NAVAL WAR COLLEGE
Newport, R.I.

HOW CAN OPERATIONAL MANEUVER BE USED BY THE NAVAL OR JOINT TASK FORCE COMMANDER TO ENHANCE OPERATIONAL PROTECTION IN THE LITTORAL.

by

Sean C. Sullivan
Commander, United States Navy

A paper submitted to the Faculty of the Naval War College Joint Military Operations Department in partial satisfaction of the requirements for the Mater of Arts Degree in National Security and Strategic Studies.

The contents of this paper reflect my own personal views and are not necessarily endorsed by the Naval War College or the Department of the Navy.

Signature:  

05 February 1999

DISTRIBUTION STATEMENT A
Approved for Public Release
Distribution Unlimited

DTIC QUALITY INSPECTED
Title: HOW CAN OPERATIONAL MANEUVER BE USED BY THE NAVAL OR JOINT TASK FORCE COMMANDER TO ENHANCE OPERATIONAL PROTECTION IN THE LITTORAL

Personal Authors: CDR Sean Corden Sullivan

Type of Report: FINAL

Page Count: 24

Supplementary Notation: A paper submitted to the Faculty of the NWC in partial satisfaction of the requirements of the JMO Department. The contents of this paper reflect my own personal views and are not necessarily endorsed by the NWC or the Department of the Navy.

Ten key words that relate to your paper: operational, protection, maneuver, littoral, amphibious, mass, space, bases, denial, control

Abstract: Operational maneuver provides operational protection to maritime forces when maneuver is used to expand the area, factor space, vulnerable to attack by the maritime force. Operational maneuver forces the enemy to respond to threats throughout its territory and littoral. The response will degrade the enemy's ability to concentrate forces against the maritime force. The enemy's ability to conduct and sustain offensive operations against the maritime force is reduced and the security of lines of operation and logistic sustainment is increased. This allows the maritime force to concentrate its forces against the enemy when conditions are favorable. The commander's ability to sustain the initiative and control the littoral provides the freedom of action to conduct follow-on and support operations against the enemy. Through the utilization of maneuver and the resulting effects maneuver places on the enemy, operational protection is effectively provided to the maritime force.

Distribution / Availability of Abstract: Unclassified

Security Classification of This Page: Unclassified
Abstract of

HOW CAN OPERATIONAL MANEUVER BE USED BY THE NAVAL OR JOINT TASK FORCE COMMANDER TO ENHANCE OPERATIONAL PROTECTION IN THE LITTORAL.

Operational maneuver provides operational protection to maritime forces when maneuver is used to expand the area, or factor space, vulnerable to attack by the maritime force. Operational maneuver forces the enemy to respond to threats throughout its territory and littoral. The response will degrade the enemy’s ability to concentrate forces against the maritime force. The enemy’s ability to conduct and sustain offensive operations against the maritime force is reduced and the security of lines of operation and logistic sustainment is increased. This allows the maritime force to concentrate its forces against the enemy when conditions are favorable. The commander’s ability to sustain the initiative and control the littoral provides the freedom of action to conduct follow-on and support operations against the enemy. Through the utilization of maneuver and the resulting effects maneuver places on the enemy, operational protection is effectively provided to the maritime force.
The operational commander is responsible for operational protection of assigned forces in the theater of operations. The primary objective of operational protection is to preserve the combat effectiveness of the assigned forces. In a maritime theater, operational protection is required for land forces ashore, land bases, air forces ashore, and air bases, naval forces at sea, amphibious landing forces, logistics forces, and airborne assault land forces. The design of operational protection is to prevent the enemy from locating, targeting, attacking or striking own forces.

Operational maneuver can be used by forces at sea as operational protection. Maritime forces threaten enemy territory and are a direct challenge to the enemy’s use of the sea. Maritime forces, concentrated against an enemy, are capable of projecting power into the territory of an enemy across the length of his coast line and into his interior. Absent the ability to wrest sea control from the opposition, the adversary is limited to sea or area denial objectives. Sea and area denial capability includes the adversary’s ability to search, locate, target, and attack a maritime force at sea. Sea and area denial, when conducted and sustained from enemy land areas and projected into the littoral, pose difficult challenges to maritime forces operating in the littoral.

"The object of naval warfare must always be directly or indirectly either to secure the command of the sea or prevent the enemy from securing it." Julian S. Corbett

The operational maneuver capability of the sea control force complicates the operations of a sea denial force. The sea control force can use multiple lines of operations, deny the adversary combat except when conditions are favorable, and select
engagements which attrite the inferior force. The enemy is forced to defend its homeland across the length of the coastline and inland to a distance which is based on the range of the power projection capability of the attacker.\textsuperscript{5}

"Of any maritime expedition two points only are fixed, - the point of departure and that of arrival."\textsuperscript{6} Alfred Thayer Mahan

In the littoral, maritime forces are exposed to a significant challenge from a defending force. The characteristics of the littoral challenge maritime entry forces. Additionally, the littoral provides the defending force opportunities to sustain threats against maritime forces. Operational protection of the maritime force is effected by the unique characteristics of the littoral.

Control of the littoral area is extremely valuable to the commander in an operation. Operations sustained in the littoral provide the commander with significant advantages against the enemy. Whether the main effort is conducted from the sea or if maritime forces are supporting operations ashore, freedom of action in the littoral provides the commander with the flexibility and capacity to sustain the initiative and tempo of operations. "Controlled littorals often offer the best position from which to begin, sustain, and support joint operations,..."\textsuperscript{7}

**The Littoral Mandate and Risks**

"Those regions relating to or existing on a shore or coastal region, within direct control of or vulnerable to the striking power of naval expeditionary forces."\textsuperscript{8}

Operations in the littoral present opportunity and advantage to the commander as well as risk and threat to own forces. The capability to operate in the littoral through the
conduct of forced entry operations and power projection against adversary forces is a prominent tenet of the National Military Strategy. United States forces not only benefit greatly from success in the littoral, but also, the capability to operate in and dominate the littoral is required by national leadership.

The National Military Strategy requires the United States military to maintain a forcible entry capability. Joint Doctrine includes guidance on this capability and acknowledges the significant challenges that a Joint Task Force commander will face in the execution of a forced entry operations and interdiction in the littoral.

The littoral is an extremely challenging area for offensive operations commencing from the sea. Clausewitz states that in war, the defense is considered the stronger form of warfare. The defense benefits from a shore-based defense against attack from the sea. The defender can use terrain, oceanographic, and geographic features to create an effective layered defense. Mines, cruise missiles, coordinated air defense systems, surface patrol craft, and land based aircraft challenge maritime forces operating from the sea in the littoral.

In a maritime operation, the littoral is considered a geographically-oriented decisive point. Inclusive in the operational scheme is the method for maneuver, attack, and dominance of this decisive point en route to physical objectives in the enemy’s territory, the enemy center of gravity or critical vulnerability. The attack occurs in and across the littoral as well as into the enemy’s territory.

An analysis of factor space for the littoral is useful in drawing characteristics of the
method of force employment. The relationship of factor space to force and time results in concepts regarding how the space-force and space-time interaction, creates opportunity or challenge to the commander.\textsuperscript{15}

In the littoral, the defending enemy takes advantage of the defensive features and characteristics of factor space. In order to access the land area, the attacking force is required to pass through a small fraction of factor space during transition. The maritime force operates in a constrained sea area in the littoral where the advantages of factor space at sea are reduced or eliminated. The advantage of maneuver for maritime forces is reduced by the need of the force to transition from a maritime force and the sea, to a land force and the land. This transition provides significant opportunity for the defending enemy and threatens the protection of own forces. Also, the enemy is able to focus surveillance, detection, tracking and concentrate his engagement resources over a smaller geographic area. Maritime force operations are directly threatened by the adversary's defensive systems because the enemy concentrates forces against the maritime force in a constrained area of operation. The capability of maritime forces to conduct combat operations concurrent with the maneuver of forces from the sea to the land is the fundamental capability which sustains forced entry capability against the forces the adversary.\textsuperscript{16}

Military operations in a littoral operating area are challenged not solely by the characteristics of factor space but also by the relationship of factor space with factors time and force. This relationship results in additional challenges to force protection in the
littoral.

The space-force relationship in the littoral requires sufficient area to allow for the maneuver of own forces. The space must possess the size and geographic features which allow for the maneuver of own forces to decisive points and on to the objective. The commander provides protection of his forces through maneuver which defends the force, lines of operation, and logistic lines of support.

The space-time relationship challenges operational protection of own forces. In a littoral area, the enemy can move defensive forces close to the shore and take advantage of geography and topography for cover and concealment. As maritime forces close the shore and operate in the littoral, early warning is compressed for aircraft, surface craft, or missile attack. The enemy uses proximity to the opposition to threaten short notice air and surface raids against the maritime force.

Littoral area contain both land and sea area. For this reason, the analysis of factor space is unique for the littoral due to the interaction of these characteristics. The proximity of land and sea areas causes both magnification and dampening of certain effects of the space-time and space-force relationships.

**Operational Protection**

The commander uses operational protection to preserve the combat power of the force and retain freedom of action. Operational protection seeks to eliminate the ability of the enemy to target and engage own forces. As a result, the force denies the enemy combat until the conditions are unfavorable to own forces for engagement. An attack by
the enemy, prior to own forces achieving the advantage, results in a loss of freedom of action and initiative.

The commander retains freedom of action against an adversary through the use of maneuver in the operational scheme. Maneuver allows the force to threaten large areas within the littoral. This action denies the enemy the ability to concentrate forces directly against the maritime force. Enemy forces remain committed to alternative or possible courses of action rather dedicated to the main effort of the maritime forces. Sun Tzu wrote of the advantages gained by a force threatening a large area with offensive operations and the planning difficulties imposed on the enemy.19 Under these conditions, the defender surrenders the initiative to the attacker. The United States Marine Corps' Operational Maneuver From The Sea envisions operations conducted by maritime forces from the sea which threaten large areas of enemy territory. The concept utilizes the maneuver capability of maritime forces to engage in coordinated ship to objective movements across the littoral.20

The commander can plan and achieve operational protection in two ways. The first is to station defensive forces to protect own forces, rear areas, and bases. This method reduces the combat power available for the offensive due to defensive requirements. The second method is to allow the force to operate using self-protection against the enemy. This method lessens the impact on combat power by defense but risks degradation to economy of force and unity of effort in the force. Operational protection can be provided to the force through the destruction of enemy forces that threaten attack
on own forces. Another method of achieving operational protection, is to take action to make own forces hard to detect and locate.\textsuperscript{21}

Maritime forces are well-suited for the use of maneuver as operational protection. Admiral A.T. Mahan proposes two ways for maritime forces to exercise operational protection across lines of operations.\textsuperscript{22} The first method is through the destruction of the enemy challenge by annihilating his fleet. The other method is achieved by sailing combatant forces with supply shipping in order to safeguard the force and sea lines of communication.

Mahan considers the destruction of the enemy’s fleet as the best method of protection. However, by his caveat “reasonable security of the sea lines of communication or lines of operation”, Mahan recognizes the difficulty of achieving total security of these lines and the enemy’s ability to sustain threats to these lines even after defeat.\textsuperscript{23}

\textbf{Maneuver}

“At the operational level, maneuver is a means by which JFC’s set the terms of battle by time and location, decline battle, or exploit existing situations. Operational maneuver usually takes large forces from a base of operations to an area where they are in position to achieve operational objectives.”\textsuperscript{24}

United States military doctrine stresses the power of maneuver warfare and includes its use in all types of operations. Maneuver exploits a United States military strength, technology. Joint doctrine employs complex weapons platforms and highly skilled forces, with high accuracy weapons, operating at a speed of command and control which establishes the initiative and proceeds at a pace that the enemy can not achieve. Joint combat power is directed against the enemy center of gravity or critical
vulnerabilities. Joint doctrine recognizes the ability of maritime forces to use maneuver in the operational scheme. Forced entry, operations on the sea, and from the sea, are joint capabilities which require significant contributions from maritime forces.

Advantage over the adversary is the key element of maneuver. Maritime forces move from bases along lines of operations to the area of operations. Interdiction of the lines of operation depends on the enemy's ability to conduct reconnaissance and surveillance of the area in order to locate the maritime force. Maritime forces complicate this effort through the use of maneuver. Locating a maritime force alone does not deter a maritime force. The enemy needs to possess the ability to target and attack the force at sea. Maritime forces possess defenses against attack which can be used during maneuver.

"Place the enemy in a position of disadvantage through the feasible application of combat power. Use of maneuver (mobility) capitalizes on the speed and agility of our own forces (Platforms and weapons) to gain an advantage in time and space relative to the enemy's vulnerabilities."

Operational maneuver provides operational protection for maritime forces in the littoral. Maneuver expands the potential threat to the enemy's territory by threatening a large area along the coast and into the interior of the enemy state. This threat eliminates freedom of action in the enemy's forces and shifts the initiative to the maritime force. Maneuver at sea provides the maritime force with concealment which make it difficult for the enemy to search, locate and target the force. The maneuver of maritime forces preserves the combat power of the force until the commander decides to release that power from an advantageous position against the enemy. The following recommendations are presented to the commander for consideration during the development of the
operational scheme and plan for maneuver for maritime forces operating in the littoral.

**Recommendation.**

Utilize Operational Maneuver to expand factor space beyond the enemy’s ability to conduct surveillance, targeting, and engagement of the maritime force.

Through the use of Operational Maneuver, the commander expands the portion of factor space that is threatened by maritime forces. Maritime forces operating between bases of operations and physical objectives located within enemy territory, threaten a large area across the enemy state. Included in the enemy territory threatened by the maritime force is the littoral.28 Due to the significant power projection capability of a maritime force at sea, much of the enemy’s coast line and near-sea area becomes vulnerable to attack. The littoral becomes a geographically-oriented decisive point for both the maritime force and the enemy.

Enemy critical vulnerabilities become exposed by the maritime force at sea. Critical weaknesses of the enemy are also exposed. Weaknesses of the military geography of the enemy state can be exploited. Military geography includes size and terrain boundaries, topography, climate, oceanography, and land use.29 Other weaknesses may be man-made by the enemy. These include transportation systems, telecommunications, agriculture, or other types of infrastructure.30

The maritime force at sea is a threat which can not be ignored by the enemy state.31 Enemy responses to the threat posed by the maritime force include challenge to the force for sea control, sea denial operations, or capitulation in the sea area. When the enemy is faced with a superior maritime force exercising sea control, thereby ensuring
access to the enemy’s coast\textsuperscript{32}, sea denial operations are a possible enemy course of action and asymmetric response.

Sea denial operations can be conducted at sea by enemy aircraft, missiles, surface ships, or submarines. The enemy requires reconnaissance, intelligence, surveillance, targeting systems and techniques, prior to an attack on a maritime force at sea. These enemy systems, sensors and platforms compete with own force platforms and similar systems. The enemy’s force is threatened and operations against the superior maritime force include substantial risk.

In this situation, the commander takes advantage of the technological superiority of United States military’s sea, airborne, space, and subsurface sensors and weaponry. The commander forces an adversary, attempting to achieve sea or area denial, to compete with Joint forces where the United States owns a significant qualitative edge and possesses the ability to interdict enemy forces.\textsuperscript{33} Also, the commander forces the adversary to operate where their forces can be located, targeted and destroyed by maritime forces.\textsuperscript{34} The maritime force neutralizes the enemy force and enhances operational protection by either destroying the enemy forces or by locating and tracking these targets and thereby avoiding contact. The commander seizes the initiative and can maneuver the force to an advantageous attack position.\textsuperscript{35}

**Recommendation.**

Utilize Operational Maneuver to increase the portion of factor space threatened by the maritime force to include the littoral and targets inland within power projection capabilities in order to eliminate the enemy’s ability to concentrate forces.
“The enemy must not know where I intend to give battle. For if he does not know where I intend to give battle he must prepare in a great many places. And when he prepares in a great many places, those I have to fight in any one place will be few.”

Sun Tzu

A maritime force executing operational maneuver threatens large areas of enemy territory. The threat to a large area expands the space vulnerable to attack by the maritime force. The maneuver capability of the maritime force denies the enemy’s ability to concentrate his forces in opposition to the maritime force. The enemy force that the maritime force faces in objective areas in littoral will not have the advantage of mass in the initial stages of the attack. The result is enhanced operational protection of the maritime force.

Operational maneuver seizes the initiative from the enemy. The commander increases leverage over the enemy in the littoral by creating a defensive dilemma. The maritime force increases operational protection by the ability to choose the time and place of battle in the littoral. The maritime force applies combat power when and where conditions are favorable. The force can maneuver for a sufficient period of time to allow the commander to get a thorough intelligence assessment of the battlespace. The commander can simultaneously maneuver and prepare the battlespace in the littoral.

In the scheme of operations, the commander can use maritime forces in support of land forces. Land forces can be supported by maritime forces to threaten the littorals by introducing a second combat force into enemy territory. The enemy commits defensive forces in defense of the maritime force. This reduces force concentrations against own land forces. Conversely, the threat of a land campaign away from the littoral commits
enemy forces away from the littoral. Through the use of simultaneity and depth, the commander increases the threat to the enemy which reduces the ability to concentrate forces against the maritime force.\textsuperscript{39} Elimination or dilution of the enemy’s ability to concentrate forces enhances operational protection.

\textbf{Recommendation.}

Utilize Operational Maneuver to threaten the littoral by risk of invasion, thereby imposing defensive requirements on the enemy that force the enemy to a culminating point prior to or during operations in the littoral.

There is considerable difference between defensive forces at sea and forces on land. The strategic defensive is a viable strategy for an inferior land power.\textsuperscript{40} The inferior defender on land can use terrain features and defend from an advantageous positions to force the enemy to a culminating point of attack where the defensive shifts to the offensive.\textsuperscript{41} Another option available to the defender is to use the defensive position to trade space for time with the intention to commence offensive operations at a later point in time after retreating or retiring in the face of opposition.

Operations at sea are distinctly different. The sea does not possess sea areas suited to defense. The factor space is different at sea, in that, the sea is not occupied by forces like land areas. Sea victory or defeat is the result of force versus force destruction rather that a trade-off of positions in a space for time situation.\textsuperscript{42}

British naval strategist, Julian Corbett, observed that naval forces could operate on a strategic defensive but only in shallow water, harbors and anchorage’s.\textsuperscript{43} The strategic defensive is only possible as long as the maritime force takes position in the shallow water,
harbor, or anchorage area. When the maritime force maneuvers away from the area, that geographic position loses the ability to support a strategic defense. The enemy can use mines, cruise missiles, patrol boat attacks, and land based aircraft to construct a strategic defense of a littoral area. The maritime force can eliminate the effectiveness of the enemy’s defense by shifting the main effort away from that area of the littoral to another position.

The littoral is a sea area where an enemy can create a strategic defensive scheme of operation. However, the operational maneuver capability of the maritime force denies much of the enemy’s defensive advantages. The length and breadth of littoral area, ability of the maritime force to deny engagement, security of the maritime force’s lines of operation and logistic, and ability to operate from exterior positions all work against the enemy.

Through the expansion of the space, an enemy incapable of offensive operations, is forced to a culminating point. Forced to defend the littoral and their own territory, the maritime force possess the initiative in engagements with enemy forces. The result is enhanced operational protection for the maritime force and increased risk for the enemy.

**Recommendation**

Create a change to factor space by forming coalitions which result in the elimination of a neutral zone in adjacent states and converts the area to a base of operations.

Coalition building can be used to change factor space. The creation of a base of operations in an adjacent state eliminates an existing neutral zone and expands the area of operation. The adjacent state agrees through diplomatic or international agreement to
allow friendly forces to operate from their sovereign land.

Formation of a coalition for the purpose of shifting neutral space to friendly force operating space carries with it the requirement to defend the new partner. The commander must include the partner state’s territory, forces, and population in Operational Protection considerations.\textsuperscript{44} The decision to operate from a base of operations in an adjacent or nearby state is factored against considerations of coalition and political concerns, strike capability of the enemy against the state where the base of operations is located, and the ability to sustain defensive operations in the new partner state. This use of operational reach creates additional bases of operations which extend the amount of enemy territory threatened by the joint force and expands the forces ability to sustain operations and conduct logistic and support functions.\textsuperscript{45}

Through the establishment of a base of operations on land adjacent to the enemy, the commander can introduce and support own and friendly forces in the area of operation. This serves as a method of envelopment against the enemy. Operations in the littoral fix enemy forces while land forces, operating from an adjacent base of operations envelop the enemy.

**Recommendation.**

Include synchronized Operational maneuver and firepower from the sea across the depth and breadth of the battlespace to achieve massed effects.

"The best strategy is always to be very strong; first in general, and then at the decisive point. Apart from the effort needed to create military strength, which does not always emanate from the general, there is no higher and simpler law of strategy than that of keeping one’s forces concentrated."\textsuperscript{46}
The concept of massing effects brings overwhelming firepower to bear, at a specific time and place, against critical strengths and weakness of the enemy. Massed effects steals the initiative from the enemy through attacks across the battlespace. Joint doctrine stresses synchronous maneuver and interdiction by joint forces against the enemy.\textsuperscript{47}

Synchronization is essential to massed effects. It requires multiple units, operating in different locations in the area of operation, executing simultaneous and sequential attacks against the enemy. The challenges of synchronization are met through command and control doctrine and an integrated command structure that allows the commander to use diverse joint forces in the operational scheme.\textsuperscript{48} Technological advances in command and control systems continue to improve integration capability by providing a common real time operational and tactical view of the battlespace.

Another challenge to synchronization is the need for factor space or the battlespace, to possess the depth and breadth to maneuver a force whose size possess the required firepower to sustain massed effects during the operation.\textsuperscript{49} Massed effects in the littoral is essential to the protection of maritime forces. Maritime forces retain the initiative through sustained high tempo attacks of overwhelming firepower focused against an enemy weakness.\textsuperscript{50}

Dominance of the littoral leads the way for follow-on operations and increases the commander’s freedom of action. Maritime forces destroy the enemy’s ability to sustain a
defense which threaten the maritime force. Elimination of the enemy's ability to operate in the littoral results in the commander's ability to control a valuable decisive point from which, follow-on maneuver, logistic, and support operations can be conducted.

**Conclusion.**

Operational maneuver provides operational protection to maritime forces when maneuver is used to expand the area, or factor space, vulnerable to attack by the maritime force. Operational maneuver forces the enemy to respond to threats throughout his territory and littoral. The response will degrade the enemy's ability to concentrate forces against the maritime force. The enemy's ability to conduct and sustain offensive operations against the maritime force is reduced and the security of lines of operation and logistic sustainment is increased. This allows the maritime force to concentrate its forces against the enemy when conditions are favorable. The commander's ability to sustain the initiative and control the littoral provides the freedom of action to conduct follow-on and support operations against the enemy. Through the utilization of maneuver and the resulting effects maneuver places on the enemy, operational protection is effectively provided to the maritime force.
ENDNOTES


3 Ibid, IV-17.


5 Department of the Navy, *Forward... From The Sea The Navy Operational Concept* (Washington, D.C.: March 1997), 7,8.


7 *Doctrine for Joint Operations* (Joint Pub 3-0), IV-17.


13 Vego, 46.

14 Ibid, 268-270.


16 *Doctrine for Joint Operations* (Joint Pub 3-0), IV-4-5.

17 Vego, 73-74.

18 Ibid, 61.

"If I am able to determine the enemy's dispositions while at the same time I conceal my own then I can concentrate and he must divide. And if I concentrate while he divides, I can use my entire strength to attack a fraction of his. There, I am will be numerically superior. Then if I am able to use many to strike a few at the selected point, those I deal with will be in dire traits."

"The enemy must not know where I intend to give battle. For if he does not know where I intend to give battle he must prepare in a great many places. And when he prepares in a great many places, those I have to fight in any one place will be few."

"And when he prepares everywhere, he will be weak everywhere."


21 Doctrine for Joint Operations (Joint Pub 3-0), IV-6.

22 Mahan, 460.

"If the war, as in the present instance, extends to distant parts of the globe, there will be needed in each of those distant regions secure ports for the shipping, to serve as secondary, or contingent bases of the local war. Between those secondary and the principle, or home, bases there must be reasonably secure communication, which will depend upon military control of the intervening sea."

"This control must be exercised by the navy, which will enforce it either by clearing the sea in all directions of hostile cruisers, thus allowing the ships of its own nation to pass with reasonable security, or by accompanying in force (convoying) each train of supply ships necessary for the support of the distant operations."

23 Ibid.

24 Doctrine for Joint Operations (Joint Pub 3-0), IV-9.


27 Naval Doctrine Publication 1, Naval Warfare, 45.

28 Doctrine for Joint Operations (Joint Pub 3-0), IV-17.

29 Commander's Estimate of the Situation, 2-1-2-3.


31 Doctrine for Joint Operations (Joint Pub 3-0), IV-17.

32 Naval Doctrine Publication 1, Naval Warfare, 26.
33 Doctrine for Joint Operations (Joint Pub 3-0), IV-11.
34 Naval Doctrine Publication 1, Naval Warfare, 28-29.
36 Sun Tzu, 98.

"In selecting judicious lines of maneuver, by giving them such directions as always to be able to act with the greater mass of the forces, and to prevent the parts of the enemy from concentrating or from affording each other mutual support." pg. 160.

"In imparting to the troops the greatest possible mobility and activity, so as, by their successive employment upon points where it may be important to act, to bring superior force to bear upon fractions of the hostile army." pg. 160.

"This employment of forces should be regulated by two fundamental principles: the first being, to obtain by free and rapid movements, the advantage of bringing the mass of the troops against fractions of the enemy: the second, to strike in the most decisive direction, - that is to say, in that direction where the consequences of his defeat may be most disastrous to the enemy, while at the same time his success would yield him no great advantages." pg. 299.

38 Naval Doctrine Publication 1, Naval Warfare, 40.
39 Doctrine for Joint Operations (Joint Pub 3-0), III-11.

Corbett, 68.

"An obvious element of strength is that where the geographical conditions are favorable we are able by the use of our navy to restrict the amount of force our army will have to deal with."

40 Clausewitz, 613-6.
41 Ibid, 511-2.
42 Mahan, 466.

"...a condition peculiar to the sea, and affecting the following discussion, must be briefly mentioned; that is, the difficulty of obtaining information. Armies pass through countries more or less inhabited by a stationary population, and they leave behind them traces of their march. Fleets move through a desert over which wanders flit, but where they do nor remain; and as the water closes behind them, an occasional waif from the decks may indicate their passage, but tells nothing of their course."
43 Corbett, 34-37.

44 Doctrine for Joint Operations (Joint Pub 3-0), III-12.

45 Doctrine for Joint Operations (Joint Pub 3-0), III-16.

Jomini, 21.

"...when the invasion is distant and extensive territories intervene, its success will depend more on diplomacy than upon strategy. The first step to insure success will be to secure the sincere and devoted alliance of a state adjoining the enemy, which will afford reinforcements of troops, and, what is still more important, give a secure base of operations, depots of supplies, and a safe refuge in case of disaster."

46 Clausewitz, 204.


49 Doctrine for Joint Operations (Joint Pub 3-0), III-11-12.

50 Ibid, III-12.
BIBLIOGRAPHY


________. *Operational Factors* Newport, Rhode Island: United States Naval War College, August 1997.

________. *Operational Functions* Newport, Rhode Island: United States Naval War College, August 1997.


