was overthrown and the country fell into civil war. The people reverted back to their nomadic and clan-based heritage, with fighting breaking out among the 15 separate clans. The horror and plight of Somalia became overwhelmingly moving as CNN brought the civil war and its resulting famine to the world's center stage. President Bush, in the final months of his administration, committed U.S. troops in support of the United Nations' effort to stabilize the country and reestablish safe humanitarian relief effort. In addition to the political and civil turmoil and the tragic need for food, the country's vast geography posed its own set of challenging problems.<sup>12</sup>

Thus began the US involvement in Somalia under the auspices of Operation RESTORE HOPE. A Special Purpose Marine Air-Ground Task Force, operating under US Central Command, accomplished the initial deployment of forces into Somalia. The landings by Navy SEALs and Force Reconnaissance Marines occurred under the watchful eyes of the world media and were conducted without incident. Upon securing of the port and airfield of Mogadishu, elements of the 1<sup>st</sup> Marine Expeditionary Force and the 10<sup>th</sup> Mountain Division arrived to establish the security necessary for the safe delivery of food to the starving Somali's. The 10<sup>th</sup> Mountain Division equipped with heavily armed High Mobility Multipurpose Wheeled Vehicles (HMMWVs) operated in the southwestern portion of Somalia. The Marines linked up with equipment from the afloat Maritime Pre-positioning Squadron and operated in the central portion of Somalia where the hazardous area of operations based around Mogadishu necessitated the need for M1 main battle tanks and light armored vehicles. The precursor operations conducted by the Special Purpose Marine Air-Ground Task Force allowed for the

rapid introduction of 26,000 follow on troops by the seizure of the port and airfield. While not a forcible entry operation, the ability to provide security at the entry points was vital to the successful introduction of follow-on forces.

In May of 1993, the US turned over leadership of the operation in Somalia to the United Nations under UNOSOM II. By the end of 1994, more than 130 peacekeepers had died, and the UN mission to Somalia had been judged a failure, with the decision made to withdraw the remaining peacekeepers by the end of March 1995.<sup>13</sup> Again, the Marines of the 1<sup>st</sup> Marine Expeditionary Force were called upon to execute Operation UNITED SHIELD, the safe withdrawal of UN forces from Somalia. On 28 February 1995, over 2,000 US and Italian Marines from the Combined Joint Task Force conducted an amphibious landing to secure a perimeter for the withdrawal of Pakistani and Bangladeshi soldiers. The port of Mogadishu became the primary avenue for the withdrawal of the UN forces, with the airfield being abandoned as UN troop numbers were reduced. Upon the removal of the UN troops, the final elements of the security force withdrew by amphibious assault vehicles in the early morning hours of 3 March. All troops and equipment withdrew without suffering a single casualty.<sup>14</sup> The ability to put a potent security force ashore to ensure the safe evacuation of UN troops was possible due to the availability of amphibious forces. Security troops ashore were able to collapse the perimeter and fall back on the beach for the final withdrawal to amphibious shipping while still possessing a capability to strike if warring factions were to interfere.

## **CURRENT TRENDS**

Over the past decade, the stated warfighting requirement has remained as the ability to lift 3.0 Marine Expeditionary Brigades (Assault Echelons), with a fiscally constrained limit of 2.5 established. A review of current programs highlights that the goal of reaching the 2.5 lift with active forces continues to slip to the right.

## **LHD-8 PROGRAM STATUS**

LHD-8 is the ship designed to bridge the gap between the current *Wasp* class LHDs and the replacement program for the *Tarawa* class LHAs. The first ship of the *Tarawa* class will reach the end of its service life in 2011. Plans under consideration within the Department of the Navy are to continue with the LHD-8 program with minor modifications to maximize vehicle lift capability, or to conduct a new ship design. Congress has provided limited funding to continue LHD-8 procurement and incremental changes are being made from the original LHD configuration.

## LPD-17 PROGRAM STATUS

Originally classified as the LX during the course of the DON Lift Study II, the LX has evolved into the LPD-17 San Antonio class amphibious transport dock. LPD-17 will serve to provide the Marine Corps with a forcible entry capability and be the functional replacement for four ship classes: LKA-113, LPD-4, LSD-36, and LST-1179. In 1993, the Chief of Naval Operations and the Commandant of the Marine Corps agreed to reduce the legacy amphibious fleet in order to gain the necessary financial savings to enhance and recapitalize the overall amphibious fleet with the procurement of the LPD-17.<sup>15</sup>

LPD-17 has met with significant problems during the design and development that has delayed its introduction to the fleet. The program, initially designed to deliver the class during the period FY 03-08 has incurred cost overruns in excess of 25 percent, necessitating a "Nunn-McCurdy Report" to congress. Costs have also been increased as a result of having two separate shipyards building a small class of ships, with Avondale shipyard schedule to build 8 and Bath Iron Works to build 4. Through this same period, design delays as a result of utilizing a new 3-D computer-based design technology, have not only incurred cost increases but have also resulted in production delays. The current production schedule shows the actual delivery of the class shifting to FY 04-13. This delay will cause added increases to the naval portion of the budget in order to maintain the serviceability of the older ship classes that were due to be replaced.

## CURRENT LIFT CAPABILITY

Currently, the amphibious lift capability is below the fiscally constrained requirement and will remain there pending the delivery of the full complement of 12 LPD-17s. Amphibious lift is measured in five components: troops, vehicles (square feet), cargo (cubic feet), helicopters, and landing craft. Vehicle lift is the only one of the five components that falls below the 2.5 requirement. Vehicle lift shrank from 2.90 MEBs at the end of the Persian Gulf War to 2.56 MEBs in 1993 and reduced further to 1.88 MEBs in FY 95 as a result of the accelerated decommissioning plan adopted by the Department of the Navy.<sup>16</sup> The Amphibious Lift Enhancement Program has enabled the Department of the Navy to maintain an overall lift capability of 2.5 vehicle lift, but the ability to rapidly activate the additional ships in a reduced status has never been tested. Figure 1 shows the projected lift capability as forecasted by the Government Accounting Office based on 1995 figures for the introduction of LPD-17.

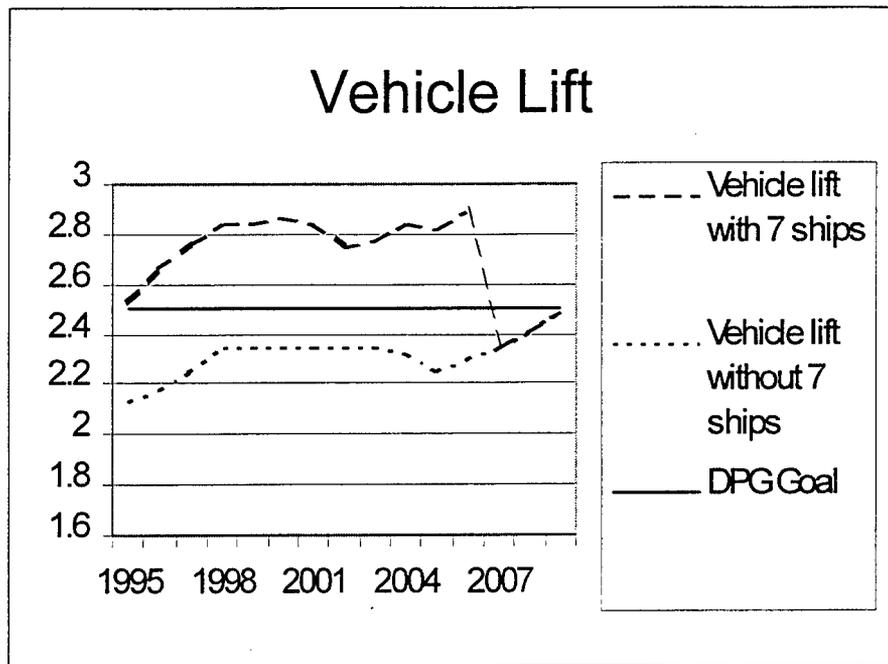


FIGURE 1. VEHICLE LIFT

## CURRENT POLICY

### NATIONAL SECURITY STRATEGY

The latest issues of the National Security Strategy and National Military Strategy provide several clear examples for the maintenance of a credible amphibious assault capability. The National Security Strategy states:

The elements of engagement -- adapting alliances; encouraging the reorientation of other states, including former adversaries; encouraging democratization, open markets, free trade, and sustainable development; preventing conflict; countering potential regional aggressors; confronting new threats; and steering international peace and stability operations -- define the Nation's blueprint for a strategy of engagement. These elements support three strategic concepts for engagement: shaping the international environment, responding to threats and crises, and preparing for an uncertain future.<sup>17</sup>

Shaping the international environment is a key element of forward-deployed forces. Through engagement with other nations, the United States builds trust and cooperation with potential allies through mutual understanding. With the downsizing of the military following the end of the Cold War, forward-deployed forces have dropped from over 500,000 to around 250,000. With this reduction, rotational overseas forces such as ARG/MEUs provide a means to maintain active engagement, especially in areas such as the Middle East and Southern Asia

where it is politically impractical for many nations to have overt defense ties with the United States. Amphibious forces have the added benefit of being able to conduct operations and exercises away from populated areas and with a very small footprint on the ground, thereby reducing the possibility of political turmoil. Engagement provides a further advantage through the demonstration of our combat capabilities providing a more robust deterrent effect to potential adversaries in the areas where we are able to operate.

Responding to threats and crises are the hallmark of amphibious forces. From providing humanitarian assistance and disaster relief support, through the full range of combat operations, capable amphibious forces can quickly respond to crises without the requirement of waiting for diplomatic moves to gain overflight or basing rights. As mentioned above, amphibious forces were able to rapidly flow into the Middle East while diplomatic efforts were ongoing with the Gulf States to accept the arrival of US forces from out of theater. As more recent events have shown in Saudi Arabia, foreign governments may put numerous restrictions on what forces are allowed in their country and may require force reductions when it is not in our national interests to reduce in theater assets. Even during the current Operation ENDURING FREEDOM, the government of Pakistan has placed restrictions on what types of forces may be based in country, restricting the basing of aircraft to only search and rescue operations. When looking at an uncertain future, one critical thing that comes to the forefront for defense planners is access. The increased threat of anti access, through either political or military means, may easily restrict the ability of the US to engage potential adversaries. The rise in radical fundamentalism, particularly in the Middle East and Southern Asia, may present the most significant problems for the introduction of combat forces into a theater of operations. The inherent flexibility of naval and particularly amphibious forces retains the ability to conduct combat operations at the time and place of our choosing with limited impact from political anti access. In order to overcome anti access based on military means (a credible combat force or mining), the maintenance of a robust amphibious assault forcible entry capability by both surface and air, coupled with the ability to counter the mine problem, will retain the ability to influence events on the ground.

Our ability to deter potential adversaries in peacetime rests on several factors, particularly on our demonstrated will and ability to uphold our security commitments when they are challenged. We have earned this reputation through both our declaratory policy, which clearly communicates costs to potential adversaries, and our credible warfighting capability across the full spectrum of conflict. This capability is embodied in four ways: ready forces and equipment strategically stationed or deployed forward, forces in the United States at the appropriate level of readiness to deploy when needed, our ability to maintain access to critical regions and infrastructure overseas, and our demonstrated ability to form and lead effective military coalitions.<sup>18</sup>

## NATIONAL MILITARY STRATEGY

To defend and protect US national interests, our national military objectives are to **Promote Peace and Stability** and, when necessary, to **Defeat Adversaries**. US Armed Forces advance national security by applying military power as directed to help **Shape** the international environment and **Respond** to the full spectrum of crises, while we also **Prepare Now** for an uncertain future.<sup>19</sup>

Thus the Shape, Respond and Prepare Now has been provided as the strategy for the US military. While the Shape and Respond are addressed equally in the National Security Strategy, Prepare Now was further defined within the National Military Strategy as four strategic concepts: strategic agility, overseas presence, power projection, and decisive force.

Strategic agility is "the timely concentration, employment and sustainment of US military power anywhere, at our own initiative, and at a speed and tempo that our adversaries cannot match."<sup>20</sup> Through the maintenance of a credible amphibious capability, the naval services achieve strategic agility for the nation in the littoral areas. Overseas presence provides the visible show of force throughout the world to friends and allies, promoting peace and stability and demonstrating US national resolve. Power projection is "the ability to rapidly and effectively deploy and sustain US military power in and from multiple, dispersed locations until conflict resolution."<sup>21</sup> This includes the ability for forcible entry operations. Decisive force relates to the application of sufficient military force to ensure success. Amphibious forces provide the President and Secretary of Defense a credible force through their contribution in each of the four above areas. Through their sea basing, they provide the strategic agility to employ force at the time and place of their choosing throughout the littoral regions of the world. Through routine deployments, they provide the necessary overseas presence necessary to assure allies and deter potential adversaries. Through their sustainability, they provide a power projection capability that can be tailored to suit the situational environment. Finally, either alone or in concert with other forces, either joint or coalition, they provide the decisive force necessary to overwhelm an adversary and create the conditions necessary to achieve a favorable political solution.

In furthering the necessity to prepare now for an uncertain future, Joint Vision 2020 charts the course for the U.S. military in the future. The four guiding principles of dominant maneuver, precision engagement, focused logistics and full dimensional protection provide the Chairman's vision of where the services need to go to provide the Joint Force Commander with the combat ready forces necessary to fight and win our nations wars through full spectrum dominance. Amphibious forces clearly fit into the area of dominant maneuver.

## NAVAL STRATEGY

Naval strategy in terms of amphibious warfare is composed of two parts; the Navy's maritime concept and the Marine Corps strategy of expeditionary maneuver warfare. Beginning with the Navy strategy, the maritime concept is a follow-on to the original "From the Sea" published in 1992. This was later revised to "Forward ... From the Sea" in 1994. Both "From the Sea" and "Forward ... From the Sea" were naval documents signed by both the Chief of Naval Operations and the Commandant of the Marine Corps. This displayed early on the close relationship within the naval services on the importance of shifting the emphasis from one of a "Blue-water" cold-war era force to one capable of operations in the littoral and the influencing of events ashore.

### **The Maritime Concept**

The maritime concept builds upon the littoral focus of the previous documents and describes the operational concepts that future naval forces will utilize to ensure US access and influence, despite an adversary's efforts to preclude our presence. The ultimate goal is "projecting US power and influence from the sea to directly and decisively influence events ashore throughout the spectrum of operations."<sup>22</sup> Maritime power projection is the heart of the Navy and Marine Corps contribution to national security. Through the inherent flexibility of sea-based platforms, naval expeditionary forces provide a scalable force that can be applied to a broad range of missions and situations. Through forward presence and rotational deployments, combat ready forces are maintained in various theaters throughout the world. Naval forces are in high demand by theater CINCs that the deployment of naval forces is governed by the Global Naval Forces Presence Policy. Through this document, the Joint Staff allocates naval forces to the theater CINCs through carrier battle groups, amphibious ready groups/marine expeditionary units, surface combatants, and Tomahawk missiles. As crisis situations develop around the world, forward deployed naval forces can be shifted between theaters to provide a credible deterrent force, and if deterrence fails, possess the capability to conduct prompt and sustained combat operations ashore. Through this arrangement, the current force of 12 carrier battle groups and 12 amphibious ready groups/marine expeditionary units has been established and reinforced by the 2001 Quadrennial Defense Review.<sup>23</sup> Forward presence also provides the benefit of collecting intelligence and gaining valuable knowledge of the operational environment in areas where the next crisis may occur.

Battle space control is comprised of the range of operations from ensuring access to shaping the battle space.<sup>24</sup> Sea control is a critical part of the naval contribution, allowing the

flow of follow on forces into the theater of operations. "Future naval forces will be challenged by anti-access capabilities such as land-based cruise missiles, space-based satellite targeting, and information operations. Naval forces must therefore control the entire battlespace – sea, air, land, space, and cyberspace – in order to defend against, defeat, deny or negate these capabilities."<sup>25</sup> Through command of the seas and a robust command and control network, naval forces will be able to control the battlespace and assure access for the entire joint team.

Battlespace attack is conducted by naval strike and amphibious forces to attack forces ashore. Through the networking of forces, reaction times will be reduced, thus allowing naval forces to maintain the advantage and keep the enemy off balance, unsure of where the next operation will occur.<sup>26</sup> The maneuver space provided by operating afloat allows for various avenues of approach that can remain unknown to the enemy without sophisticated surveillance equipment. By attacking and influencing the battlespace, follow on forces will be provided the necessary assembly areas to link up and move forward to conduct offensive operations.

Battlespace sustainment is achieved through a robust system of sea-based logistics. Through the achievement of sea control, naval forces are able to resupply within the area of operations by utilizing Military Sealift Command ships to provide all classes of supply.<sup>27</sup> Necessary supplies for forces ashore can be landed via surface or helicopter assets until a port facility is available. The maritime concept relationship between ends, ways, and means is shown below in Figure 2.

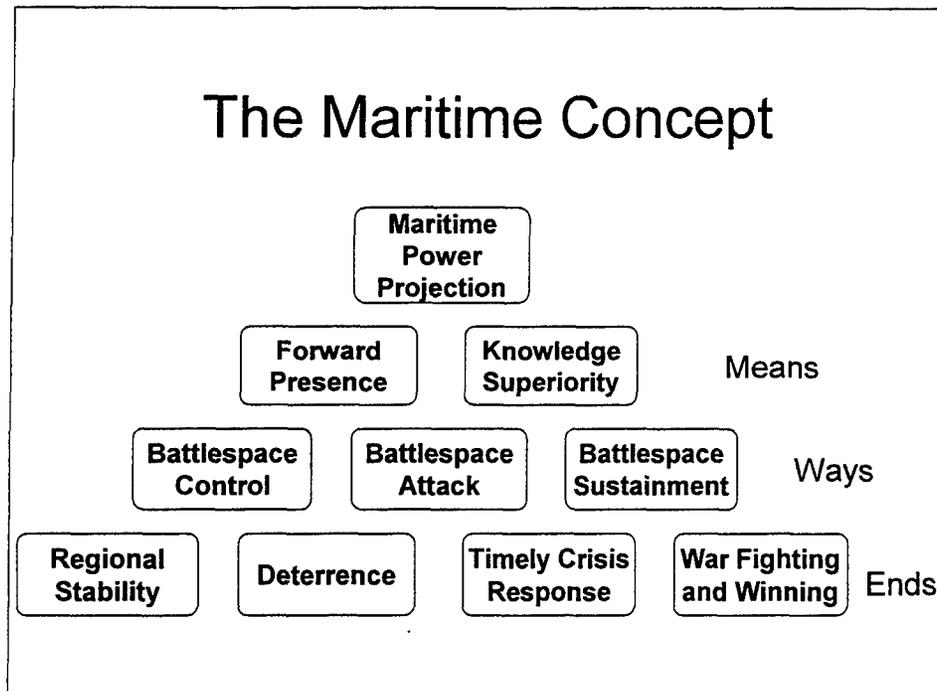


FIGURE 2. THE MARITIME CONCEPT<sup>28</sup>

### Marine Corps Strategy 21

Marine Corps strategy has evolved over the past half century with a view of refining the concepts of operational employment. Initially, Marine forces would have to seize and hold areas ashore to build up combat power and then conduct subsequent combat operations. Currently, the Marine Corps strategy revolves around operational maneuver from the sea, whereby forces conduct ship-to-objective maneuver without the need to build up large forces ashore.

Expeditionary Maneuver Warfare is the union of our core competencies; maneuver warfare philosophy; expeditionary heritage; and the concepts by which we organize, deploy and employ forces. It emphasizes the unique capabilities the Marine Corps provides the joint force commander and the synergy created when leveraged with the complementary capabilities of other Services and agencies. These capabilities translate into power projection designed to shape the global security environment, assuring our friends and allies while dissuading, deterring, and defeating potential adversaries. The elements of Expeditionary Maneuver Warfare will guide the process of innovation, change, and adaptation to ensure the Corps continues its role as the Nation's total force in readiness.<sup>29</sup>

This has created changes to the command structure of amphibious forces that have been around since the Second World War. In the past, the Commander Amphibious Task Force would be in charge of the operation until the Commander Landing Force was established

ashore with the command and control facilities necessary to continue combat operations. In the new phase of ship-to-objective maneuver, Commander Landing Force may never transition ashore and hence changes have been made such that the Joint Force Commander will designate the command relationships between the CATF and CLF, as well as the designation of who is the supported commander.<sup>30</sup>

By changing the operational concept of employment, the Marine Corps provides the Combatant Commander with a credible, viable, and sustainable force. As stated in Marine Corps Strategy 21: “These capabilities will provide the geographic combatant commanders with scalable, interoperable, combined-arms Marine Air-Ground Task Forces (MAGTFs) to shape the international environment, respond quickly to the complex spectrum of crisis and conflicts, and gain access or prosecute forcible entry operations.”<sup>31</sup> The Marine Corps Capstone Concept is Expeditionary Maneuver Warfare, which continues to focus the Marine Corps down the path laid out in Strategy 21.

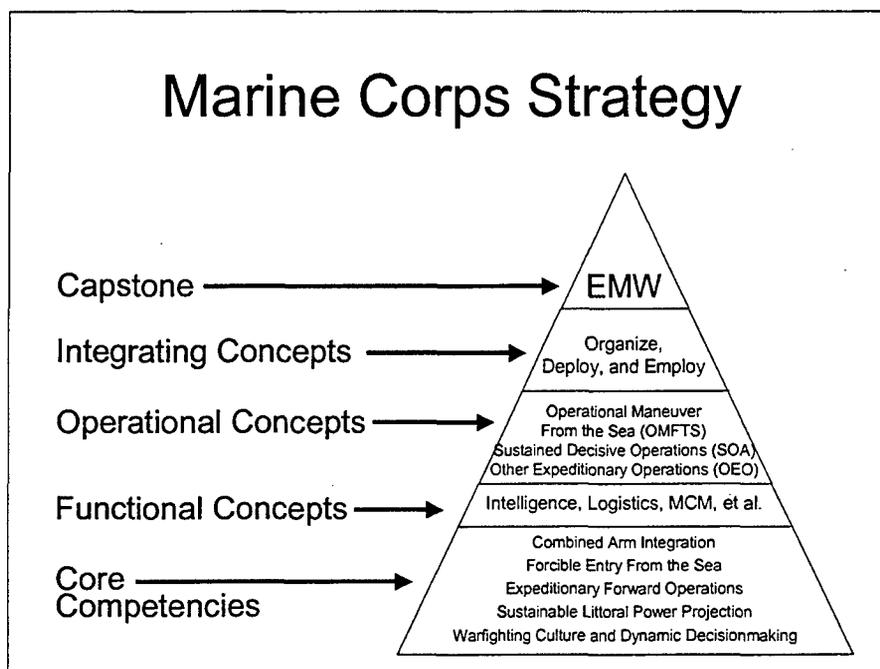


FIGURE 3. EXPEDITIONARY MANEUVER WARFARE<sup>32</sup>

**FORCIBLE ENTRY CAPABILITY**

Joint Publication 3-18 defines forcible entry as “seizing and holding a lodgment in hostile or potentially hostile territory that, when seized and held, will enable continuous landing of troops and materiel and provide maneuver space for subsequent operations.”<sup>33</sup> The armed

forces of the United States possess three primary forcible entry capabilities or options: amphibious assault, airborne assault, and air assault.

To meet emergencies, two hands are better than one, and essential when one is unreliable. While it is *desirable* to have an airborne force, which enables quicker intervention where its use is possible, it is *essential* to have a marine force. An amphibious force of modern type, operating from the sea and equipped with helicopters, is free from dependence on airfields, beaches, ports, and land bases, with all their logistical and political complications. The use of an airborne force, or of any land-based force, is a more irrevocable step than the use of an amphibious force, since its commitment is more definite and its withdrawal more difficult. A self-contained and sea-based amphibious force, of which the United States Marine Corps is the prototype, is the best kind of fire-extinguisher because of its flexibility, reliability, logistic simplicity, and relative economy.<sup>34</sup>

One can summarize characteristics of an amphibious operation as follows:

- Naval forces have a long duration capability off-shore, and can provide a show of force of US resolve, while respecting the sovereignty of a nation.
- Naval forces are continuously forward-deployed and can easily move to problem areas. However, speed limitations in moving to a distant crisis area may preclude their use, if immediate results are required.
- Naval forces are not tied to a land base, which increases their flexibility for use in crises and provide for long-term sustainment. Logistics hubs in the theater are preferable when compared to the alternative of long lines of supply from distant ports.
- Naval forces make more combat power initially available.
- Naval forces provide the operational commander flexibility in a continuously changing environment.
- Naval forces may be a less effective show of force or combat capability if the crisis is not close to the area.

One can summarize characteristics of an airborne operations, be they airborne or air assault, as:

- Airborne forces can provide a combat force on the ground in a crisis situation within hours of an alert.
- Airborne forces are not restricted to operations within close proximity to the sea.
- Airborne forces must be sustained by air until ground LOCs are open.
- Airborne forces do not provide a loiter capability to influence political powers.

- Airborne force sustainment restrictions can limit size and capability of the force employed.<sup>35</sup>

From the above characteristics, there are clear reasons to preserve the capabilities of conducting forcible entry operations by either amphibious or airborne forces. A simple look at the world's geography shows that roughly 75 percent of national capitals are within the littoral area and can be influenced by naval forces. The ability to provide a sustainable show of force, short of actual combat operations, provides US leaders with an ability to shape the international arena and achieve victory without engaging in combat operations. Airborne forces possess an advantage in overall speed of employment, but the lack of combat power and the necessity to sustain them via airlift continually until ground lines of communication are open poses significant risks. In this era of casualty aversion, the ability of the American public to support an operation with heavy casualties when light airborne forces are under fire from a heavily mechanized enemy force is doubtful. In dealing with the antiaccess problem that confronts regional CINCs, airborne forces can conduct air assaults instead of airborne assaults by utilizing sea-based platforms, such as aircraft carriers, they do not need an intermediate staging base on land. Their utilization as air assault staging platforms, similar to what occurred during the invasion of Haiti (Operation UPHOLD DEMOCRACY) and in more recent events during operations in Afghanistan (Operation ENDURING FREEDOM), does have negative effects in reducing the number of Carrier Air Wings available to the Joint Force Commander.

## **MARINE CORPS ORGANIZATION**

The Marine Corps warfighting component centers on the Marine Air Ground Task Force (MAGTF). There are four basic MAGTF organizations, ranging in size and capability and geared to the mission assigned. The largest of the MAGTFs is the Marine Expeditionary Force (MEF), the centerpiece of how the Marine Corps is organized. Three standing MEF's, as required by Congress, provide the Regional CINCs with combat ready forces: I Marine Expeditionary Force at Camp Pendleton, California, II Marine Expeditionary Force at Camp Lejeune, North Carolina, and III Marine Expeditionary Force at Okinawa, Japan.

Imbedded in each MEF is a Marine Expeditionary Brigade. The Marine Corps removed the table of organization for the standing Marine Expeditionary Brigades in 1991 as a cost saving measure during the drawdown, but Marine Expeditionary Brigades were still replicated under the MEF (Forward) concept. Because the MEF (Forward) was not understood outside the Marine Corps, the Corps reactivated Marine Expeditionary Brigade in 1999, with personnel drawn from existing MEF headquarters. The Marine Corps also instituted a viable training

program to ensure that its expeditionary brigades are combat ready when required. Each of the three standing expeditionary brigades command elements coexist within the three standing MEF headquarters. The Marine Expeditionary Brigade's mission is to plan, coordinate, and conduct sustainable combined arms combat and other expeditionary operations across the spectrum of conflict. MEB tasks include:

- Forcible entry
- Deployment to CINC's Area of Responsibility (AOR) as part of a Joint or Combined Force
- Provision of a nucleus Joint Task Force Headquarters
- As an enabler for follow-on forces
- Preparation to act as the Marine Corps Service Component
- Preparation to serve as the advance echelon of a MEF.<sup>36</sup>

The next MAGTF is the Marine Expeditionary Unit. There are seven standing Marine Expeditionary Units that provide forward presence as stipulated under the Global Naval Forces Presence Policy of the Joint Chiefs of Staff. Three MEUs (11<sup>th</sup>, 13<sup>th</sup> and 15<sup>th</sup>) fall under I Marine Expeditionary Force, three MEUs (22<sup>nd</sup>, 24<sup>th</sup> and 26<sup>th</sup>) are part of II Marine Expeditionary Force, and one MEU (31<sup>st</sup>) is part of III Marine Expeditionary Force. Upon completion of training and certification, MEUs are designated "Special Operations Capable" MEU (SOC)s. Marine Expeditionary Units "provide the National Command Authority and Unified Commanders an effective means of dealing with the uncertainties of future threats by providing forward deployed units which offer unique opportunities for a variety of quick reaction, sea-based, crisis response option in either a conventional amphibious/expeditionary role or in the execution of maritime special operations."<sup>37</sup>

The final MAGTF is the Special Purpose MAGTF, which is task-organized to meet requirements that the other three MAGTFs cannot meet. An example of a Special Purpose MAGTF is a single-ship MAGTF deployed as part of the West African Training Cruise.

Each level of MAGTF is task organized to meet the requirements of assigned missions. In general, each forms under a Command Element, with three subordinate elements comprised of a Ground Combat Element, Air Combat Element, and Combat Service Support Element. In order to determine the lift requirements required by each, lift requirements were developed as shown in Table 4.<sup>38</sup> These requirements include those troops assigned to the Landing Force, as well as those that come under the Naval Support Elements including the crews for the landing craft, beach party team, SEAL forces, Amphibious Task Force Staff, and the Fleet Surgical Team, to name a few.

## LIFT REQUIREMENTS (Landing Force & Naval Support Element)

	TROOP	Vehicle ksqft	Cargo kcuft	Air Spots	LCAC Spots
MEF(AE)	38100	860	1310	460	78
MEB(AE)	13500	300	630	185	24
MEU	2800	62	150	**	6

\*\* Notional squadron (reinforced)  
12 CH60 4 CH53E 4 UH1N 4 AH1W 6 AV8B

FIGURE 4. NOTIONAL LIFT REQUIREMENTS

“Amphibious forces provide the geographic CINCs a range of capabilities, from forward presence to power projection and forcible entry. These capabilities afford the National Command Authority a high degree of flexibility and a broad array of options in responding to a crisis.”<sup>39</sup> The reduction of overseas bases in the past decade has further underlined the advantages of Amphibious Forces:

Put into simple context, amphibious forces, like aircraft carriers, are sea-bases from which we operate naval forces. They are flexible, utilitarian, and independent of the constraints associated with establishing bases on foreign soil. From them, we can conduct the full spectrum of operations ranging from humanitarian assistance to violent projection of combat power. Like all sea-based forces, they are available for use unencumbered by the political constraints of other nations. This broadens their value to the President as a ready contingency response force.<sup>40</sup>

### CONCLUSIONS

When looking at the capabilities that amphibious forces provide to the nation, two roles need to be addressed: forward presence and wartime requirement. From a peacetime

requirement, based on the requirement to provide forward presence forces as directed by the Joint Staff, 12 amphibious ready groups are required to maintain the current deployment requirements of Operational and Personnel Tempo. In order to provide robust combat ready forces in theater, equipment needs to be maintained, and personnel need to be trained prior to employment. Based on world events and the reduction in our overseas base structure, the requirements of our present deployment schedules are likely to remain consistent far into the future. As a mechanism for engagement with our allies and friends abroad, as well as providing a flexible response, amphibious forces will remain forward-deployed for tasking by the Theater Commanders.

From a warfighting requirement, the ability to transport 2.5 or 3.0 Marine Expeditionary Brigades of Assault Echelon lift may be an outdated requirement. The ongoing transformation within the Department of Defense was not even visible on the horizon when the lift requirement was established in 1990. Secretary of Defense Donald Rumsfeld has initiated a full-scale joint transformation effort to ensure that the individual services are linked by a coherent strategy. Over the next decade, the mobility-impaired forces of the U.S. Army will move to a more rapidly deployable force, with the goal of being able to deploy a brigade in 96 hours and a division within 5 days. This was clearly not the case in 1990. In addition, the Maritime Prepositioning Ship program has advanced over the years. MPS squadrons provide the equipment and supplies necessary for 3 Marine Expeditionary Brigades possessing the ability to link up with forces flown into theater. The capacity to secure a suitable port in a controlled environment is still a requirement, but may be achievable with less than a 2.5 MEB assault. The Army Prepositioning Squadron Afloat also contains the heavy brigade sets required to conduct sustained combat operations, negating a large portion of the drain on the strategic airlift and sealift forces.

From a current perspective, taking into account the international situation and the budgetary realities that we are faced with, it is clear that a larger percentage of the budget for amphibious ship construction is not a viable alternative. The requirement for forward presence is clearly understood and should remain the focus for the size of the amphibious fleet. By maintaining the ability to deploy Amphibious Ready Groups with embarked Marine Expeditionary Units, the nations defense and security requirements will be well served.

WORD COUNT = 6639

## ENDNOTES

<sup>1</sup> C. A. H. Trost, and A. Gray, Department of the Navy Integrated Amphibious Operations and USMC Air Support Requirements (Washington, D. C.: Chief of Naval Operations and Commandant of the Marine Corps, 8 January 1990), 1.

<sup>2</sup> Ibid., 9-10.

<sup>3</sup> Ibid., 10.

<sup>4</sup> Ibid.

<sup>5</sup> Ibid., 9.

<sup>6</sup> J. M. Boorda, letter to Senator Sam Nunn Concerning Amphibious Lift and Related Issues, Washington, D.C., 22 June 1994.

<sup>7</sup> Composition of the Department of the Navy, U.S. Code, Vol. 10, sec. 5063 (2001).

<sup>8</sup> D. C. James, The Years of MacArthur, Volume III. 1945-1954 (Boston, MA: Houghton Mifflin, 1985), 465.

<sup>9</sup> Ronald J. Brown, "Marine Forces Afloat in Southwest Asia" Marine Corps Gazette 11 (November 1992): 62.

<sup>10</sup> Ibid.

<sup>11</sup> Ibid., 62-63.

<sup>12</sup> George P. Fenton, "Marine Expeditionary Units – On the Operational Level in MOOTW," Marine Corps Gazette 3 (March 1996): 59-60.

<sup>13</sup> Frederick M. Lorenz, "Less-Lethal Force in Operation United Shield," Marine Corps Gazette 9 (September 1995): 69.

<sup>14</sup> Ibid., 74.

<sup>15</sup> Sean Stackley, "LPD 17 – Amphibious Transport Dock Program," briefing slides, Washington Navy Yard, U.S. Naval Sea Systems Command PMS 317, 12 October 2001.

<sup>16</sup> General Accounting Office, Marine Corps – Improving Amphibious Capability Would Require Larger Share of Budget than Previously Provided (Washington, D.C.: U.S. Government Printing Office, February 1996), 24.

<sup>17</sup> William J. Clinton, A National Security Strategy for a Global Age (Washington, D.C.: The White House, December 2000), 3.

<sup>18</sup> Ibid., 17.

<sup>19</sup> John M. Shalikashvili, National Military Strategy of the United States of America (Washington, D.C.; Joint Staff, 1997), 2.

<sup>20</sup> Ibid., 3.

<sup>21</sup> Ibid.

<sup>22</sup> Vernon M. Clark, The Maritime Concept (Washington, D.C.; Chief of Naval Operations, April 2000), 1.

<sup>23</sup> U. S. Department of Defense, Quadrennial Defense Review Report (Washington, D.C., U.S. Department of Defense, 30 September 2001), 22.

<sup>24</sup> Clark, 5.

<sup>25</sup> Ibid.

<sup>26</sup> Ibid., 6.

<sup>27</sup> Ibid., 6-7.

<sup>28</sup> Ibid., 7.

<sup>29</sup> J. L. Jones, Expeditionary Maneuver Warfare (Washington, D.C., Headquarters U.S. Marine Corps, 10 November 2001), 1.

<sup>30</sup> U.S. Joint Chiefs of Staff, Joint Doctrine for Amphibious Operations, Joint Publication 3-02 (Washington, D.C., Government Printing Office, 19 September 2001), II-4.

<sup>31</sup> Jones, 1.

<sup>32</sup> Ibid., 2.

<sup>33</sup> U.S. Joint Chiefs of Staff, Joint Doctrine for Forcible Entry Operations, Joint Publication 3-18 (Washington, D.C., Government Printing Office, 16 July 2001), VII.

<sup>34</sup> Robert Debs Heinl, Jr., Soldiers of the Sea: The United States Marine Corps, 1775-1962. Forward by B. H. Liddell Hart. (Baltimore, MD: Nautical and Aviation Publishing Company of America, 1991).

<sup>35</sup> Patrick M. Strain, Amphibious Operations in the 21<sup>st</sup> Century: A Viable Forced-Entry Capability for the Operational Commander. School of Advance Military Studies paper (Fort Leavenworth, KS: U.S. Army Command and General Staff College, 14 May 1993), 3.

<sup>36</sup> "Draft Marine Expeditionary Brigade," 25 February 2000; available from <<http://www.doctrine.quantico.usmc.mil/meb/meb25feb.pdf>>, Internet; accessed 18 December 2001. 5.

<sup>37</sup> HQ, U.S. Marine Corps Programs and Resources Department, Concepts and Issues 2001: Forging the Future Marine Corps, (Washington D.C.: HQ, U.S. Marine Corps, 2001), 202.

<sup>38</sup> Trost, 54.

<sup>39</sup> HQ, Chief of Naval Operations, Expeditionary Warfare Division, Naval Amphibious Warfare Plan: Decisive Power from the Sea, (Washington D.C.: U.S. Department of the Navy, October 1999), 3.

<sup>40</sup> Trost, 2-3.



## BIBLIOGRAPHY

- Boorda, J. M., Letter to Senator Sam Nunn Concerning Amphibious Lift and Related Issues. Washington, D.C., 22 June 1994.
- Brown, Ronald J., "Marine Forces Afloat in Southwest Asia" Marine Corps Gazette 11 (November 1992): 60-63.
- Clinton, William J., A National Security Strategy for a Global Age. Washington, D.C.: The White House, December 2000.
- Composition of the Department of the Navy. U.S. Code. Vol. 10, sec. 5063 (2001).
- "Draft Marine Expeditionary Brigade." 25 February 2000. Available from <<http://www.doctrine.quantico.usmc.mil/meb/meb25feb.pdf>>. Internet. Accessed 18 December 2001.
- Fenton, George P., "Marine Expeditionary Units – On the Operational Level in MOOTW." Marine Corps Gazette 3 (March 1996): 58-64.
- HQ, Chief of Naval Operations, Expeditionary Warfare Division. Naval Amphibious Warfare Plan: Decisive Power from the Sea. Washington D.C., U.S. Department of the Navy, October 1999.
- HQ, U.S. Marine Corps Programs and Resources Department. Concepts and Issues 2001: Forging the Future Marine Corps. Washington D.C.: HQ U.S. Marine Corps, 2001.
- Heini, Robert Debs, Jr., Soldiers of the Sea: The United States Marine Corps, 1775-1962. Forward by B. H. Liddell Hart. Baltimore, MD: Nautical and Aviation Publishing Company of America, 1991.
- James, D. C., The Years of MacArthur, Volume III. 1945-1954. Boston, MA: Houghton Mifflin, 1985.
- Jones, J. L., Expeditionary Maneuver Warfare. Washington, D.C.: HQ US. Marine Corps, 10 November 2001.
- Lorenz, Frederick M., "Less-Lethal Force in Operation United Shield." Marine Corps Gazette 9 (September 1995): 68-76.
- Shalikashvili, John M., National Military Strategy of the United States of America. Washington, D.C.: U.S. Joint Chiefs of Staff, 1997.
- Shelton, Henry H., Joint Vision 2020. Washington, D.C.: U.S. Joint Chiefs of Staff, June 2000.
- Strain, Patrick M., Amphibious operations in the 21<sup>st</sup> century: A viable forced-entry capability for the operational commander. School of Advanced Military Studies paper, Fort Leavenworth, KS: U.S. Command and General Staff College, 14 May 1993.
- Stackley, Sean, "LPD 17 – Amphibious Transport Dock Program." Briefing slides. Washington Navy Yard: U.S. Naval Sea Systems Command PMS 317, 12 October 2001.

Trost, C. A. H., and Gray, A., Department of the Navy Integrated Amphibious Operations and USMC Air Support Requirements. Washington, D. C.: Chief of Naval Operations and Commandant of the Marine Corps, 8 January 1990.

U.S. Department of Defense, Quadrennial Defense Review Report. Washington, D.C.: U.S. Department of Defense, 30 September 2001.

U.S. General Accounting Office, Marine Corps – Improving Amphibious capability would require larger share of budget than previously provided. Washington, D.C.: U.S. Government Printing Office, February 1996.

U.S. Joint Chiefs of Staff. Joint Doctrine for Amphibious Operations. Joint Publication 3-02. Washington, D.C.: U.S. Joint Chiefs of Staff 21 September 2001.

U.S. Joint Chiefs of Staff. Joint Doctrine for Forcible Entry Operations. Joint Publication 3-18. Washington, D.C.: U.S. Joint Chiefs of Staff 16 July 2001.