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**Amphibious Operations in the 21st Century:
A Viable Forced-Entry Capability For
The Operational Commander?**

**A Monograph
by**

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ABSTRACT

AMPHIBIOUS OPERATIONS IN THE 21ST CENTURY: A VIABLE FORCED-ENTRY CAPABILITY FOR THE OPERATIONAL COMMANDER? by Major Patrick M. Strain, USMC, 62 pages.

Since the demise of the former Soviet Union, the world has witnessed greater international turmoil, aggression, and conflict. The possibility of a global conflict is minimal, but the opportunities for United States' involvement in regional conflicts has increased in order to protect its vital interests. The current reductions in armed forces and forward deployment of units require the maintenance of a strong power projection and forced-entry capability. The two forms of forced-entry operations available to the operational commander are amphibious and airborne operations.

The requirement to conduct amphibious forced-entry operations remains valid. The United States is a maritime nation and the majority of its interests lie close to the sea. However, the reduction in amphibious shipping, naval surface fire support, and mine-countermine capabilities, and the proliferation of advanced technology and weapons to potential third world foes, calls to question the ability of the United States to conduct traditional amphibious forced-entry operations. To remain viable in a much more lethal environment, amphibious operations must be conducted from a maneuver warfare perspective.

This study begins with a brief historical look at amphibious operations and discusses current doctrine. On this foundation is built a theoretical structure for a discussion of maneuver and attrition warfare. Maneuver warfare emphasizes speed, concentration, surprise, and the application of strength to enemy weaknesses to shatter his morale, break his cohesion, and exploit his vulnerabilities while avoiding attrition-based operations that seek to inflict more casualties on the enemy than are inflicted on the friendly force. The writings of several theorists, to include Clausewitz, Sun Tzu, Richard Simpinkin, B. H. Liddell Hart, and Ardant duPioq are reviewed and woven together to create a solid theoretical framework on which to build a better amphibious forced-entry capability. Once maneuver and attrition theory are explained, the application of maneuver warfare to amphibious operations is analyzed to determine its viability in a high threat environment with limited resources. Two examples, one historical, Operation Chromite in Korea in 1950, and one future scenario set in Korea in 2005, demonstrate the operational use of amphibious operations and the application of maneuver warfare tenets to amphibious operations.

This study recommends the application of maneuver warfare principles to amphibious operations and the development of equipment and tactics that will give the operational commander a truly viable, responsive forced-entry capability.

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SECTION I: INTRODUCTION

Large scale amphibious operations...will never occur again.

General Omar N. Bradley¹

Those words, spoken by General Bradley, Chairman, Joint Chiefs of Staff, before the House Armed Services Committee on 19 October 1949, appeared to be the beginning of the end for amphibious operations as part of our nation's military capability. As the nation's senior military officer and a participant in some of the largest amphibious operations ever conducted, his words carried tremendous weight. His predictions, however, mattered little to General Douglas MacArthur, Commander-in-Chief, Far East (CINCFE). On 25 June 1950, the North Korean Peoples Army (NKPA) crossed the 38th Parallel and attacked South Korea. Within days, MacArthur began planning for an amphibious assault in the rear of the NKPA at Inchon to sever their lines of communication (LOCs) and crush their forces.² It was a masterful operational stroke and demonstrated the continued viability of forced-entry by amphibious operations.

As we approach the 21st century, do amphibious operations still represent a credible forced-entry capability? Has the world political situation and advancing technology rendered the amphibious assault obsolete? Does the United States still need an amphibious forced-entry capability? Since the landing at Inchon, there have been echoes of General Bradley's comments, claiming amphibious warfare is outmoded and suicidal in this modern age. The proliferation of advanced weapons to third world countries, including

surface-to-surface missiles, shallow and deep water mines, sophisticated detection methods, and submarines, has made littoral and amphibious warfare far more dangerous than in the past. Yet, the United States is a maritime nation, dependent on the world's oceans for much of its trade. Our globe is three-fourths water and the sea provides the only means of introducing significant numbers of American ground forces and equipment onto hostile soil.

The last few years has seen the breaking up of the Soviet Union and the rise of the United States as the world's only true superpower. The decline of communism has given birth to greater international turmoil, aggression, and conflict. Ethnic and religious rivalries flourish, as played out in the former Yugoslavia republics of Croatia and Bosnia-Herzegovina. Desires for regional hegemony, characterized by Iraq's invasion of Kuwait in August 1990, and resurgent nationalism as seen in the former republics of the USSR, all serve to make the world more uncertain. This rising uncertainty, coupled with the reduced forward basing of US forces due to budget restraints and a growing desire among some nations to remove forces from their soil, necessitates the continued development and maintenance of a strong power projection and forced-entry capability by the United States to protect its vital interests.

Currently there are only two forms of forced-entry capability in the US military--amphibious operations and airborne operations. Far from being redundant, these two methods are a complementary capability. A quick comparison of their characteristics highlights their complementary nature:

Amphibious Operations

-- Naval forces have a long duration loiter capability off shore, providing a show of force and US resolve while respecting the sovereignty of a nation.

-- Naval forces are continuously forward deployed and can be easily moved to a problem area. However, their speed limitation in moving to a distant crisis area may preclude their use if immediate results are needed.

-- Naval forces are not tied to a land base, increasing flexibility for use in a crisis and providing long-term sustainment capability.

-- More combat power is initially available.

-- Provides the operational commander flexibility in a continuously changing environment.

-- Less effective show of force or combat capability if crisis is not close to the sea.

Airborne Operations

-- Can provide a combat force on the ground in a crisis situation within hours of an alert.

-- Not restricted to operations within close proximity to the sea.

-- Must be sustained by air until ground LOCs are open.

-- No loiter capability to effectively influence political powers.

-- Sustainment restrictions can limit size and capability.

Although complementary in nature, it does not take the great maritime theorist Alfred T. Mahan to understand the geostrategic situation of our country, the maritime nature of the developed world, or the importance of naval power in a maritime world. Naval and landing forces provide the operational commander flexibility that is lacking in an airlifted force. Amphibious forces can easily vary their involvement, just as a rheostat varies an electric current. Conversely, airborne operations are more rigid, have little staying power, and do not provide the operational commander the ability to vary their involvement--from a show of force to sustained combat operations--as the political situation dictates.

There are, however, problems with the United States' amphibious capability. First, available and projected amphibious lift is insufficient to support a very large amphibious operation.³ Second, the focus of the Navy has been fighting a superpower battle for sea control, much in the Mahanian tradition. The normal requirements for amphibious operations, such as a mine-countermine (MCM) capability, adequate naval surface fire support (NSFS) to support an amphibious operation, and a lack of emphasis on developing technologies and procedures for littoral warfare, have diminished the capability to conduct amphibious operations against a determined threat.⁴

Third, the proliferation of weapons and technologies to smaller countries has greatly increased the vulnerability of an amphibious force that is tied to a requirement to initially off-load troops and equipment 4000 yards from the beach, relinquishing operational and tactical surprise. Finally, the utility of amphibious operations

must be viewed from a perspective larger than the mere seizure of a lodgment for the introduction of follow-on forces or as a deception force.

If an amphibious forced-entry capability is required in today's complex world, then changes must occur to sustain its viability. A new view of amphibious operations, their capabilities, and their contribution to our nation's defense must be developed. "...From The Sea", the Department of the Navy's White Paper of September 1992, started that process, refocusing the Navy's efforts on the development of technologies and procedures for littoral warfare. Additional emphasis must be placed on the development of new amphibious assault assets that enhance the survivability of the amphibious task force in a forced-entry operation.

More important, however, there must be a complete rethinking of how amphibious operations are conducted. The massed frontal assaults of World War II are no longer acceptable as a way to conduct operations. The costs in equipment and manpower are too severe to be given serious consideration. The use of maneuver warfare theory, applied to amphibious operations--a "blitzkrieg" from the sea--enhances the survivability of the force, maximizes the capabilities of a smaller, technologically advanced force as opposed to a slugfest from the front, and utilizes the inherent superiority of the United States' mobility, firepower, and other technologies to exploit the enemy's weaknesses.

Maneuver warfare emphasizes speed, concentration, surprise, and the application of strength to the enemy's weaknesses in order to

shatter his morale, break his cohesion, and exploit his vulnerabilities. It is a philosophy of how to defeat the enemy. Decentralized control, exploitation of enemy weaknesses and an operational outlook that does not distinguish between land and sea characterizes the maneuver warfare approach to amphibious operations. This monograph applies maneuver warfare theory to amphibious forced-entry operations to ascertain their continued viability into the next century by examining current amphibious doctrine, maneuver theory, history, and a possible future scenario.

SECTION II: AMPHIBIOUS DOCTRINE; PAST AND PRESENT

In landing operations, retreat is impossible. To surrender is as ignoble as it is foolish...Above all else remember that we as the attackers have the initiative. We know exactly what we are going to do, while the enemy is ignorant of our intentions and can only parry our blows. We must retain this tremendous advantage by always attacking: rapidly, ruthlessly, viciously and without rest.

General George S. Patton, Jr.⁵

History has recorded the use of the sea to transport and maneuver forces for introduction into ground combat for over 2000 years. One of the earliest operations was the Persian landing at Marathon, Greece in 490 BC. Darius moved his forces to Marathon by sea for an attack on Athens. Although the Persians subsequently lost the battle at Marathon, the use of the sea for maneuver and engagement of enemy forces continued to increase.⁶ More recent amphibious operations include the British attack against Napoleon's forces at Aboukir Bay, Egypt in 1801, the American landing at Vera Cruz in 1847, and the landings conducted at Roanoke, Virginia and Fort Fisher, North Carolina during the Civil War.⁷ Through each of these examples runs a consistent theme--the coordinated efforts between naval and landing forces to use the sea to defeat the enemy through power projection.

Modern amphibious operations were derived primarily from the British and Australian landings at Gallipoli in 1915. The British sought to out-maneuver the enemy forces and reinforce its ally, Russia, by forcing an opening through the Dardanelles and into the

Black Sea, breaking the deadlock on the western front in Europe and reducing casualties. It was a classic example of operationally maneuvering amphibious forces, or in B. H. Liddell Hart's words, using the "indirect approach",⁸ to attack a weakness in the enemy force and rapidly bring an end to the war.

Poor execution and weak leadership doomed the Gallipoli operation to failure from the beginning. The only successful part of the operation was the withdrawal of forces from the Gallipoli peninsula in January 1916.⁹ The inability of the British to secure their objectives from the sea against the Germans and the Turks, combined with the large number of casualties and the realization that technology had changed the face of warfare forever, suggested that opposed amphibious operations were no longer feasible. Military forces around the world no longer viewed amphibious operations as a viable forced-entry capability.¹⁰

The 1920s witnessed the reemergence of the study of amphibious operations in the US based on the assumption that war with Japan in the Pacific was a future reality.¹¹ Although given little support, a small group continued to study the lessons of Gallipoli to extract the reasons for its failure and determine how best to solve the many complex problems of landing against an opposing force. In 1934, the Tentative Landing Manual was published and became the foundation for further development of amphibious doctrine. The manual described landing operations as:

...an assault on an organized or unorganized defensive position modified by substituting initially ships' gunfire for that of light, medium, and heavy field artillery, and frequently, carrier based aviation for

land-based air units until the latter can be operated from shore.¹²

Six major components of amphibious warfare were identified and discussed in detail in the manual. They were (1) command relationships, (2) naval gunfire support, (3) aerial support, (4) ship-to-shore movement, (5) securing the beachhead, and (6) logistics.¹³ The focus of the manual was on the planning, embarkation, and securing of a beachhead from which further operations could be conducted. The manual continued to be refined through exercises and actual combat operations during World War II, but there is little evidence that amphibious assaults were planned as part of a seamless operation, linking the assault and further operations ashore.

The link between conducting an amphibious assault and prosecuting operations further inland was often fuzzy or nonexistent. This was best demonstrated by the planning and execution for Operation Overlord, the invasion of Normandy in 1944. The entire reason for the assault across the English Channel rested in General Eisenhower's orders to attack the mainland of Europe and conduct operations against Germany to destroy her forces and cause her unconditional surrender.¹⁴ Yet, Overlord was planned in excruciating detail through the assault while little attention was given to operations following it. The allied forces knew very little about conditions inland and were unprepared to conduct sustained combat operations and take advantage of the enemy weaknesses. Instead, the attack became bogged down until 3rd US Army conducted its breakout.¹⁵

Today's amphibious doctrine has benefitted from many years of exercises and combat experience, as well as dramatic advances in technology. Yet, in doctrine and execution there remains a disconnect between the assault and establishment of a beachhead and operations inland. Joint Pub 3-02, Joint Doctrine for Amphibious Operations, is the current joint doctrinal manual for amphibious operations. It defines an amphibious operation as:

An attack launched from the sea by naval and landing forces embarked in ships or craft involving a landing on a hostile shore or potentially hostile shore.¹⁶

A quick look at this definition highlights a significant deficiency. It focuses on the assault landing without reference to operations ashore. To remain a viable forced-entry capability, the execution of the ship-to-shore movement, establishment of a beachhead, if practicable, and the prosecution of combat operations inland must become a seamless operation. The speed of mechanized units, the incorporation of the helicopter as a vertical assault platform, and the availability of instantaneous communications have increased the speed and depth at which operations can be conducted. Technological advances in range and lethality of weapons have closed the distance between land and sea forces. Budget constraints have reduced the number of systems available to the services. Within a theater of operations, land and sea operations cannot be considered separate entities. The sea and littoral areas must be seen as maneuver space and the beach only as a terrain feature in that space.

Amphibious operations provide the operational commander a mobile and flexible capability to concentrate combined arms forces and

strike at selected points in the depth of enemy defenses. As in the landing at Inchon, these points must focus on gaps in the enemy defenses based on current intelligence, aim at striking critical enemy vulnerabilities,¹⁷ and exploit the element of surprise to capitalize on enemy weaknesses by applying combat power at the most advantageous location and time. The establishment of a beachhead and the marshalling of overwhelming combat power before conducting further operations inland may not be possible in the future and should not be viewed as an end in itself. The reduced lift capability for landing forces ensures a large scale assault (i.e. more than one division) is no longer practicable,¹⁸ and an amphibious assault cannot be conducted by simply throwing massed forces into the breach of the enemy defenses, creating overwhelming force at the point of landing. The massed assaults of World War II will never occur again. Potential enemy forces, such as North Korea, may possess mobile defenses capable of quickly counterattacking a penetration of defenses on the beach and throwing the landing force back into the sea.

JCS Pub 3-02 identifies four types of doctrinal amphibious operations from which the operational commander can choose to achieve his strategic objectives. They are the amphibious assault, amphibious raid, amphibious demonstration, and amphibious withdrawal.

The amphibious assault is the most common type of amphibious operation. It involves the establishment of a landing force on a hostile or potentially hostile shore.¹⁹ An example is the landing at Normandy by Allied forces on 6 June 1944. An amphibious raid

involves a swift attack into or temporary occupation of an objective followed by a planned withdrawal.²⁰ The raid at Dieppe, France, conducted by the British during World War II is a perfect example of this type of operation. Conducted on 19 August 1942 and lasting just twelve hours, British and Canadian forces landed at Dieppe, attempting to destroy enemy defenses, air and dock facilities, and radar, and capture enemy prisoners and documents. A dismal failure, the raid nevertheless encouraged Winston Churchill to continue pushing for a stronger amphibious capability for British forces.²¹

An amphibious withdrawal is the extraction of forces by sea in naval ships from a hostile or potentially hostile shore.²² The withdrawal at Gallipoli discussed earlier is a good example. The last type of operation is the amphibious demonstration. It is conducted for the purpose of deceiving the enemy by a show of force with the expectation of forcing the enemy into a course of action that is unfavorable to him.²³ The demonstration at Tinian during World War II is a good example. As part of the Marianas Islands, Tinian would eventually provide a base from which US B-29s would bomb Japan, including the atomic bombs over Hiroshima and Nagasaki. The only large landing beach was located on the southern part of the island next to Tinian Town. Unfortunately, most of the Japanese defenders were also there. Two small beaches were located in the north, one 60 yards wide, the other 130 yards wide. To avoid throwing the landing force into the mouth of the enemy defenses, one division conducted a demonstration in front of the Japanese position to fix the defenders while two divisions landed across the narrow

beaches in the north. The demonstration was successful and the enemy forces were rapidly defeated from an unexpected direction.²⁴

Today, however, amphibious forces are performing operations that do not neatly fit into any of the above categories. Humanitarian assistance missions such as Operation Sea Angel in Bangladesh in 1991 and the Noncombatant Evacuation Operations in Liberia and Somalia in 1990-1991 further demonstrate the usefulness and flexibility of amphibious operations, but are not addressed in current amphibious doctrine. Flexibility in mindset and planning are critical to successful mission accomplishment. This same flexibility must be present in all planning for amphibious operations to retain their utility for the operational commander. Unfortunately, flexibility is often not exercised due to the rigid planning requirements for an assault landing.

Planning for amphibious operations is parallel, concurrent, and detailed.²⁵ The planning is perhaps the most detailed of any form of military operation and heavily influenced by the fact that the amphibious forces are not currently engaged with the enemy. The level of detail required is driven by the necessity to load ships with troops and equipment to facilitate accomplishment of the landing force mission. It is this level of required detail that can hamper the operational commander's ability to exploit opportunities on the battlefield.

Planning begins with receipt of the initiating directive by the Commander, Amphibious Task Force (CATF) directing him to conduct an amphibious operation. It is issued by the combatant commander,

subunified commander, service component commander, or Joint Task Force (JTF) commander delegated overall responsibility for the operation.²⁶ (See Appendix A for further discussion of the Initiating Directive.)

Once the initiating directive is received, twelve basic decisions must be made by the CATF and the Commander, Landing Force (CLF) before the detailed planning commences. Some of these decisions include determination of the beachhead, landing areas, landing beaches, and helicopter landing zones. (See Appendix B for a complete description of the basic decisions.) Once these decisions are made, landing sequences, embarkation assignments, ship-to-shore schedules and many other detailed plans are initiated and completed. Inflexibility in planning and adapting to a changing enemy situation could hamper the operational commander's ability to use amphibious forces decisively. Section IV will address this problem further.

A complete discussion of amphibious doctrine and planning is beyond the scope of this section or monograph. However, this basic understanding of amphibious warfare is necessary to continue the discussion of applying maneuver warfare theory to the conduct of amphibious operations. The basic doctrine for amphibious operations is sound, however, the capabilities of potential enemy forces pose a threat to the traditional execution of amphibious operations. Maneuver warfare theory, if applied to amphibious operations, can enhance its forced-entry capability. With this in mind, a discussion of maneuver warfare theory follows.

SECTION III: ATTRITION AND MANEUVER WARFARE

Attrition is not a strategy. It is, in fact, irrefutable proof of the absence of any strategy. A commander who resorts to attrition admits his failure to conceive of an alternative. He rejects warfare as an art and accepts it on the most non-professional terms imaginable. He uses blood in lieu of brains.

Dave Richard Palmer²⁷

The arguments surrounding the style of warfare to pursue-- attrition or maneuver²⁸--have been heatedly exchanged for many centuries. Writers as early as Sun Tzu addressed the need to place one's forces in a position that reduces the need for a bloody confrontation. The rapid increases in technology and mobility before, during, and after World War I added fuel to the fire, and elicited long dissertations on the folly of attrition-based warfare and the virtues of maneuver-based warfare. In 1921, B. H. Liddell Hart delivered a well-known lecture to the Royal United Services Institution entitled "The 'Man-in-the Dark' Theory of Infantry Tactics and the 'Expanding Torrent' System of Attack."²⁹ In response to the devastating casualties of World War I, he advocated a method of engaging the enemy through the concentration of forces at weak points in his defenses and the maintenance of momentum to defeat the enemy through exploitation and pursuit with minimal casualties.

Today, arguments abound on the relative merits of each form of warfare, with a great deal of misunderstanding and misconception. What exactly is attrition-based and maneuver-based warfare? Are they exclusive or complementary concepts? Which form should the US

military use? This section will discuss both styles and demonstrate the necessity of adopting a maneuver-based approach to amphibious warfare.

The Strategy of Attrition

A strategy of attrition seeks victory through the cumulative destruction of the enemy's material assets and personnel through superior firepower and technology.³⁰ Attrition is war waged through industrial means. The enemy is seen as merely an array of targets that must be systematically destroyed, focusing on efficiency of efforts. The concentration on firepower tends to slow tempo and operations are more ponderous. Measures of success are more scientific and quantitative--battle damage assessments (percent destroyed/neutralized), body counts, and terrain seized. Results are in proportion to the effort expended, with greater results achieved through greater attrition. Attrition-based warfare also implies a willingness to accept greater attrition in order to achieve success.

The more warfare tends towards attrition, the more predictable the military forces become. Procedures are routine, tactics become repetitive, and the operational level of war is less meaningful.³¹ A pattern of predictable firepower concentrations followed by frontal assaults, applying strength against strength, by a numerically superior force would quite naturally result in a gradual movement forward through sustained attack, reorganization, and resupply followed by another attack. This continuous cycle, fed by the industrial and manpower capacity of a nation, achieves the goal of attriting the enemy across the front. Attrition warfare mitigates

the need to orchestrate battles and engagements at the operational level to achieve strategic objectives. These objectives are ultimately achieved when the enemy is destroyed. The exaggerated dependence on firepower and rigidity is detrimental to maneuver and flexibility.

Advocates of attrition warfare point to Carl von Clausewitz's statement that "[d]estruction of the enemy forces is the overriding principle of war" and "destruction of the enemy's forces is generally accomplished by means of great battles and their results; and the primary object of great battles must be the destruction of the enemy's forces."³² By following this line of reasoning, the attritionist devotes his energies to bring the enemy to battle, to engage him in combat which Clausewitz calls "the only effective force in war,"³³ and reduce his combat capability through overwhelming firepower and destruction. Through combat, shifts in relative strength are achieved by imposing a higher casualty rate on the enemy. Increases in relative strength ensure the attritionist emerges victorious.

History is replete with examples of attrition-based warfare: the Luftwaffe's attempt to destroy the British Royal Air Force during the Battle of Britain, the Allied campaign across western Europe and Italy, and General Ridgway's coast-to-coast offensives in 1951-52 against the Chinese and North Korean forces which were systematically engaged through airpower and artillery. The "bottom-up" focus of attrition-based warfare on the battle to inflict casualties mitigates the effects of maneuver except for the positioning of fire support

assets, reduces momentum, increases the expenditure of materiel and lives, and prolongs the conflict. Sun Tzu wrote that "there has never been a protracted war from which a country has benefited[.]"³⁴ and today's military can ill-afford to adopt such a style of warfare.

The Strategy of Maneuver

To better understand maneuver-based warfare, it is useful to first define maneuver as currently used in doctrinal manuals. Joint Pub 1-02, Department of Defense Dictionary of Military and Associated Terms, defines maneuver as the:

[e]mployment of forces on the battlefield through movement in combination with fire, or fire potential, to achieve a position of advantage in respect to the enemy in order to accomplish the mission.³⁵

The 1993 edition of Field Manual (FM) 100-5, Operations, (Final Draft) defines maneuver as:

the movement of forces in relation to the enemy to secure or retain positional advantage. Effective maneuver keeps the enemy off balance and thus also protects the force.³⁶

At the operational level, maneuver is defined in FM 100-5 as:

the means by which the commander determines where and when to fight by setting the terms of battle, declining battle, or acting to take advantage of tactical plans. Maneuver means dynamic warfare and rejects stereotyped, predictable patterns of operation.³⁷

Finally, Armed Forces Staff College (AFSC) Pub 2, Service Warfighting Philosophy and Synchronization of Joint Forces, defines operational maneuver as:

the movement and employment of forces that seeks a decisive impact on the conduct of a campaign. It attempts to gain advantage of position before battle and to exploit tactical success to achieve operational results.³⁸

A quick look at these definitions highlights a key element of maneuver-based warfare. Maneuver is designed to place friendly forces in a favorable position relative to the enemy. This relative positioning could be for the further destruction of the enemy through firepower and close combat, or it may create a psychological dislocation which renders the enemy incapable of fighting by destroying his will. Maneuver-based warfare, however, goes far beyond the requirement to gain a positional advantage over the enemy. Fleet Marine Force Manual (FMFM) 1, Warfighting, defines maneuver warfare as:

a warfighting philosophy that seeks to shatter the enemy's cohesion through a series of rapid, violent, and unexpected actions which create a turbulent and rapidly deteriorating situation with which he cannot cope.³⁹

Maneuver warfare is a mindset, a mental approach to conflict, that seeks to put the enemy at a severe disadvantage through the creative application of force which does not seek so much the physical destruction of the enemy, but the shattering of his moral and physical cohesion--the destruction of his will to fight. The principle target is the enemy's mind, requiring a thorough understanding of the enemy. The psychology of the mind is a key element in conducting maneuver warfare. Weapons are effective only insofar as they influence the morale of the enemy.

Clausewitz understood the importance of moral forces on the belligerents. He noted that the moral forces of combat are "among the most important in war" and "constitute the spirit that permeates war as a whole."⁴⁰ He further describes the relationship between

physical and moral forces in war, saying "[o]ne might say that the physical seem[s] little more than the wooden hilt, while moral factors are the precious metal, the real weapon, the finely honed blade."⁴¹ The importance of moral factors is noted by other theorists. Sun Tzu calls moral influence the first of five fundamental factors in war,⁴² while Ardant du Picq asserted that:

[w]ith equal or even inferior power of destruction he will win who has the resolution to advance, who by his formations and maneuvers can continually threaten his adversary with a new phase of material action, who, in a word has moral ascendancy. Moral effect inspires fear. Fear must be changed to terror in order to vanquish.⁴³

By breaking the blade of moral forces, an enemy becomes virtually incapable of further fighting, yet the destruction of the entire force is not necessary in order to render an opponent impotent.

The destruction of the enemy's armed forces, as understood in attrition warfare, is not the predominant influence in maneuver warfare. Clausewitz wrote that the destruction of the enemy's army is the primary objective in war, but the reader must first understand his use of the word destruction. Clausewitz writes:

The fighting force must be destroyed: that is, they must be put in such a condition that they can no longer carry the fight. Whenever we use the phrase "destruction of the enemy's forces" this alone is what we mean.⁴⁴

By calling for the destruction of the enemy's forces, Clausewitz was not mandating their total annihilation, but rather rendering the enemy incapable of further action, whether by attrition or psychological dislocation.

Richard Simpkin, a British theorist, describes maneuver theory as a dynamic, three dimensional interaction of mass, time, and

space.⁴⁵ Through maneuver, advantage is gained over the enemy not by mass alone, but also spatially and temporally, forcing him to become reactive and preventing him from gaining the initiative. Unlike attrition warfare, maneuver warfare views fighting as just one means of achieving objectives. Sun Tzu stated this best saying "[t]o capture the enemy's army is better than to destroy it...For to win one hundred victories in one hundred battles is not the acme of skill. To subdue the enemy without fighting is the acme of skill."⁴⁶ Practitioners of maneuver warfare fully acknowledge the requirement for physical and moral preparedness, but seek defeat of the enemy through preemption, dislocation, or disruption.

Operationally, preemption is the purest form of maneuver in that through the maneuvering of forces, victory is achieved without engaging in hostilities.⁴⁷ Successful preemption requires that the commander clearly perceive the enemy situation, understand the value of time, and act with immediate boldness and resolve to place the enemy in an untenable position without engaging in direct fire confrontations. Preemption is also the most difficult to achieve. Napoleon's victory against Mack at Ulm in 1805 is perhaps one of the best examples of preemption. Through speed, concentration, and a good understanding of his enemy, Napoleon was able to maneuver his forces from the Brittany coast to Ulm, surrounding Mack and cutting him off from reinforcements. Mack was forced to surrender without a fight.

The dislocation of enemy forces results in the rendering of enemy forces irrelevant through a combination of momentum, combat

capability, and turning the enemy.⁴⁸ Dislocation can be physical, such as turning a flank and isolating a force, thus pulling him from the fight. It can also be psychological by moving at a speed faster than the enemy can react--getting inside his decision cycle. Dislocation is accomplished through a combination of firepower and maneuver, however, the emphasis is on the maneuver of forces to present the enemy with a dilemma.

Disruption renders the enemy operationally irrelevant by attacking his critical vulnerabilities,⁴⁹ pressing the fight through bold, decisive action; striking quickly with combined arms; applying strengths against weaknesses; and causing the defeat of the enemy without having to physically destroy his force. The most noticeable example of disruption is the German blitzkrieg of World War II. Through swift, violent, narrow penetration and exploitation, the Germans were able to secure victory against an opponent without engaging in wasteful attacks that did not focus on the enemy's vulnerabilities.

The three modes of application of armed forces vary in their degree of reliance on maneuver to accomplish the mission, with preemption being the most and disruption the least. This brings us to a key point of maneuver warfare and a source of misunderstanding. As stated earlier, maneuver warfare is a way of thinking about warfare, applying strengths against weaknesses and defeating the enemy without physically destroying him. Maneuver warfare is not bloodless. In fact, as fighting begins, maneuver and attrition warfare become complementary concepts.⁵⁰ Fires and forces are

concentrated at decisive points to destroy enemy elements when the opportunity arises and when they fit into the larger context of the operation. But firepower is used selectively to support maneuver, contributing to the psychological and physical dislocation and defeat of the enemy while preserving friendly forces.

Two other important elements of maneuver warfare must be briefly discussed--tempo and risk. FM 100-5 (Final Draft) defines tempo as "[t]he rate of speed of military actions..."⁵¹ while FMFM 1 describes tempo as "[s]peed over time...the consistent ability to operate fast."⁵² A faster tempo, relative to the enemy, allows the commander to operate within the enemy's decision cycle, making the enemy commander's actions irrelevant because he is reacting to the wrong event.⁵³ But tempo is more than just speed of action. Simpkin describes tempo as:

a complex of seven elements, all of them complex in themselves and all of them mutually interacting:

- physical mobility
- tactical rate of advance
- quantity and reliability of information
- C3 [command, control, and communications] timings
- times to complete moves
- pattern of combat support
- pattern of service 9 (logistic) support.⁵⁴

Each of these elements is vulnerable to Clausewitz's "friction" of war,⁵⁵ bringing us to a discussion of risk. Maneuver warfare has a higher degree of risk than attrition warfare. Correspondingly, the higher the risk, the higher the potential payoff. Friction and confusion are inherent in maneuver warfare, but the successful practitioner learns how to operate in this atmosphere while

increasing the friction and confusion of the enemy. The requirement for decentralization of command (auftragstaktik), the probing of enemy forces to identify a weakness or gap, the gathering of momentum and the maintenance of tempo to exploit enemy weaknesses without outrunning sustainment support, and the natural fog of war that guarantees inadequate information for decisionmaking, all serve to increase risk on the battlefield.

Attrition warfare controls risk through centralizing command and focusing on the physical destruction of the enemy. Rewards are modest in view of the forces used, and failures are more gradual and less catastrophic. Conversely, maneuver warfare is inherently risky and failure comes quickly and at a greater cost than attrition warfare, but the potential payoff can be spectacular given the forces used. The German thrust through the Ardennes and into France in 1940 is a good example. The armored thrust deep into France was potentially vulnerable as their narrow, deep penetrations were susceptible to interdiction and destruction. Yet, because of the speed and violence of the invading force, the bulk of France's armed forces were psychologically and physically dislocated and the country was defeated more quickly and with less cost than a more traditional frontal, attrition-based attack.

Maneuver warfare is a state of mind born of a bold will, intellect, initiative, and ruthless opportunism. It is a way of thinking in and about war that shapes our every action. It is a way of fighting that generates the greatest decisive effect against the enemy at the least possible cost.⁵⁶ Liddell Hart believed the

commander's aim was not so much to seek a battle as to put himself in a situation "so advantageous that if it does not of itself produce the decision, its continuation by a battle is sure to achieve this."⁵⁷ Applying this philosophy to amphibious forced-entry operations, the commander can decisively achieve his objectives in the face of reduced amphibious capability and a more technologically advanced enemy.

SECTION IV: MANEUVER WARFARE AND AMPHIBIOUS OPERATIONS

Amphibious flexibility is the greatest strategic asset that a sea-based power possesses. It creates a distraction to a continental enemy's concentration that is most advantageously disproportionate to the resources employed. The distracting effect is apt to diminish, however, after a landing takes place unless...its exploitation is rapid...

B. H. Liddell Hart (1960)⁵⁸

In September 1992 the Department of the Navy published a White Paper titled "...From the Sea." The purpose of the White Paper is to redefine the role of the naval services through this decade and in to the next century. The most promising part of the White Paper is the dramatic shift in focus from a global threat to regional and littoral challenges and opportunities. No longer will the Navy focus on a superpower maritime confrontation on the high seas with the former USSR while amphibious operations and littoral warfare take a back seat. Instead, the focus of current doctrine development, equipment procurement, technological advances, and further development in tactics, techniques, and procedures is on the needs of littoral warfare, including amphibious forced-entry operations.⁵⁹

This is a much needed step towards maintaining the viability of amphibious forced-entry operations in the future. It is a dramatic turn-around from 1979 when the Chief of Naval Operations, Admiral Thomas B. Hayward, wrote "The Future of U.S. Sea Power" where he discussed maritime strategy at length without once mentioning amphibious operations.⁶⁰ "...From the Sea" now defines the new direction for naval forces as "Naval Expeditionary Forces—Shaped for

Joint Operations--Operating Forward From the Sea--Tailored for National Needs."⁶¹

The White Paper identifies four key operational capabilities required to execute this new direction: command, control, and surveillance; battlespace dominance; power projection; and force sustainment.⁶² Each of these capabilities is defined only in broad terms, but serves to focus the energy necessary to develop and plan for naval operations in the future. All of these capabilities will have a direct impact on the ability to conduct forced-entry operations into the next century. A critical component of conducting these operations is the development of a sound command and control (C2) structure that enhances decentralized operations over greater ranges while providing near real-time information to the commanders through enhanced surveillance capabilities.

Battlespace is the sea, air, and land environment where naval forces will conduct operations. It is the heart of naval warfare, ensuring "effective transition from open ocean to littoral areas, and from the sea to land and back, to accomplish the full range of potential missions."⁶³ Power projection involves the maneuver of naval forces from the sea, massing forces rapidly, generating high intensity, precise offensive power at the time and location of their choosing under any weather condition, day or night and massing strength against weakness.⁶⁴ Finally, sustainment of these operations must encompass the full range of logistics support necessary for any military operation.⁶⁵

The application of maneuver theory to amphibious forced-entry operations capitalizes on the inherent flexibilities of naval forces. Maritime forces enable the operational commander to strike the enemy at a place and time of his choosing and at operational depths. However, the commander must view these operations as something larger than the seizure of a beachhead and the subsequent introduction of heavy forces ashore. The limited availability of amphibious lift, the potential for increased capabilities and sophistication of the enemy force, and a political atmosphere driving the military to achieve success quickly with minimal casualties prohibits a "business as usual" attitude in conducting amphibious operations. Maneuver theory in conjunction with amphibious operations immediately opens more possibilities as the mental construct surrounding power projection from the sea changes from a frontal, attrition-heavy assault to a maneuver-oriented seamless operation that applies strength against enemy weaknesses, striking at the enemy center of gravity.

The sea is a broad avenue from which naval forces can strike deep against the enemy. Unlike previous amphibious operations that required the amphibious task force (ATF) to come within 4000 yards of the shore to disembark the landing force, maneuver-based amphibious operations moves the ATF beyond visual and radar range, capable of striking at any point along a broad front, thus spreading out the enemy's defenses and creating weaknesses and gaps. The introduction of the Landing Craft Air Cushion (LCAC), with a speed of 40-50 knots and a load capacity of 60 tons (65 overload) provides the landing

force a capability to launch from over the horizon and rapidly transit to shore and further inland. The use of the LCAC increases the percent of beaches available in the world for an assault landing from 30 percent to 70 percent,⁶⁶ giving the operational commander greater flexibility in using amphibious forces.

The LCAC, as well as helicopters (and ultimately the MV-22 Osprey), and the development of the advanced amphibious assault vehicle (AAAV), capable of 25-30 knots speed in the water, allows the ATF to stand further offshore and enhances survivability during the landing. Operational and tactical surprise and security are enhanced as an ATF 100 miles offshore can attack any point along an 800 mile line within 24 hours,⁶⁷ launch the landing force by air and surface means 25-100 miles from the shore, mass at identified enemy weaknesses along multiple axes from widely dispersed elements of the ATF, and thrust deep beyond enemy defenses towards operationally significant objectives, focused on the center of gravity.

Practitioners of maneuver-based amphibious operations must rethink the way operations are conducted so they remain operationally relevant. Joint Pub 3-02 begins to address amphibious assaults that are initiated from over the horizon.⁶⁸ The focus of the discussion, however, centers on the enhanced capabilities of an ATF with the introduction of the LCAC. The recognition of the flexibility inherent in the use of the LCAC is a good, but small, start in developing the mental construct necessary for maneuver-based amphibious forced-entry operations.

When the maneuver warfare principles previously discussed are applied to current amphibious doctrine, amphibious operations should take on the following characteristics, consistent with the operational situation:

-- The landing force begins maneuver from the location of the ATF instead of the shoreline. By initiating maneuver at sea, the ATF remains dispersed and enemy defenses are weakened by spreading out his forces. This gives the commander the advantage of surprise and the flexibility to choose an operationally relevant gap in the enemy defenses, penetrate the gap, rapidly exploit the penetration, and move to operational depths in the enemy's rear to strike at his center of gravity.

-- Actions and phases must be seamless in order to maintain a continuous flow of combat power and sustainment through the penetration. The buildup of forces ashore before attacking to operational depths cedes the initiative to the enemy, placing the landing force in a vulnerable position. A critical factor in maneuver warfare is the judicious use of time. The enemy must never be given time to recover from an assault. The commander must use time to his advantage to place the enemy in an untenable position.

-- Tempo and momentum must be greater than the enemy's.

-- Broad landing beaches may be replaced by narrow points where forces are massed and penetrate the enemy weakness. Broad landing beaches dilute combat power and expose the landing force to greater danger.

-- The selection of penetration/landing points may be delayed until the last minute in order to identify enemy surfaces and gaps from preassault operations.⁶⁹

-- The introduction of follow-on forces must not wait for the establishment of the traditional beachhead, but must exploit any penetration to maintain tempo and momentum.

-- Sustainment operations must anticipate requirements and push logistics forward instead of waiting for requests for support, thus slowing tempo. Sea-based logistics may become more practical than the establishment of a logistics area ashore.

-- Maneuver and fires must be swift, violent, and integrated. The use of fires to dislocate and disrupt the enemy creates opportunities for maneuver forces to exploit enemy weaknesses and must be carefully orchestrated.

-- Directive control from the commander is necessary to avoid overcontrol of forces and take advantage of opportunities as they arise. The use of mission orders and commander's intent is imperative.

-- Branches and sequels must be identified and planned. The maintenance of tempo requires thorough planning, to include possible branches and sequels.

-- Planning and operations must focus on the psychological and physical dislocation of the enemy to ensure defeat with minimum casualties.

There are certain challenges to be met before the above aspects of maneuver-based amphibious forced-entry operations can be fully

implemented. Some advances in technology must be developed in order to more accurately determine the enemy's capability and disposition and then relay that information in a timely manner to the commander on the ground so that it is useful. A critical shortcoming is the lack of adequate fire support in the initial stages of the operation when the landing force is most vulnerable. Current naval gunfire systems are incapable of ranging targets inland from an over-the-horizon posture, and if they move closer to shore, they become more vulnerable and surprise is lost. Ships do not carry adequate stocks of missiles to be used in support of the landing force. At the current time, the only available fire support for this type of operation is air. However, recent initiatives to address this deficiency include the development of an 8 inch naval gun and the use of the Army's Multiple Launch Rocket System (MLRS) and Tactical Missile System (ATACMS) from ships to provide fires in support of the landing force to operational depths.⁷⁰

A potential enemy may possess a shallow and/or deep water mining capability that could degrade the ability of the landing force to come ashore. The Navy's mine-countermeasure (MCM) capability is weak, but additional procurement of MCM assets will enhance the ability of the ATF to conduct in-stride sweeping operations to get the landing force ashore without compromising surprise or tempo.⁷¹ Finally, all systems must be all-weather capable to take advantage of poor weather and periods of limited visibility. This includes navigational capabilities for surface transport vessels, such as the LCAC, helicopters, and all fixed-wing assets.

Technical and training limitations at this time preclude the full exploitation of maneuver-based amphibious operations. Some capabilities are currently available, but technical shortcomings must be identified, developed, procured, and fielded. More important, the development of a maneuver-based mental attitude and doctrine and rigorous training are required before the full potential of maneuver warfare can be exploited. Maneuver-based warfare has been used in amphibious operations in the past and the future will mandate its use. An historical example and a future scenario will illustrate the use of a maneuver-based amphibious forced-entry operation and its viability into the next century.

SECTION V: A LOOK AT THE PAST AND FUTURE

First, a historical example may simply be used as an explanation of an idea...Second, it may serve to show the application of an idea...Third, one can appeal to historical fact to support a statement...to prove a possibility of some phenomenon or effect...Fourth and last, the detailed presentation of a historical event, and the combination of several events, make it possible to deduce a doctrine: the proof is in the evidence itself.

Carl von Clausewitz⁷²

The study of history provides, in conjunction with theory, a vehicle for the development of doctrine as a guide to the conduct of military operations. As the study and implementation of maneuver warfare into military operations continues to grow, it is useful to analyze the past and apply the lessons to the future. The Inchon-Seoul operation conducted during September 1950 is reviewed and a future scenario in Korea in the year 2005 is developed to amplify the application of maneuver warfare to amphibious forced-entry operations.

OPERATION CHROMITE

In the pre-dawn darkness of 25 June 1950, the North Korean Peoples Army (NKPA) attacked across the Demilitarized Zone (DMZ) that separated North and South Korea, thrusting the peninsula, and ultimately the United States, into a long, bloody war. The swiftness of the North Korean attack surprised many, and within 72 hours, the NKPA was in Seoul and the Republic of Korea (ROK) Army was in a quick retreat southward. By 30 June, President Truman authorized the deployment of US ground forces into Korea to reinforce the ROK Army

and halt the NKPA advance. The next day, the first US ground force, Task Force Smith, was on the ground in Pusan and America was at war.⁷³

During the first week of July, General Douglas MacArthur, Commander-in-Chief, Far East Command (CINCFE), began the planning for an amphibious operation that would strike at the heart of the enemy's lines of communication (LOCs)--Seoul.⁷⁴ The decision to land at Inchon had tremendous operational significance. MacArthur's stated objective was to interdict the NKPA's LOCs at Seoul and, in conjunction with an attack by the Eighth US Army, crush the NKPA in short order. He noted that "[t]he history of war proves that nine out of ten times an army has been destroyed because its supply lines have been cut off...We shall land at Inch'on and I shall crush them."⁷⁵ Inchon was certainly a logical choice due to its proximity to Seoul (25 miles), reducing the time and distance necessary to achieve the campaign objectives. To MacArthur, an amphibious sweep around the flank of the enemy to strike his rear always appealed to his sense of operational art. He understood that maneuver-based warfare produced the greatest victories and the quickest decisions to its practitioner. Inchon would be no different.⁷⁶ Inchon represented the most direct, most difficult, and most vulnerable point at which to land and achieve his objectives.

The landing at Inchon posed many problems from an amphibious perspective. "We drew up a list of every natural and geographic handicap--and Inchon had 'em all (sic)."⁷⁷ MacArthur's own 5000 to 1 odds against success only served to heighten the anxiety surrounding the potential for disaster.⁷⁸ The potential for enemy

reinforcements driving X (US) Corps back into the sea; the dramatic tidal shift of 32 feet, necessitating the requirement to land two separate elements 12 hours apart, thus surrendering tactical surprise; the narrow approaches to Inchon that could have been easily blocked; and numerous other problems all served to enhance the potential for catastrophic failure.

But with the potential for tremendous failure comes a potential for dramatic success. The Inchon-Seoul campaign was just such a success. On 15 September 1950, X (US) Corps conducted an amphibious assault at Inchon, and by 28 September, Seoul had been captured and the enemy's LOCs interdicted.⁷⁹ In conjunction with the attack, the Eighth US Army began its breakout from the Pusan Perimeter on 17 September, attacking northward against a retreating enemy, and linking up with the X (US) Corps at Seoul as the city was liberated. The back of the NKPA had been broken and they were retreating across the 38th Parallel into North Korea, followed closely by the United Nations forces.

MacArthur's operational use of amphibious operations strikes at the heart of maneuver-based warfare and highlights some of the key elements described earlier. MacArthur first understood the necessity to strike at an enemy vulnerability--his LOCs--in order to defeat the enemy's operational center of gravity--the NKPA. MacArthur sought a weakness against which he could apply a force, achieving an operational objective in the shortest time with the least cost in men and materiel.

Most significantly, MacArthur's focus of the operation was not on the establishment of a lodgment followed by the introduction of heavy follow-on forces. The two divisions assigned to I (US) Corps were the only forces available and faced approximately 30,000 North Korean troops committed in the Inchon-Suwon-Seoul area and another 10,000 uncommitted in the area.⁸⁰ MacArthur's focus, instead, was on Seoul and the enemy's vulnerable LOCs. He envisioned a seamless operation, beginning from the sea and moving into Seoul to achieve an operational objective. He used a force far smaller than that required to achieve a 3:1 superiority,⁸¹ however, he focused his force to achieve local superiority against an enemy weakness. Through speed, surprise, and ruthless opportunism he defeated a large, well equipped force, isolating the NKPA from their source of supply and rendering them operationally irrelevant. He continually pressed his forces to move fast and win quickly, emphasizing a need to gain and maintain a tempo greater than the enemy's.

MacArthur believed a frontal attack alone through the Pusan Perimeter would be costly and that the North Koreans were unprepared for an enveloping attack, especially at Inchon. He disdained proposals to land further south, claiming they were "ineffective and indecisive" because they were too shallow.⁸² The amphibious landing had to strike quickly at the heart of the enemy's weakness to achieve success. A landing further south put the assault forces into the strength of the enemy forces and the results would have been less decisive and more costly. He likened his plan to Wolfe's surprise landing at Anse du Foulon and his subsequent capture of Quebec in

1759. He believed the North Koreans would consider an Inchon landing as impossible, just as Montcalm had considered the British landing to capture Quebec.⁸³ Inchon would become MacArthur's "Plain of Abraham" and he would take the North Koreans by surprise.

MacArthur used maneuver from the sea to defeat his enemy through moral and physical dislocation. He eschewed the possibility of defeating the enemy through costly frontal attacks out of the Pusan Perimeter and maneuvered forces deep into the enemy's rear to strike at a critical vulnerability. MacArthur understood the risks inherent in any amphibious operation and the particular risks of the landing at Inchon. He also understood the necessity to strike quickly and decisively. Inchon was simply a place from which he could push combat forces forward to strike at Seoul, his operational objective.

Unlike the planning for Operation Overlord, MacArthur's emphasis was on the actions beyond the beach and into Seoul. This example best illustrates the maneuver mindset necessary to conduct successful maneuver-based operations. Even with all the right equipment and tactics, if a maneuver-based, operationally-oriented mental construct is not present, then amphibious operations quickly degenerate into a wasteful attempt to secure a foothold and wait for follow-on forces and logistics build-up, surrendering the initiative to the enemy and reducing the operational tempo--all key elements of maneuver-based warfare. MacArthur, with limited forces, time, and opportunities, did not allow that to happen.

A Scenario For The Future⁸⁴

A scenario developed by the U. S. Marine Corps as a wargaming tool at the Marine Corps Combat Development Command in Quantico, VA helps to further understand the application of maneuver warfare principles to amphibious forced-entry operations. This scenario is a major regional contingency during the year 2005 in Korea. It amplifies the discussion of maneuver warfare in amphibious operations.

In a last ditch effort to unify the peninsula, North Korea invades the south. The primary axis of the attack is the Kaesong/Munsan and Chorwon corridors, with a lesser attack along the eastern coast. U. N. condemnation is swift and the United States honors its treaty obligation with the Republic of Korea (ROK).

Through several successful attacks, using non-persistent chemicals and fuel air explosives (FAE), Democratic People's Republic of Korea (DPRK) forces suppress ROK and United States air and overcome ROK defensive positions along the Demilitarized Zone (DMZ). Using chemicals against heavily defended positions, they move south along the western side of the peninsula as far as Kwangju before being stopped by ROK and US forces. The DPRK attack along the eastern side of the peninsula made only small advances before being stopped. Reinforcing US forces arrive in theater and are preparing for the Combined Forces Command (CFC) counterattack.

As part of the CFC Campaign Plan to reestablish the DMZ and the territory of the ROK, Commander, Amphibious Forces has been directed to conduct an amphibious operation north of the DMZ, between the DMZ

and Wonson on the eastern side of the Korean peninsula, in support of the counterattack along the east coast. The attack will proceed as far inland as the Commander, Amphibious Forces deems necessary. The purpose of the amphibious operation is to fix second and third echelon forces and prevent reinforcement of DPRK forces in the south. Enemy strength is estimated at 50-60 percent along the western front and 75-80 percent along the eastern front.

The amphibious assault forces are out-numbered by the DPRK forces, however, the DPRK's ability to secure a landing site is diminished by the inherent maneuverability of amphibious forces and the distance between the DMZ and Wonson. A necessary precursor to this operation is the availability of sufficient intelligence to accurately determine the disposition of enemy forces. Although national intelligence assets provide tremendous information, some necessary details are only gained from forces on the ground.

The operation begins with the establishment of battlespace dominance. While absolute supremacy is not necessary in the area, control of the air and surface/subsurface areas immediately precedes the assault. The identification of minefields and subsequent avoidance/sweeping operations is followed by the assault forces landing from over the horizon to retain both the elements of surprise and survivability. Current operational capabilities rely on time-consuming operations to establish conditions necessary for a frontal assault, telegraphing the location of the assault to the enemy commander.

The possession of surface-to-surface missiles and mobile defensive forces enhances the DPRK's ability to defend against an amphibious assault. From a range of 25 miles or farther, assault forces disembark from widely dispersed ships. This dispersion conceals the actual location of penetration points and spreads the enemy's defenses. In a "reconnaissance pull" operation, the friendly forces maneuver to gaps identified by reconnaissance elements in the enemy defenses, using vertical assault capabilities to move forces deep inland, while surface forces converge on several penetration points from widely dispersed ships and quickly thrust inland to effect a link-up, bypassing enemy strengths. The depth of the penetration is determined based on the overall situation, the ability of the force to conduct its mission, and the opportunities that arise enabling the amphibious forces to strike the enemy's center of gravity.

The dispersion of the landing forces presents the enemy commander with a dilemma and contributes to his confusion. Trying to determine how, when, and where the assault forces will strike causes the enemy commander to become reactive. He surrenders the initiative and must try to cover all possibilities, from a simple reinforcement of a single penetration of committed ground forces to the requirement to defend everywhere. It is this aspect of maneuver warfare that enhances the survivability of the assault force and defeats the enemy without requiring his physical destruction.

The actual sequencing of forces ashore, through air or surface means, is on-call instead of the normal preplanned routine currently

practiced. This provides the right force at the right time for the right mission. It requires a much more flexible mindset and approach to planning and implementation. Using vertical and surface assaults simultaneously, assault forces quickly achieve mass, increasing their tempo and dislocating the enemy, fixing his second and third echelon forces.

Fires, an essential element of the assault, are provided through aviation from carrier and land-based assets, surface-borne fire support elements such as organic artillery and MLRS, and naval surface fire support (i.e. naval gunfire and missiles). No pre-landing bombardments are planned to maintain the element of surprise. Initial reconnaissance forces identify critical targets for fires as assault forces conduct the ship-to-shore movement. Fires are timed to facilitate the penetration of enemy defenses and exploitation of the gaps.

Sustainment operations remain sea-based to reduce the necessity for a beach build-up and enhance security of the rear areas by reducing the exposure of critical supplies to enemy attacks from conventional/unconventional means. Logistics requirements are anticipated and pushed forward, particularly critical Classes III and V supplies. The use of LCACs and heavy-lift helicopters reduces the time required to move supplies ashore, highlighting the requirement that sustainment operations must possess the same mobility as combat operations.

This scenario is necessarily brief, but gives an overall view of the conduct of amphibious forced-entry operations using maneuver-

based warfare. If this scenario had focused on a traditional amphibious assault, the emphasis would be on the establishment of a beachhead and the subsequent introduction of follow-on forces, pitting strength against strength. The establishment and build-up of a beachhead on the Korean coast with the limited forces available precludes the possibility of pushing forward quickly to engage and defeat the enemy forces at operationally significant depths. There are insufficient forces and shipping available to conduct the brute force landing operations of the past. The beachhead is vulnerable to interdiction from conventional and unconventional ground forces and surface-to-surface missiles. By halting operations at a beachhead line, the DPRK is able to recover from initial friendly success, move forces to mass for a counterattack, and push friendly forces back into the sea. Initiative and tempo are surrendered to the enemy and the introduction of follow-on forces is hampered. The DPRK would be able to isolate the landing force, concentrate on the defeat of the CFC counterattack, and then defeat the landing forces. The operation begins to resemble the landing at Anzio in 1944 and a fleeting opportunity is lost as the landing deteriorates into an attrition-based operation.

Through maneuver-based assaults in conjunction with the friendly counterattack, amphibious forces achieve moral and physical dislocation of the DPRK through a seamless operation beginning from a sea base, maneuvering to the shore and across the beach, penetrating and exploiting gaps, striking decisively at critical enemy vulnerabilities and avoiding enemy strengths. Tempo and initiative

are retained by the assaulting force that is no longer tied to limited frontal attacks against a well-armed DPRK forces. The enemy's tempo is disrupted through the coordination of fires, the exploitation of multiple gaps, and the speed of the attacking force. The DPRK forces must contend with the counterattack from their front while the landing force strikes deep into their rear area, moving faster than he can react, isolating forces and preventing the reinforcement of first echelon units. The enemy is presented with multiple dilemmas, contributing to his psychological dislocation. As exemplified in this futuristic scenario, successful amphibious forced-entry operations require the commander to outmaneuver and outfight rather than just outmuscle the enemy through the application of brute force.

SECTION VI: CONCLUSIONS

A self-contained and sea-based amphibious force...is the best kind of fire extinguisher--because of its flexibility, reliability, logistics simplicity, and relative economy.

B. H. Liddlell Hart (1960)⁸⁵

For the foreseeable future, the United States must maintain a credible amphibious force-on-call capability. The State Department's "Global 2000 Report to the President" stated:

...Four-fifths of the world's population will live in underdeveloped countries and three-quarters of the population live within 500 kilometers of the sea. Many of these distant Third World regions will become maritime theaters, and amphibious forces...will serve as the military instrument of choice.⁸⁶

Further, of the 113 cities in the world considered significant vital interests of the United States, 80 are within 75 miles of the sea.⁸⁷

The proliferation of technology, the acquisition of sophisticated, accurate, long-range weapon systems by many Third World countries, and the rising uncertainty in today's world demands a viable, robust capability to defend our vital interests around the globe, either through a show of force, humanitarian efforts, or combat operations. The reduction of forward deployed forces further increases the demand on power projection capabilities of this country. As such, maritime forces will have a prominent role in securing our country's interests.

Amphibious operations of the future can no longer rely on the application of overwhelming combat power through massed frontal

assaults into the enemy's strength. Instead, commanders must focus on the application of strength against selected enemy weaknesses and defeat the enemy without requiring the destruction of his forces--an invitation to maneuver-based warfare. The United States no longer possesses the capability to conduct amphibious assaults on the same scale as the landings at Normandy or Okinawa during World War II. Future conflicts will not provide sufficient lead time to develop a larger amphibious capability. We must be prepared to go to war with the forces currently available.

Consequently, the focus of amphibious operations must go beyond the seizure of a beachhead and the establishment of a lodgment for the arrival of follow-on forces. Operations must be oriented towards the rapid penetration inland from the sea and attack, either directly or indirectly, the enemy's center of gravity. The tenets of maneuver warfare, with its emphasis on speed, surprise, the application of strength against weakness, and the moral and physical dislocation of the enemy vice his physical destruction, must be applied to amphibious doctrine. Concurrently, new technologies must be developed to facilitate this application.

More important, however, is the development of a mind-set that is flexible, bold, and ruthlessly opportunistic. A myopic orientation on rigidly structured, overly restrictive operations can surrender the initiative to the enemy by failing to take advantage of fleeting opportunities as they occur. Commanders must be directive in their control of operations and subordinates must be trained and then trusted to achieve the commander's intent. Decentralization,

not micromanagement, is required to fully exploit the potential of maneuver warfare.

Maneuver warfare is a philosophy that seeks the greatest victory at the least cost, and when applied to amphibious operations, enhances the utility, flexibility, and survivability of amphibious forces. It provides the operational commander a tremendous advantage to influence the action and secure his objectives. It is the future. The publication of FMFM 1 in 1989 introduced the Marine Corps to maneuver warfare, but much remains to be done. Further wargames must be conducted, additional technical requirements identified and developed, and every leader, from the squad leader to the joint forces commander, trained how to think quickly and accurately in maneuver-based warfare.

The approach of the 21st century and recent world events have made our world more exciting, yet more dangerous. Although the threat of global war is, at least for the near term, minimal, the opportunities to become involved in regional conflicts have increased many times. The United States, as the superpower in an interdependent world, must maintain a credible, maneuver warfare-oriented, amphibious forced-entry capability to protect its vital interests and secure the liberties we hold so dear.

APPENDIX A

The Amphibious Operation Initiating Directive⁸⁸

The Initiating Directive:

1. Establishes the Amphibious Task Force (ATF).
2. Assigns a mission.
3. Provides forces to accomplish the mission.
4. Assigns assault shipping for both assault echelon (AE) and assault follow-on echelon (AFOE).
5. Designates the Commander, Amphibious Task Force (CATF), Commander, Landing Force (CLF), and other commanders as appropriate.
6. Positively defines the Amphibious Operations Area (AOA) in terms of sea, land, and air space. The size must be sufficient to ensure accomplishment of the ATF mission as well as to provide sufficient area for the conduct of necessary air, land, and sea operations.
7. Provides code words for the operation name and for other key specifics about the operation.
8. Sets the target dates for execution of the operation.
9. Provides special instructions on command relationships.
10. Provides special instructions pertaining to the planning, employment, allocation, and control of nuclear and chemical munitions.
11. Includes:
 - (1) Positive instructions governing the termination of the operation and, if feasible, command arrangements and disposition of forces to be effective at that time.
 - (2) Information regarding operations to be conducted after termination of the amphibious operation.
12. Assigns responsibility and provides necessary coordination instructions for the conduct of supporting operations.
13. Provides cryptographic and operational security (OPSEC) guidance.
14. Provides a concept for military deception operations to be conducted in support of the amphibious operation.

APPENDIX B

Amphibious Operation Basic Decisions⁸⁹

Basic decisions are those decisions that must be made at the highest level within the ATF before detailed planning for an amphibious operation can proceed. Some of these decisions will be dictated in the initiating directive by the issuing commander. The basic decisions and who makes them are described below and listed in matrix form in Figure B-1.

a. Selection of ATF General Course of Action. CATF and CLF jointly select a general course of action for the ATF as a whole that will accomplish the mission assigned in the initiating directive. At a minimum, agreement must be reached by CATF and CLF on a general area for the landing if not specified by higher authority.

b. Selection of ATF Objectives. Once the general course of action has been determined, CATF and CLF jointly select those ATF objectives essential for the accomplishment of the mission.

c. Determination of LF Mission. Based on the ATF mission, general course of action, and objectives, CLF develops a mission statement for the LF and submits it to CATF for concurrence.

d. Designation of Landing Sites. A landing site is a continuous segment of coastline over which troops, equipment, and supplies can be landed by surface means. A landing site is restricted in maximum length only to the extent of usable, uninterrupted coastline, but must be a minimum length to contain at least one landing beach.

e. Determination of LF Objectives. After analyzing the assigned mission and designated landing sites, CLF determines LF objectives, usually defined in terms of physical or terrain features, attainment of which are necessary to accomplish the ATF mission.

f. Selection of Beachheads. A beachhead is a designated area on a hostile or potentially hostile shore which, when seized and held, ensures the continuous landing of troops and material and provides maneuver space requisite for subsequent projected operations ashore. It is the physical objective of an amphibious operation.

g. Selection of the Landing Area. The landing area is that part of the objective area within which the landing operations of an amphibious force are conducted. It includes the beach, the approaches to the beach, the transport areas, the fire support areas, air occupied by close supporting aircraft, and the land included in the advance inland to the initial objective.

h. Formulation of the LF Concept of Operations Ashore. The LF concept of operations ashore is a usually written and graphic representation, in broad outline, of CLF's intent with respect to the operation. It gives an overall picture of the operation, including the formation for landing and the scheme of maneuver for accomplishing the LF and ATF objectives by LF and other forces.

i. Selection of Landing Beaches. A landing beach is that portion of a shoreline usually required for the landing of a battalion landing team. However, it may also be that portion of a shoreline constituting a tactical locality (such as the shore of a bay) over which a force larger or smaller than a battalion landing team may be landed.

j. Selection of Helicopter Landing Zones (HLZ). An HLZ is a specified ground area for landing assault helicopters to embark or disembark troops and/or cargo. A landing zone may contain one or more landing sites.

k. Selection of Fixed-Wing Aircraft LZs and Drop Zones for Airborne and Air-Transported Operations. When airborne or air-transported forces are employed, CLF, after consulting with the airborne troop commander and air commanders, selects the drop zones (DZs) and LZs.

l. Selection of the Tentative Date and Hour of Landing

Basic Decision	May Be Contained In Initiating Directive	CATF	CLF*	JOINT
1. Select Amphibious Task Force General Course of Action	X			X
2. Select Amphibious Task Force Objectives	X			X
3. Determine Landing Force Mission		X		
4. Designate Landing Sites		X		
5. Determine Landing Force Objective			X	
6. Determine Beachheads			X	X
7. Select Landing Areas				
8. Formulate Landing Force Concept of Operations			X	
9. Select Landing Beaches			X	
10. Select Helicopter Landing Zones			X	
11. Select Fixed Wing Aircraft Landing Zones and Drop Zones			X	
12. Select D-Day and H-Hour	X	X		
*All Basic Decisions made by CLF are Subject to review/concurrence by CATF from a supportability perspective				

Figure B-1. Basic Decision Responsibilities Matrix

ENDNOTES

1. D. Clayton James, The Years of MacArthur. Volume III. 1945-1964, (Boston, MA: Houghton Mifflin Co., 1985), p. 465.
2. Roy E. Appleman, U. S. Army in the Korean War, (Washington, DC: GPO, 1961), p. 488.
3. Mark L. Hayes, "Sealift: The Achilles' Heel of our National Strategy", Marine Corps Gazette, (November 1992), pp. 79-80.
4. Bernard E. Trainor, "Still Going...Amphibious Warfare", Naval Institute Proceedings, (November 1992), p. 30.
5. George S. Patton, Jr., General Order to the Seventh Army before Sicily landings, 27 June 1943, as quoted in Robert D. Heinl, Dictionary of Military and Naval Quotations, (Annapolis, MD: U.S. Naval Institute Press, 1966), p. 11.
6. William L. Rodgers, "Marathon, 490 B.C." in Assault From The Sea, ed. by Merrill L. Bartlett (Annapolis, MD: Naval Institute Press, 1983), pp. 3-11.
7. See Brendan P. Ryan, "Aboukir Bay, 1801", Robert W. Daly, "Burnside's Amphibious Division, 1862", Joseph E. King, "The Fort Fisher Campaigns, 1864-65", and John Fleming Polk, "Vera Cruz, 1847" in Assault From The Sea, ed. by Merrill L. Bartlett (Annapolis, MD: Naval Institute Press, 1983), pp. 69-78, 88-104.
8. For a discussion of the indirect approach, see B. H. Liddell Hart, Strategy, (London: Faber & Faber Ltd., 1954), pp. 319-370.
9. Alan Morehead, Gallipoli, (New York: The Nautical & Aviation Publishing Company of America, 1956), pp. 339-355.
10. Jeter A. Isley and Philip A. Crowl, The U.S. Marines and Amphibious War, (Princeton, NJ: Princeton University Press, 1951), pp. 20-21.
11. Ibid., pp. 24-33.
12. Ibid., p. 37.
13. Ibid.
14. Russell F. Weigley, Eisenhower's Lieutenants, (Bloomington, IN: Indiana University Press, 1981), p. 37.
15. Ibid., p. 35.

16. Joint Chiefs of Staff, Joint Pub 3-02, Joint Doctrine for Amphibious Operations, (Washington: GPO, 1992), p. I-3.

17. Department of the Navy, Headquarters, U.S. Marine Corps, Fleet Marine Force Manual (FMFM) 1, Warfighting, (Washington, DC: GPO, 1989), p. 36. A critical enemy vulnerability is a thing which, if eliminated, will do the most damage to his ability to resist.

18. Hayes, pp. 79-80. The current Marine Corps lift requirement for amphibious forces is the shipping necessary for the assault echelons of 3 Marine Expeditionary Brigades (MEBs). The Office of the Secretary of Defense has fiscally constrained the requirement to the assault echelons of 2.5 MEBs. Large scale assaults are confined to this size force. Multi-division landings of the World War II and Korea vintage are not a capability of this size force.

19. Joint Pub 3-02, p. I-4.

20. Ibid.

21. Charles W. Schriener, Jr., "The Dieppe Raid, 1942", in Assault From The Sea, ed. by Merrill L. Bartlett (Annapolis, MD: Naval Institute Press, 1983), pp. 249-260.

22. Joint Pub 3-02, p. I-4.

23. Ibid.

24. Department of the Navy, Headquarters, U.S. Marine Corps, Fleet Marine Force Reference Publication (FMFRP) 12-34-III, History of the U.S. Marine Corps Operations in World War II: Central Pacific Drive, Volume III, (Washington, DC: GPO, 1989), pp. 377-378.

25. Joint Pub 3-02, p. III-1.

26. Ibid., p. II-5.

27. Dave Richard Palmer, Summons of the Trumpet, (Novato, CA: Presidio Press, 1978), p. 117.

28. FMFM 1, p. 28.

29. B. H. Liddell Hart, "'The Man-in-the Dark' Theory of Infantry Tactics and the 'Expanding Torrent' System of Attack", The Journal of the Royal United Service Institution (Feb 1921), pp. 1-22.

30. FMFM 1, p. 28.

31. Edward N. Luttwak, Strategy: The Logic of War and Peace, (Cambridge, MA: Belknap Press, 1987), p. 92.

32. Carl von Clausewitz, On War, ed. and trans by Michael Howard and Peter Paret (Princeton, NJ: Princeton University Press, 1976), p. 258.
33. Ibid., p. 97.
34. Sun Tzu, The Art of War, trans. by Samuel B. Griffith, (New York: Oxford University Press, 1963), p. 73.
35. Joint Chiefs of Staff, Joint Pub 1-02, Department of Defense Dictionary of Military and Associated Terms, (Washington: GPO, 1989), p. 218.
36. Department of the Army, Field Manual (FM) 100-5, Operations, (Final Draft) (Washington: GPO, 1993), p. 2-9.
37. Ibid.
38. Armed Forces Staff College, AFSC Pub 2 (Draft), Service Warfighting Philosophy and Synchronization of Joint Forces, (Norfolk, VA: AFSC, 1991), p. G-10.
39. FMFM 1, p. 59.
40. Clausewitz, p. 184.
41. Ibid., p. 185.
42. Sun Tzu, p. 63.
43. Ardant du Picoq, Battle Studies, (Harrisburg, PA: The Military Service Publishing Company, 1946), p. 124.
44. Clausewitz, p. 90.
45. Richard Simpkin, The Race to the Swift, (London: Brassey's Defence Publishers, Ltd., 1985), p. 22.
46. Sun Tzu, p. 76.
47. Simpkin, pp. 140-141.
48. Ibid., pp. 139-140.
49. Ibid., p. 139.
50. Ibid., p. 23.
51. FM 100-5, p. Glossary-8.
52. FMFM 1, p. 32.

53. Ibid., p. 84. "Tempo is often associated with a mental process known variously as the "Decision Cycle," "OODA Loop," or "Boyd Cycle," after retired Air Force Colonel John Boyd who pioneered the concept in his lecture, "The Patterns of Conflict." Boyd identified a four-step mental process: observation, orientation; decision, and action. Boyd theorized that each party to a conflict first observes a situation. On the basis of the observation, he orients; that is, he makes an estimate of the situation. On the basis of the orientation, he makes a decision. And, finally, he implements the decision--he acts. Because his action has created a new situation, the process begins anew. Boyd argued that the party that consistently completes the cycle faster gains an advantage that increases with each cycle. His enemy's reactions become increasingly slower by comparison and therefore less effective until, finally, he is overcome by events."

54. Simpkin, p. 106.

55. Clausewitz, pp. 119-121.

56. FMFM 1, p. 77.

57. Liddell Hart, Strategy, p. 325.

58. Liddell Hart, "Marines and Strategy", p. 17.

59. Department of the Navy, White Paper "...From The Sea: Preparing the Naval Service for the 21st Century", (Washington: Department of the Navy, 1992), pp. 1-2.

60. Gordon D. Batcheller, "If Not Tarawa, What?", Marine Corps Gazette, (Nov 1992), p. 25.

61. "...From The Sea," p. 2.

62. Ibid., p. 7.

63. Ibid., p. 8.

64. Ibid.

65. Ibid., p. 9.

66. Michael H. H. Evans, Amphibious Operations: The Projection of Sea Power Ashore, (London: Brassey's, 1990), p. 191.

67. Ibid.

68. Joint Pub 3-02, pp. III-12, III-13.

69. This is also known as "recon pull." Using this technique, advanced force and preassault operations must be redefined be conducted just before or simultaneously with the amphibious assault. With recon pull, reconnaissance forces are sent out probing for enemy gaps. Once identified, the assault forces, either prepared to conduct the assault or already underway, would move to the area from widely dispersed ships to penetrate the weakness and push exploitation forces through it. The preponderance of combat power is pushed through these gaps as they widen, much like rushing water widens a gap once it breaks through.

70. Richard K. Fickett, "LCAC Can Support Shore Bombardment", Naval Institute Proceedings, (February 1993), p. 88.

71. Thomas L. Bliokensderfer, "Amphibious Mines: Silent Enemy of the Landing Force", Marine Corps Gazette, (Nov 1992), pp. 84-87.

72. Clausewitz, p. 171.

73. Robert D. Heinl, Jr, Victory at High Tide, (New York: The Nautical & Aviation Publishing Company, 1979), pp. 14-15.

74. Appleman, p. 488. There is some dispute as to whether MacArthur actually envisioned the plan on his own, or simply used an existing war plan. Clay Blair, in his book The Forgotten War, contends that MacArthur simply used a war plan, known as SL-17, which was completed and approved on 19 June 1950. SL-17 assumed an NKPA invasion of South Korea, a retreat to and defense of a perimeter around Pusan, and an amphibious landing at Inchon. On the other hand, MacArthur had considerable experience using amphibious operations to bypass enemy strengths and attack where the enemy was weak, thus rendering the defenders operationally irrelevant. Blair's assertion that MacArthur was simply using a ready-made plan, however, seems dubious given the objections to the landing by virtually everyone from the President and the Joint Chiefs of Staff (JCS) to MacArthur's staff and subordinate commanders. At a briefing on 23 August, members of the JCS, to include the Army's Chief of Staff, General Collins, and MacArthur's staff tried to persuade him to conduct a landing anywhere but Inchon, including Kunsan or Posun-Myong further south. See Clay Blair, The Forgotten War, (New York: Doubleday, 1987), p. 87.

75. Appleman, p. 488.

76. Ibid.

77. Heinl, p. 24.

78. Ibid., p. 42.

79. Appleman, p. 536.

80. Ibid., p. 540.

81. Ibid., pp. 491-492. The 1st Marine Division had approximately 15,000 Marines while the 7th Infantry Division, with attached South Koreans, embarked approximately 24,850. The 1st Marine Division actually made the assault and began the push to Seoul. The 7th Infantry Division began unloading on the 17th of September, 2 days after D-Day.

82. Heintz, p. 41.

83. Ibid.

84. In December 1992, the Marine Corps Combat Development Command began a wargame to evaluate the potential for applying maneuver warfare principles to amphibious operations. The wargame used four scenarios, two major regional contingencies (MRCs) and two lesser regional contingencies (LRCs). These wargames were broad-based, designed as a beginning to further explore this potential. As part of this, the Marine Corps has further refined its Over-the-Horizon concept which essentially moves the ATF beyond visual and radar range, but still focuses on the traditional establishment of a beachhead as the normal course of events. This new concept, Operational Maneuver From The Sea, seeks to fully apply maneuver warfare concepts to amphibious operations. This concept is currently in the development stage and no doctrine or principles have been developed as yet. This monograph seeks to determine the feasibility of this concept.

85. B. H. Liddell Hart, "Marines and Strategy", Marine Corps Gazette, (July, 1960), p. 17.

86. Paul F. Pugh, "Operational Art and Amphibious Warfare", Marine Corps Gazette, (July, 1991), p. 82.

87. Ibid.

88. Joint Pub 3-02, pp. II-8, II-9.

89. Ibid., pp. III-4 to III-10.

BIBLIOGRAPHY

Books

- Appleman, Roy E. U. S. Army in the Korean War. Washington: GPO, 1961.
- Bartlett, Merrill L. Assault From The Sea. Annapolis, MD: Naval Institute Press, 1983.
- Blair, Clay. The Forgotten War. New York: Doubleday, 1987.
- Citino, Robert M. The Evolution of Blitzkrieg Tactics. Westport, CT: Greenwood Press, Inc., 1987.
- Cooper, Matthew. The German Army 1933-1945. Chelsea, MI: Scarborough House, 1990.
- Deighton, Len. Blitzkrieg. New York: Ballantine Books, 1980.
- du Pioq, Ardant. Battle Studies. Harrisburg, PA: The Military Service Publishing Company, 1946.
- Evans, Michael. H. H. Amphibious Operations: The Projection of Sea Power Ashore. London: Brassey's Defence, 1990.
- Heinl, Robert D. Victory at High Tide. New York: The Nautical & Aviation Publishing Company, 1979.
- _____. Dictionary of Military & Naval Quotations. Annapolis, MD: US Naval Institute, 1966.
- House, Jonathon M. Towards Combined Arms Warfare: A Survey of 20th Century Tactics, Doctrine, and Organization. Ft Leavenworth, KS: US Army Command and General Staff College, 1984.
- Isley, Jeter A. and Philip A. Crowl. The U.S. Marines and Amphibious War. Princeton, NJ: Princeton University Press, 1951.
- James, D. Clayton. The Years of MacArthur. Volume III. 1945-1964. Boston: Houghton Mifflin Co., 1985.
- Jomini, Antoine Henri. The Art of War. Edited by J. D. Hittle in Roots of Strategy. Book 2. Harrisburg, PA: Stackpole Books, 1987.
- Leonhard, Robert R. The Art of Maneuver. Novato, CA: Presidio Press, 1991.

- Liddell Hart, B. H. Strategy. London: Faber & Faber, Ltd., 1954.
- Lind, William S. Maneuver Warfare Handbook. Boulder, CO: Westview Press, Inc., 1985.
- Lupfer, Timothy T. The Dynamics of Doctrine: The Changes in German Tactical Doctrine During the First World War. Ft Leavenworth, KS: US Army Command and General Staff College, 1981.
- Luttwak, Edward N. Strategy: The Logic of War and Peace. Cambridge, MA: Belknap Press, 1987.
- Messenger, Charles. The Art of Blitzkrieg. London: Ian Allen,
- Morehead, Alan. Gallipoli. New York: The Nautical & Aviation Publishing Company of America, 1956.
- O'Sullivan, Patrick and Jesse W. Miller. The Geography of Warfare. New York: St Martin's Press, 1983.
- Palmer, Dave Richard. Summons of the Trumpet. Novato, CA: Presidio Press, 1978.
- Simpkin, Richard. The Race to the Swift. London: Brassey's Defence Publisher, Ltd., 1985.
- Sun Tzu. The Art of War. Translated by Samuel B. Griffith. New York: Oxford University Press, 1963.
- von Clausewitz, Carl. On War. Edited and Translated by Michael Howard and Peter Paret. Princeton, NJ: Princeton University Press, 1976.
- Weigley, Russell F. Eisenhower's Lieutenants. Bloomington, IN: Indiana University Press, 1981.
- Willoughby, Charles Andrew. Maneuver in War. Harrisburg, PA: Military Service Publishing Co., 1939.

Manuals

- Armed Forces Staff College. AFSC Pub 2, Service Warfighting Philosophy and Synchronization of Joint Forces (Draft). Norfolk, VA: AFSC, 1991.
- Department of the Army. Field Manual (FM) 100-5, Operations (Final Draft). Washington: GPO, 1993.

Department of the Navy, Headquarters, US Marine Corps. Fleet Marine Force Manual (FMFM) 1, Warfighting. Washington, DC: GPO, 1989.

_____. FMFM 1-1, Campaigning. Washington, DC: GPO, 1990.

_____. FMFM 1-8, Ship-to-Shore Movement. Washington, DC: GPO, 1988.

_____. Fleet Marine Force Reference Publication (FMFRP) 12-23-III, History of the U.S. Marine Corps Operations in World War II: Central Pacific Drive, Volume III. Washington: GPO, 1989.

_____. FMFRP 14-7, Over-the-Horizon (OTH) Amphibious Operations Operational Concept. Washington, DC: GPO, 1991.

Joint Chiefs of Staff. Joint Pub 1, Joint Warfare of the Armed Forces. Washington, DC: GPO, 1991.

_____. Joint Pub 1-02, Department of Defense Dictionary of Military and Associated Terms. Washington: GPO, 1989.

_____. Joint Pub 3-02, Joint Doctrine for Amphibious Operations. Washington, DC: GPO, 1986.

_____. JCS Pub 3-02.1 (Test), Joint Doctrine for Landing Force Operations. Washington, DC: GPO, 1989.

Monographs/Unpublished Works

Canby, Stephen L. and Edward N. Luttwak. "Mindset: National Styles in Warfare and the Operational Level of Planning, Conduct, and Analysis". Study submitted to the Office of Net Assessment, Department of Defense, March 10, 1980.

Lauer, G. Stephen. "Maneuver Warfare Theory and the Operational Level of War: Misguiding The Marine Corps?" SAMS Monograph, US Army Command and General Staff College- 1991.

Lieto, Anthony S. "Amphibious Operations: The Operational Wild Card." SAMS Monograph, US Army Command and General Staff College, 1990.

Marchant, Richard J. "Operational Maneuver and Fires: A Role for Naval Forces in Land Operations." SAMS Monograph, US Army Command and General Staff College, 1989.

Parker, Michael L. "Triphibious Campaigning--A Different Perspective on Operational Maneuver." SAMS Monograph, US Army Command and General Staff College, 1989.

Priddy, John R. "Desant From The Sea: An Option for the Operational Employment of a Marine Air-Ground Task Force." SAMS Monograph, US Army Command and General Staff College, 1990.

Schroedel, Joseph. "The Art and Science of Operational Maneuver." SAMS Monograph, US Army Command and General Staff College, 1988.

Articles

Batcheller, Gordon D. "If Not Tarawa, What?" Marine Corps Gazette, Volume 76, 11 (November 1992): 24-31.

Bierly, Jerome F. and Thomas E. Seal. "Over-the-Horizon Amphibious Operations." Marine Corps Gazette, Volume 75, 7 (July 1991): 41-42.

Blickensderfer, Thomas L. "Amphibious Mines: Silent Enemy of the Landing Force." Marine Corps Gazette, Volume 76, 11 (November 1992): 84-87.

Fickett, Richard K. "LCACs Can Support Shore Bombardment." Naval Institute Proceedings, Volume 119/2/1,080 (February 1993): 88-89.

Hays, Mark L. "Sealift: The Achilles' Heel of our National Strategy." Marine Corps Gazette, Volume 76, 11 (November 1992): 71-80.

LaPlante, J. B. "The Path Ahead for 'Gators and Marines." U.S. Naval Institute Proceedings, Volume 118/11/1,077 (November 1992): 34-38.

Liddell Hart, B. H. "'The Man-in-the-Dark' Theory of Infantry Tactics and the 'Expanding Torrent' System of Attack." The Journal of the Royal United Service Institution, Volume LXVI (Feb-Nov 1921): 1-22.

_____. "Marines and Strategy." Marine Corps Gazette, Volume 44, 7 (July 1960): 10-17.

Luttwak, Edward N. "The Operational Level of War." International Security, Volume 5, 3 (Winter 1980/81): 61-79.

Pugh, Paul F. "Operational Art and Amphibious Warfare." Marine Corps Gazette, Volume 75, 7 (July 1991): 80-85.

Trainer, Bernard E. "Still Go-ing...Amphibious Warfare." Naval
Institute Proceedings. Volume 118/11/1,077 (November 1992): 30-
33.