

AD-A215 857

THE EMPLOYMENT OF MARITIME
OPERATIONAL WEAPONS IN SUPPORT
OF THE NATO GROUND COMMANDER

A Monograph
by

Lieutenant Colonel David F. Young
Military Intelligence

STIC
ELECTE
DEC 20 1989
CB D



School of Advanced Military Studies
United States Army Command and General Staff College
Fort Leavenworth, Kansas

Advanced Operational Studies Fellowship
88-89

Approved for Public Release; Distribution is Unlimited

REPORT DOCUMENTATION PAGE				Form Approved OMB No. 0704-0188		
1a. REPORT SECURITY CLASSIFICATION UNCLASSIFIED			1b. RESTRICTIVE MARKINGS			
2a. SECURITY CLASSIFICATION AUTHORITY			3. DISTRIBUTION/AVAILABILITY OF REPORT Approved for Public Release; Distribution Unlimited.			
2b. DECLASSIFICATION/DOWNGRADING SCHEDULE						
4. PERFORMING ORGANIZATION REPORT NUMBER(S)			5. MONITORING ORGANIZATION REPORT NUMBER(S)			
6a. NAME OF PERFORMING ORGANIZATION School of Advanced Military Studies		6b. OFFICE SYMBOL (If applicable) ATZL-SWV	7a. NAME OF MONITORING ORGANIZATION			
6c. ADDRESS (City, State, and ZIP Code) Fort Leavenworth, Kansas 66027			7b. ADDRESS (City, State, and ZIP Code)			
8a. NAME OF FUNDING/SPONSORING ORGANIZATION		8b. OFFICE SYMBOL (If applicable)	9. PROCUREMENT INSTRUMENT IDENTIFICATION NUMBER			
8c. ADDRESS (City, State, and ZIP Code)			10. SOURCE OF FUNDING NUMBERS			
			PROGRAM ELEMENT NO.	PROJECT NO.	TASK NO.	WORK UNIT ACCESSION NO.
11. TITLE (Include Security Classification) The Employment of Maritime Operational Weapons in Support of the NATO Ground Commander						
12. PERSONAL AUTHOR(S) YOUNG, David F., LTC, USA						
13a. TYPE OF REPORT Monograph		13b. TIME COVERED FROM _____ TO _____		14. DATE OF REPORT (Year, Month, Day) 89-02-14		15. PAGE COUNT 42
16. SUPPLEMENTARY NOTATION						
17. COSATI CODES			18. SUBJECT TERMS (Continue on reverse if necessary and identify by block number)			
FIELD	GROUP	SUB-GROUP	Maritime Strategy			
19. ABSTRACT (Continue on reverse if necessary and identify by block number) This monograph looks at the possibility of using the Navy's long range weapons systems to support the NATO ground commander. In NATO, the doctrine of Follow On Forces Attack (FOFA) has been developed as a means to defeat the numerically superior Soviet/WP forces. The ground based systems currently available are extremely limited and the allied air force may not survive the first few days of war. In a future environment of probable resource austerity caused by fiscal constraints, naval support may be critical in the execution of FOFA. Current U.S. Maritime Strategy endorses the use of power projection in support of the ground commander, but only after the enemy navy has been destroyed and command of the sea has been won. The monograph first reviews what prominent naval strategists have written about the use of navies, and in particular about the use of power projection. As one would anticipate, power projection becomes a more important part of naval strategy as weapons systems become more accurate and their ranges increase. For the most part, however, strategists agree that control of the sea is necessary before the ground commander is supported. The paper also looks						
20. DISTRIBUTION/AVAILABILITY OF ABSTRACT ☒ UNCLASSIFIED/UNLIMITED ☐ SAME AS RPT ☐ DTIC USERS				21. ABSTRACT SECURITY CLASSIFICATION UNCLASSIFIED		
22a. NAME OF RESPONSIBLE INDIVIDUAL David F. Young, LTC, USA				22b. TELEPHONE (Include Area Code) (913) 684-3437		22c. OFFICE SYMBOL ATZL SWV

THE EMPLOYMENT OF MARITIME OPERATIONAL WEAPONS
IN SUPPORT OF THE NATO GROUND COMMANDER

BY

LTC David F. Young

Advanced Operational Studies Fellowship
School of Advanced Military Studies
Fort Leavenworth, Kansas

14 February 1989

Approved for public release; distribution is unlimited

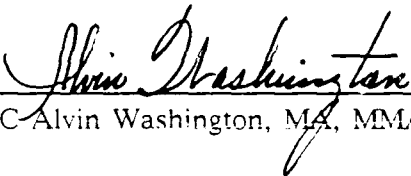
SCHOOL OF ADVANCED MILITARY STUDIES

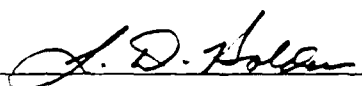
MONOGRAPH APPROVAL

Name of Student: David F. Young, LTC, Military Intelligence

Title of Monograph: The Employment of Maritime Operational
Weapons In Support of the NATO Ground
Commander.

Approved by:


LTC Alvin Washington, MA, MMAS Director, Advanced
Operational Studies
Fellowship


COL Leonard D. Holder, MA Director, School of
Operational Studies
Fellowship

Accepted this 5th day of MAY 1989

ABSTRACT

The Employment of Maritime Operational Weapons in Support of the NATO Ground Commander. LTC David Young, USA.

This monograph looks at the possibility of using the Navy's long range weapons systems to support the NATO ground commander. In NATO, the doctrine of Follow On Forces Attack [FOFA] has been developed as a means to defeat the numerically superior Soviet/WP forces. The ground based systems currently available are extremely limited and the allied air force may not survive the first few days of war. In a future environment of probable resource austerity caused by fiscal constraints, naval support may be critical in the execution of FOFA. Current U.S. Maritime Strategy endorses the use of power projection in support of the ground commander, but only after the enemy navy has been destroyed and command of the sea has been won.

The monograph first reviews what prominent naval strategists have written about the use of navies, and in particular about the use of power projection. As one would anticipate, power projection becomes a more important part of naval strategy as weapons systems become more accurate and their ranges increase. For the most part, however, strategists agree that control of the sea is necessary before the ground commander is supported. The paper also looks at the Falkland Islands campaign, a modern missile war, to see if sea control was secured before power projection operations began. It also reviews general power projection capabilities and isolates an example of how power projection could support the ground war in both the central and southern regions of NATO.

The conclusions are that the Navy could support the ground war without first securing sea control and that this support might be vital to holding the central region. A decision to provide this kind of support would most likely have to be made at an echelon above theater level since it might impact on other national [U.S.] strategic considerations. It also points out that maritime operational fire support is not widely exercised and that procedures would have to be developed and practiced if this kind of support is to be contemplated.

Accession For	
NTIS GRA&I	☒
DTIC TAB	☐
Unannounced	☐
Justification	
By	
Distribution/	
Availability Codes	
Distribution/	
Dist	Special
A-1	

TABLE OF CONTENTS

INTRODUCTION.....	1
WHAT THE STRATEGISTS HAVE SAID.....	5
CONTEMPORARY STRATEGIES.....	13
HISTORICAL PARALLELS.....	20
POWER PROJECTION CAPABILITIES.....	24
AN EXAMPLE.....	30
CONCLUSION.....	36
ANNEX A.....	40
BIBLIOGRAPHY.....	41

INTRODUCTION

The navies of most major nations are designed for a dual purpose: to contest the use of the sea and to attack targets ashore. While in the long run, navies are built and supported to allow warring nations to influence events on land,[25:43] how navies influence the ground war, and when, are subject to debate. Focusing on NATO, specific questions arise as to whether the U.S. Navy should first concentrate on securing the sea lines of communications [SLOCs] and on destroying the Soviet Navy, thus indirectly supporting the allied ground effort, or whether the U.S. Navy should have a more direct influence on ground combat operations by using its organic weapons systems. In the recent past there have been changes in the size and composition of both conventional and nuclear NATO and Warsaw Pact [WP] forces. And there continue to be Soviet overtures suggesting yet more change in the force structures. As these military forces change, there is a corresponding requirement to review the ways in which they would be employed in war. As military resources become more scarce, the way in which they are employed becomes more important.

The Soviet Union/Warsaw Pact have long enjoyed a quantitative advantage over the Alliance concerning numbers of conventional forces. That disparity is expanding. General Galvin, the Supreme Allied Commander, Europe, is quoted as saying that Soviet military equipment production continues at a steady rate. In the last four years the Soviets have produced more tanks and

artillery pieces than exist in the British, French and German armies combined: The Soviets are producing 700 combat aircraft per year and are building a nuclear submarine every five weeks: The Warsaw Pact now has 30,000 more tanks than does NATO, and the new T-80 is being produced at a rate of 280 a month.[37:8] The Warsaw Pact has more offensive capability than NATO on the first day of battle, or ten or thirty days after. A thousand ship sailings would be necessary for the initial reinforcement of NATO. [37:8] The probability of the reduction of this inequity between the Warsaw Pact forces and those of NATO is unlikely. While it is difficult to estimate accurately the cost of Soviet defense expenditures, one analyst speculates that at current rates the Soviet defense spending could reach 25 per cent of their gross national product. This would equate to four times the US expenditure, or about \$1.2 trillion a year.[15:6]

While a force imbalance has persisted for many years, it was not until the early 1980s that NATO developed a military response to assist in the defense against the superior Warsaw Pact (WP) forces. This response, called Follow On Forces Attack (FOFA), is a concept of deep attack and in many ways is similar to the U.S. AirLand Battle concept. It is a conventional option, still relying ultimately on the (basically) U.S. strategic nuclear umbrella to deter WP aggression or to stop Pact forces after a limited penetration. FOFA is similar to the AirLand Battle except that it does not include maneuver as an option to attack deep targets. This reluctance stems from political rather than practical considerations. FOFA was developed to counter the

anticipated enemy doctrine of attacking in echelon with second echelon or Operational Maneuver Groups exploiting weaknesses in Allied defenses to achieve rapid and deep penetration.

Currently, NATO does not have sufficient mobilization assets to bring U.S. combat forces to Europe in time to help in place forces block deep WP penetrations.[29:43] NATO's air defense and anti tank weapons are outdated as are their close air support aircraft.[29:43] Complicating NATO defense planning is FOFA's dependence upon technological improvements in all weather, accurate sensor systems; sophisticated, secure and survivable command, control, communications and intelligence (C³I) systems; and responsive, accurate and survivable target attack systems. The required capabilities are not in place today in NATO.[24:8-9] While both the U.S. and NATO member nations have been actively involved in numerous modernization programs to develop or improve deep attack options, continued funding of these and similar improvements may be in jeopardy.

Recent proposals for change in the force structure such as the Intermediate Nuclear Force (INF) reduction treaty and a prospective U.S.- U.S.S.R. agreement on deep cuts in strategic arms have...."jolted NATO into a new awareness of its conventional posture quandary and into a confused search for exits from this quandary".[29:43] Mr. Gorbachev has recently proposed a reduction in Pact conventional forces, but that does not significantly alter the imbalance between the two protagonists. Options open to NATO to address this imbalance

include increasing its conventional force and/or improving combat efficiency through force modernization and multiplication. Any alternative that entails substantial costs is unlikely to receive popular support. Growing deficits and budget cuts as well as an expanding perception in NATO member countries that the Soviet Union/Warsaw Pact do not currently pose a significant threat are impediments to defense improvements. As the conventional imbalance increases, there is a concomitant need to develop ways to use more efficiently the forces available.

In pursuit of a potential option for cost effective ways to improve the conventional fighting capability of NATO ground forces, this paper will examine the effect and consequences of applying naval power projection during the early phases of a war in Europe. The following pages will explore the use of navies as seen through the eyes of naval strategists; will address how navies have been employed in recent history; and will look at how US naval strategists plan to employ naval forces in the future. It will also investigate the general ways in which navies could directly support ground operations and then it will tailor that support to specific areas in the central and southern regions of Europe. Where applicable, the naval contribution will be examined as it applies to NATO's FOFA doctrine.

WHAT THE STRATEGISTS HAVE SAID

Land warfare is obviously different from maritime warfare. Variables such as key terrain, prepared defenses, and cover and concealment that determine how ground units fight are absent on the sea. Naval commanders are neither concerned with keeping a reserve force nor with flanking an opponent. Superior firepower and a good intelligence apparatus are the major ingredients in determining the outcome of a naval battle.[25:6] While maritime strategists differ in their theories, they all consider that the achievement of command, or control, of the sea is the main purpose of a navy. Some strategists such as Mahan see this as the only purpose of the navy, while others ascribe additional roles to a navy. Generally speaking, however, most strategists are more comfortable with a strategy that establishes sea control first, before any other mission, such as power projection, is attempted.

Alfred Thayer Mahan was perhaps the most influential naval strategist. He believed that the tenets of his strategy were imbedded in nature and therefore not susceptible to the changing influences of time and technology. Even though his thoughts were developed in the late 19th and early 20th centuries, his influence is still very much felt today. As late as 1941, Mahan was still referred to as the 'Evangelist of sea power'. [5:415] Another writer says that Mahan is still often the only theorist studied and ... "that modern technology may have debased his image but many await the day of his second coming

for salvation from our current lack of consensus in naval doctrine." [26:1] Because his ideas continue to dominate the field, especially in the United States, Mahan's principles should be clearly understood.

Mahan believed that a nation's geography and policy determined its naval strategy and sea power. He felt that there were six basic ingredients which contributed to a nation's sea power. These included [8:29-60] a nation's geographical position [i.e. insular, continental]; its physical configuration [i.e. access to the sea]; length of coast line; size of population [available for maritime pursuits]; the national character [i.e. inclination to trade]; and the character of the government.

The touchstone of Mahan's strategy was total control of the sea. This was accomplished by both targetting the enemy's navy as well as by preventing his commercial usage of the sea. Control, or command, of the sea is defined as both retaining free use of it, while denying that same use to the enemy. For Mahan the basic issue in naval strategy is whether command of the sea can be established in wartime. [7:25]

The basis of Mahan's strategic doctrine was to control the sea by a concentration of force. The function of a great fleet was not to chase, but to control. The dominant characteristic of a great fleet then should be power. If a nation has an inferior navy (called a fleet in being), its most useful mission would be to shut itself up in a secure port and force the stronger navy

to stand watch. Examples of fleets in being were the German Navy in WWI and the Italian Navy in WWII.[3:433-4]

Mahan's model applied both strategic and tactical levels of analysis to understand better a particular war. He defined the object as the strategic effect of war and equated this to control of the sea. Tactical objectives were also strategic and they were the various ways open to secure control of the sea, such as destruction or blockade of the enemy fleet.[13:xiii] This concept of a tactical objective is not dissimilar to the concept of operational art as defined in FM 100-5 as the linkage between strategy and tactics.

Mahan considered the selection of incorrect or inappropriate tactical objectives as a major contributor to losing a war. He called these "ulterior objects" and cited the following as a prime example: [13:xiv]

"In early 1756 the British maintained a garrison at Port Mahon on the island of Minorca. The French, distracting British attention from the Mediterranean, were able to transport from France and to land a sufficient force to invest Port Mahon. Not surprisingly, the British response was to send a fleet to lift the siege. The ensuing engagement between the French and British fleets in May, 1756 was entirely indecisive. Although the French could have tacked to windward and crunched the British van, they failed to do so, because they pursued the "ulterior object"- the conquest of Port Mahon- instead of accomplishing the immediate objective, which should have been the destruction of the British fleet. The successful investment of Port Mahon depended upon control of the sea: If the French controlled the sea, Port Mahon would sooner or later fall; if the British controlled the sea, the French forces ashore would wither on the vine."

Mahan felt that if ships were used to secure positions ashore, then they should be subordinated to the army. He was also

opposed to having ships guard ports, which was another mission he felt belonged to the army. Mahan rejected Amphibious operations as proper maritime roles. He was greatly influenced by Jomini's theories of land warfare, especially by the ideas of central position and mass or concentration of force. Amphibious operations, or any other kind of force projection, tended to divide the force and therefore violated the principle of mass. This disinclination to become involved with operations on land included a reluctance to exchange fire with shore batteries. His observations concerning the ineffectiveness of naval bombardments of fixed fortifications during the Civil War led him to say that

"...a ship can no more stand up against a fort costing the same money than the fort could run a race with the ship.... [and] defense on the sea side against a direct naval attack is comparatively easy because..ships..are at a recognized disadvantage contending against forts." [11:460]

Mahan's objective was always the enemy's navy. How that enemy was to be attacked depended upon the strength of his navy. Weaker forces were always attacked. Equal or stronger forces were attacked with a defensive-offensive strategy. [17:88]

Julian Corbett, writing at about the same time as Mahan, had a slightly different approach to war. He felt that while the object in land warfare was the acquisition of territory, at sea it was the control of the lines of communications and that strategy was developed to insure the lines of communications were established and free. [26:4] Command of the sea is always in dispute and the stronger the navy, the sooner it can achieve control. Weaker navies avoid stronger ones to prolong the

struggle for command of the sea. Corbett was impressed with naval force mobility and flexibility and felt that naval forces could simultaneously accomplish many things in many places. In this regard he differed from Mahan who, influenced by Jomini, emphasized the importance of concentration of forces.

Not unlike Clausewitz, Corbett believed that the function of the military is to provide a means to a political end. In the application of land and sea power, military leaders must have a thorough understanding of what the war is about, what the friendly political objectives are as well as the enemy's political objectives.[13:xiii] Based on these understandings, a relationship is developed by military leaders between the land and sea forces in relation to the political objective that is sought. If the sea is a significant part of the war effort, then maritime principles are relevant. In his maritime strategy, the naval objective is always to secure command of the sea or at least prevent the enemy from obtaining command of it. When this is accomplished, naval forces can be used in some other pursuit. This kind of thinking characterizes today's US Maritime Strategy.

Corbett felt that command of the sea should not be exercised to maintain control, but that it should be used for some specific purpose such as defense against invasion or power projection. He also asserted that naval support of ground operations may be conducted while command of the sea was still in dispute.[13:xiv] While it is desirable to control the sea before attempting

another mission, the strategic objective of the other mission may be so significant that its importance justifies the risk. This, according to Corbett, requires planners and commanders to keep specific objectives in mind when developing and executing operations.[13:xxiii] It also requires them to assess continuously the relative value of using naval forces in sea control versus power projection or other naval roles.

Continental powers generally have followed a maritime strategy different from sea control and have focused more on sea denial operations. History has demonstrated that in short wars, at least in Europe, sea power has not played a significant role in military thinking and that the "...navy remained a stepchild of continental strategy".[5:446] One of Mahan's earlier principles is that nations cannot afford to maintain both a superior navy and a superior army and that nations having vulnerable land frontiers with potential enemy nations should probably invest the bulk of their defenses in land force development. Naval forces for these kinds of nations are usually designed as fleets in being, to attempt to achieve limited working control of the sea. They have also been designed to protect the homeland by using mine warfare and small fast boats such as torpedo boats and destroyers. Others have pitted inferior navies against non military targets such as merchant marine vessels, a strategy known by the French name of guerre de course. In Europe today, Continentalists are focused on the prevention of a Soviet drive for a united Eurasia, and they do

not consider naval forces to be significant in the defense of Europe.

As Mahan postulated, geography plays a role in determining the extent of a nation's naval development and the ways in which it uses that navy. Today, changes in technology are having a highly significant effect on the evolution of naval forces. History has shown that as weapons systems become more sophisticated and as their range and accuracy improve, navies are increasingly employed in power projection roles. Churchill is quoted as having said that in 1943 the Royal navy bombarded enemy coastal targets on 716 occasions.[1:14] And, on June 6, 1944 naval forces opened the assault on the French coast by firing approximately 2,000 tons of shells in the first ten or twenty minutes of bombardment and continued thereafter for many days to give close support to the allied forces on the ground.[1:15]

Writing shortly after the end of World War II, Bernard Brodie described the purpose of naval operations as being much more limited than land warfare, and that as a rule, naval forces existed only to sustain ground and air forces since the latter two achieved the final decision.[1:13] He felt that navies served two purposes, the first of which was to control transportation. This was accomplished by protecting the transfer over water of land and air forces, by protecting the merchant marine, by preventing the enemy from using the sea to transport his armies, and by choking off the enemy's import of

critically needed materiel. The other major purpose of a navy was to serve as a mobile heavy artillery or aircraft base in support of obtaining the ground objective.[1:14]

Brodie felt that the employment of naval forces was situationally dependent. After Pearl Harbor it would have been inappropriate for the U.S. to seek out the Japanese fleet.[17:86] Similarly, after the U.S. entry into WWII, the first mission of the navy was to sustain the allies before attempting an all out offensive. He felt that

"..any admiral who adheres inflexibly to any set of preconceived principles was hardly likely to be victor against a resourceful opponent." [17:86]

Maritime strategists advocate establishing some kind of sea control and usually mandate that control be established before a navy embarks on any other mission. Not to do so runs the risk of forsaking the strategic objective in pursuit of Mahan's "ulterior objective", although Mahan's strategic objective was always to secure command of the sea. In Europe, today, the strategic objective might well be to blunt a Soviet attack in the central region. In this case, as Brodie and Corbett have both pointed out, circumstances at the time should determine how and when naval, as well as other forces, are employed.

CONTEMPORARY STRATEGIES

Contemporary U.S. maritime strategy posits a specific way of fighting if deterrence fails. According to, Admiral Harry Train, a former SACLANT, there are limited options should war break out. These include:

1. The Allies will quickly stop the Soviets thus forcing them to sue for peace.
2. The Allies will be quickly pushed back and they will accept peace on Soviet terms.
3. The Allies could initiate a full nuclear exchange.
4. The Allies would initiate a limited nuclear strike, the Soviets would respond in kind, and the Allies would either accept a cease fire or would continue at the conventional level.
5. The Allies, despite initial setbacks would continue a conventional struggle until a suitable peace could be negotiated.

Since naval planners consider options one and two to be unlikely, and options three and four to be unacceptable, naval planning is based upon the last option.[34:5]

The U.S. maritime strategy has been evolving for several years and it continues to mature. Much of it is very general and therefore it is vulnerable to criticism and misunderstanding as is illustrated by the following quote:[30:54]

"Just what does the navy mean by "maritime strategy"? The pages of Proceedings show that there is disagreement on this question.

To some writers, maritime strategy appears to mean a headlong charge of the carrier fleet against the Soviet Kola Peninsula. To others, it means horizontal escalation: responding to a Soviet attack on Western Europe by immediately opening hostilities in other theaters. A third group appears to believe that maritime strategy means a general offensive orientation, but implies no specific actions because these would be left to the discretion of the various unified and specified commanders."

John Mearsheimer has accused the U.S. Navy of not defining its strategy clearly while at the same time defining it differently so that the maritime strategy "tends to have an amorphous and elastic quality about it".[31:5] Nonetheless there appear to be four general components of U.S. maritime strategy and they include: 1. Horizontal escalation to make the Soviets fight where they are less prepared to fight; 2. Offensive sea control to prevent the Soviet fleet from becoming a challenge to U.S. or NATO fleets; 3. Power projection using amphibious forces and carrier air to support the ground battle in Europe; 4. "Counterforce Coercion" as a deterrent or to persuade the Soviets to terminate aggression by threatening to destroy their SSBNs with friendly attack submarines.[31:14]

One of the challenges leveled against the maritime strategy is that it is not real maritime strategy as defined by the experts, Mahan and Corbett.[30:54] Mearsheimer, on the other hand, describes the aspects of horizontal escalation and direct military impact as "neo Mahanian threats".[31:34] This writer feels that certain aspects of the maritime strategy, especially offensive sea control, would be endorsed by Mahan. Power projection and horizontal escalation are not supported by Mahan's theory in that both dissipate rather than concentrate

strength. Corbett, on the other hand, would be extremely cautious about risking the fleet in attacking the enemy in his protected areas. Both theorists maintain that sea control is the predominant mission that has to be accomplished before any others.

In transitioning to war, there are three phases of the maritime strategy. First is deterrence which is accomplished by global forward deployment. With resources available to address rapidly a localized crisis, there is potential for prevention of escalation to war. The second phase is seizing the initiative. Quoting Admiral James D. Watkins, during this phase.. "naval forces will destroy Soviet forces in the Mediterranean, Indian Ocean and other forward areas, neutralize Soviet clients if required, and fight our way toward Soviet home waters...".[33;1] The third phase involves carrying the fight to the enemy. This is similar to the previous phase but it is more aggressive and seeks war termination.

Several implied assumptions are obviously the foundation of our current maritime strategy. Some of the more controversial of these include: [14:66:21;56:36;46]

1. The U.S. is a global power and as such has military interests beyond NATO.
2. There will be no immediate collapse in Central Europe.
3. The best use of naval air is not in the Central Region.

4. Nuclear weapons will not necessarily be used. There will be no early nuclear release, and through "counterforce coercion" or attacking the Soviet strategic nuclear weapons (SSBNs) a nuclear balance will be created in favor of NATO.

5. NATO consists of more than just the Central Region.

6. Should Europe be lost, that would be a failed campaign but not the loss of the war.

Continentalists criticize maritime strategy and point out that history has demonstrated that wars are won only by land forces. They point to the Royal Navy in World Wars I and II as being relatively ineffective against the Germans. They feel that the role of the navy is to protect the SLOCs to Europe so that the ground forces there can determine the outcome of the next world war. They also feel that the money obligated to support the maritime strategy would be better spent in improving the Allied ground and air force capability in Europe.[31;28] Another group is concerned with the offensive aspect of sea control strategy. Those in this group agree with Clausewitz that the defense is the stronger form of warfare. By attacking the Soviet in his bastion, where the attacker has to defeat not only the enemy fleet but also has to overcome defensive advantages such as mines, shore based weapons and air forces, they argue that maritime strategy gives too much advantage to the Soviet.

Another criticism of the maritime strategy is that it does not support NATO's strategy. This is more difficult to evaluate

because of the difficulty in defining a precise maritime strategy. Analysts sometimes contradict themselves in evaluating the cohesiveness of both the U.S. maritime strategy and NATO's. F.J. West Jr. in an article written in 1985 stated that the maritime strategy contributed to NATO deterrence.[35: 12] Two years later he wrote that the maritime strategy has advanced options that are at variance with established NATO doctrine.[36:1] A key point here is that the maritime strategy was developed to support national strategy. It supports National Security Decision Document (NSDD)-32, which was promulgated in 1982.[14:61] To the extent that National strategy supports NATO strategy, maritime strategy must also support NATO strategy. There do appear to be some inconsistencies however, such as the maritime strategy's tendency to globalize the war. Perhaps a more important difference is the fact that NATO officials do not anticipate that their forward defense will stop a Warsaw Pact attack.[36:42] Should this happen, NATO's flexible response strategy then provides for the possibility of a nuclear escalation. Early use of nuclear weapons would have a significant impact on the maritime strategy. The other apparent disparity is the NATO anticipation of nuclear escalation, or short war, where the maritime strategy is structured around the concept of a relatively long war.

Soviet strategy envisions a future war with the U.S. to be conducted on a world wide scale. "The probable centerpiece of Soviet strategy in global war would be a combined arms assault

against Europe, where they would seek a quick and decisive victory." [33:7] They would prefer to fight a conventional war, but at the same time place a high priority on ensuring that they maintain a nuclear superiority through their conventional war fighting. Soviet military objectives in a war with the U.S. would be to defeat and occupy Western Europe, to neutralize the major powers and to dominate the post war world. [41:13-4]

Probably the most crucial wartime role of the Soviet navy is the protection of their ballistic missile submarines which are considered to be strategic reserve weapons. To ensure the survivability of these systems the Soviets have developed a complex joint defensive system which incorporates mines as well as ground and air forces tiered to protect the SSBNs. The Soviets have, in a way, transferred from land warfare to sea the Clausewitzian concept that the defense is stronger than the offense. At the same time their navy as well as their other services will place a great deal of emphasis on locating and destroying allied nuclear capable assets such as aircraft carriers, cruise missile platforms and ballistic missile submarines.

While Soviet maritime strategy is to defend the homeland and their strategic nuclear capability, the U.S. strategy calls for forward deployment from which assets can be launched to sink the Soviet navy. U.S. maritime strategy accommodates power projection in support of the ground commander, but it reserves this option until sea control has been achieved. The argument

is that land attack systems such as carriers and missiles are both scarce and expensive and that these systems should be preserved and not prematurely exposed to enemy detection and destruction. The U.S. Navy has no plans to use carrier air in the central region [31:28], but does plan to support the central region with limited amphibious operations and strikes on the northern and southern flanks, after winning command of the sea. As mentioned, the maritime strategy assumes that the central region will hold and that naval attacks on the flanks will support operations in the center by drawing Pact forces away from it. In short, in place and follow on allied ground and air forces are concentrated in the central region. Soviet ground and air forces are also focused on the central region and its maritime forces are employed to protect the mainland. U.S. maritime strategy is to attack the Soviet Navy, especially the SSBNs, protect the SLOCs, and when possible project power onto the northern and southern flanks. While Mahan's theory does not endorse a power projection role for the navy, it most certainly would not support an effort that divided forces and diverted them from the enemy's main endeavor.

HISTOPICAL PARALLELS

Looking back through the history of naval warfare [and warfare in general], a trend evolves which broadens the role of naval forces from sea control [to include sea denial] to the many roles that are seen today in, for example, the U.S. maritime strategy. These changes have been most influenced by advances in technology. Because technological improvements have so radically altered the capability of a navy to project force, significant examples of power projection do not unfold until WWII. In the Pacific, the U.S. Navy was instrumental in securing island after island through the use of its naval guns and carrier air. It did not attempt to gain full sea control before providing this direct support to the ground commander. The U.S. Navy did enjoy limited control of the sea, but only because the Japanese did not contest it.[7:194] In the Mediterranean the British also enjoyed limited sea control and through the use of naval firepower greatly supported General Wavell's Libyan offensive in December 1940 against an enemy that outnumbered him three to one.[1:160] Successful naval support was also provided in the face of large enemy air forces as was seen in the British shelling of Genoa in February 1941.[1:162] History has also shown the risks associated with the use of sea power in a contested area. While WWII provides many examples of the use of naval power in both contested and uncontested waters, it is somewhat difficult to draw parallels from that era with warfare today because technology has so increased the range and accuracy of sea based weapons systems.

Acknowledging that there will not be a battle, or war, from the past that duplicates conditions today, the Falklands campaign does include many of the weapons systems that we would find on today's battlefield. While the Falklands are a long way from Europe, and Argentine adversaries different from Soviet foes, it is the only naval war to date of the missile age.

The campaign is summarized by the former British Secretary of state for Defense, John Nott: [32:120]

"In seven weeks a task force of 28,000 men and more than one hundred ships sailed 8,000 miles, neutralized the Argentine navy and fought off air attacks in which the British were outnumbered six to one. The Task Force then landed 10,000 men on a hostile shore while under heavy air attack; fought several pitched battles against an entrenched and well supplied enemy who at all times outnumbered our force; and brought them to surrender in three and one half weeks."

In this campaign, the Argentine Navy, (a force which included a U.S. WWII vintage aircraft carrier, a cruiser, guided missile destroyers and four submarines, two of which were modern diesel) took itself out of the fight early on. On 2 May, the nuclear powered submarine, HMS Conqueror launched two Mk8 torpedos that sunk the Argentine cruiser General Belgrano. [18:79] The inability of Argentina to combat HMS Conqueror, coupled with the detailed intelligence being provided the British task force by the U.S., [18:107] forced the Argentine Navy to remain in protected waters.

Air power was heavily weighted in favor of Argentina as seen in these figures: [18:80]

ARGENTINA

44 SuperMirage III & IV
68 SkyHawk A4P
10 Canberra bombers
5 Super Etendard fighters
60 Pucara ground attack aircraft.

BRITAIN

14 RAF Harriers
24 Naval Harriers

In spite of the lop-sided figures, in the end, Britain controlled the skies. British air supremacy was due to the superior air to air weapons of the British [the missiles used by the Argentines were heat seekers and so their pilots had to maneuver to shoot] and bolstered the fact that Argentine aircraft had to fly 800 round trip miles to engage the naval air opponents. This left little fuel for fighting an air battle.[18:81] Until the eventual outcome, Argentine air managed to inflict considerable damage on the Royal Navy, sinking 5 ships and hitting twenty others. Had they had more than the five Exocet missiles in their inventory, the damage might have been greater.

The British Forces conducted amphibious landings at South Georgia, San Carlos and Fitzroy. The landings were successful although in all instances the British suffered heavy losses from Argentine air forces. At South Georgia, 4.5 inch naval guns helped turn the tide in favor of the landing force.[18:84] After absorbing their losses at Fitzroy, the British prepared to retake Port Stanley with a three day naval air and gun

bombardment. Shortly thereafter the Argentine forces on the Falklands surrendered.

The Falklands campaign represents a modern maritime conflict in which naval forces were employed in a power projection role while still facing threats from the sea and air. In many regards, the conditions of this war are similar to the conditions anticipated in a NATO WP confrontation. Like the British, the U.S. would have a long line of communication into the theater. Also like the British, NATO forces would be facing an opponent that has superior ground as well as air forces. A final similarity is that NATO, like the British task force, would enjoy naval superiority against an opposing navy that will in all likelihood also remain close to home.

In this campaign, the British controlled the sea because it was not contested; however, they were faced with a significant air threat. In spite of this threat, they commenced immediate operations on the islands by projecting power ashore. They suffered casualties, but in just three and one half weeks were victorious.

POWER PROJECTION CAPABILITIES

As stated earlier, one aspect of the U.S. maritime strategy includes providing support to the ground commander. The ground forces in Europe are indirectly supported by the U.S. Navy by insuring that the sea lines of communications are kept open to guarantee resupply of the alliance. A more direct form of support, namely power projection, is also provided under the maritime strategy; however, the proponents of our maritime strategy are less inclined to endorse this kind support until command of the sea has been gained by destroying the Soviet/Warsaw Pact fleet. The argument is that any other mission, such as power projection, would jeopardize the U.S. fleet by exposing it to destruction, which would in turn lead to the desolation of the friendly ground forces as Soviet sea power strangled Western Europe. Once command of the sea has been won by the Allies, the U.S. Navy would then be free to turn its firepower in direct support of the ground commander. And, this support is considerable. John Lehman has said that in wartime, the 2nd Fleet (the heart of the Atlantic strike fleet)....."represents the equivalent firepower of forty WWII aircraft carriers and can deliver accurate strike ordnance on target equal to 800 B-17's a day, every day".[28:5] While this would represent a significant augmentation to the ground force, it is not scheduled to be applied until the Soviet Fleet is "rolled back". When asked how long it would take to roll back the Northern Fleet to enable carrier based strikes against the Kola peninsula, John Lehman replied:

"No one has tried to put a timeframe on it because of the inherent unpredictability...War is inherently unpredictable, one can't easily determine how it will break out or how long it will take, for instance, to nullify the submarine force in the Norwegian Sea. 'That is a tough area to operate in'. It may take a week or it may take a month or three months." [31;30]

In wartime Europe three months or even one month might be too long to wait. In NATO the ground forces are relying on the defeat of the Soviet follow on forces to defend successfully in Western Europe. If these follow on echelons cannot be attacked because of a shortfall in ground based weapons, or because the Allied air force cannot attack deep, naval support is one of the very few resources left to assist the ground commander.

One of the motivators behind the development of FOFA was the politically induced restrictive nature of the front. Because it is not acceptable to abandon territory to absorb an attack, the concept of attacking the enemy well beyond the forward edge of the battle area was developed to add depth to the allied battlefield. The following three principles, espoused by General Rogers, are the keystone of FOFA: [24;4]

"To identify, through the use of modern mobile sensor platforms, the flow of Warsaw Pact reinforcements as they move into the battlefield.

To integrate and pre evaluate electronically, intelligence received from all sources and to disseminate it over a reliable and secure communications network to military commanders who can make immediate decisions.

To use long range and stand off missiles with conventional munitions to destroy airfield runways and enemy concentrations deep in his rear."

At the tactical and operational levels in Europe there are limited intelligence assets that can 'look deep'. There are two military intelligence brigades in the central region, each with

an aerial exploitation battalion. The Army Intelligence Master Plan would improve and expand the capabilities of these units as well as improve the tactical intelligence posture overall; however, these enhancements are not yet fielded. Some intelligence can be provided to the operational commanders by Air Force electronic warfare (EW) assets such as the F-4G Wild Weasel, and the EC 130 Compass Call. These platforms are limited in number and because their primary mission is jamming in support of Suppression of Enemy Air Defense (SEAD), they are vulnerable to early destruction. E 3A (AWACS) systems are also available; however, they too are limited in number. The RF-4C is the only operational level intelligence platform capable of all weather, day-night reconnaissance using stand off sensors to avoid air defense threats. Only 24 of these tactical electronic reconnaissance (TEREC) RF-C4s, and 17 side looking airborne radar equipped aircraft have been produced.[24:12] There are also higher level systems such as the TR 1 and the SR 71 as well as well as national capabilities; however, competing requirements may affect the responsiveness of these systems.

Turning to look at the weapons systems available for the NATO commanders to attack deep, assuming accurate targeting intelligence is available, there exist some serious shortfalls. Ground based weapons include artillery with a range under 30 kilometers, the multiple launch rocket system (MLRS) also limited to under 30 kms and the LANCE missile system with a range of 75kms. While the LANCE meets the range requirements of FOFA, it is outdated, unresponsive and limited in number with an estimated 80 launchers throughout NATO.[39:20] The Tactical

missile system (TACMS), designed for use with the MLRS, will have a range of 260 kms, but it is not yet fielded.

The INF treaty has further complicated the commander's problems by reducing the theater level capability to attack deep.[39;22]

"The loss of the U.S. Pershing II and ground cruise missiles under the treaty removes the only certain way NATO has to strike militarily significant Soviet targets on both Soviet and Warsaw Pact soil, without resort to general nuclear war."

The other category of weapons systems available to the ground commander to strike deep is the allied air force, but the survivability of this force in the face of numerically superior Soviet/WP air forces is in question.[20;1075] An assessment of NATO's air force, drawn from war games and paper analyses, is that at best it might struggle to a draw against Pact forces.[37;43] Further degrading the allied air force is the superior Soviet air defense system which includes up to six times as many SAMs as NATO has in its inventory. In addition to high attrition, the availability of allied air to strike deep targets is challenged by the many competing requirements such as close air support, SEAD, counter air operations and intelligence related missions.

What are some of the ways that naval assets could be applied in support of the ground commander? Because of the increased range of most naval weapons systems, there is more versatility than ever before in their application.

Amphibious operations, air support, shore bombardment and logistics are the four general categories of direct naval assistance. Amphibious operations were significant in WWII in

both the Pacific and European theaters. In a future war in Europe they will probably have a less direct impact since the initial fighting forces are in place. They would most likely be used on the flanks to secure choke points, or forward bases as well as to detract Pact forces from the central region.

Shore bombardment includes both missiles and guns. In a conventional war in Europe, guns would be less efficient than missiles because of their limited range. The possible exception is the 16 inch gun of the Iowa class battleship. Two of these will be in the Atlantic or Mediterranean fleet, each with 9 guns. The gun fires a 1,225 kg projectile to a range of 39 kms.[22:38] The major impact of shore bombardment would however be provided through the missile. While anti ship missiles could be used against shore targets, they have a more limited range and guidance systems that are not particularly efficient against shore targets. The cruise missile, and in particular the Tomahawk Land Attack Missile (TLAM), is very well suited to support the ground commander. Currently, the U.S. Navy plans to procure 3,994 cruise missiles with 2,643 being the TLAM variety. There will also be 2600 potential launchers.[3:690-1] With a range of 700 nautical miles it can reach deep targets.[19:52] A drawback of the TLAM-C [conventional] is that it is only effective against fixed targets since its target data has to be preprogrammed.[22:56] Still, it offers potential as a combat multiplier in disrupting road and rail lines against an enemy who places emphasis on tempo and speed of operations. Other uses include early destruction of enemy airfields, and possibly planes on the ground, to help swing the air balance to NATO.

The extent of naval air support potentially available to the ground commander is not insignificant. A Nimitz class strike carrier carries an air wing of 86 aircraft.[23:42] At the operational level, significant support would come from naval air intelligence operations and deep interdiction. In addition to the conventional aircraft there is also a significant Vertical/Standing take Off and Landing (V/STOL) capability, which could extend the depth of support even further inland depending upon availability of refueling/support facilities. The following table provides general planning ranges for carrier based aircraft: [3:710-11]

	<u>FERRY RANGE</u>	<u>COMBAT RADIUS*</u>
F/A 18	1600 NM	450 NM
F14	2000 NM	500 NM
F4	2300 NM	900 NM
A6	2400 NM	320 NM
A7	2800 NM	425 NM
A8	2500 NM	300 NM
EA6B	2400 NM	710 NM
EA3	5000 NM	1100 NM

* Radius is based on a high low high flight profile

A carrier battle group could potentially carry 160 bombers, with the fighter/bombers converting to a bomber role.[7:186] If the assumption is made that the opposing ground based air forces render each other combat ineffective, this armada represents an awesome unopposed asset.

AN EXAMPLE

While power projection is indeed one of the cornerstones of today's maritime strategy, it is perhaps the least emphasized when considering a war in Europe. The U.S. Navy has the requisite weapons to attack land targets; however, the inclination is to delay this mission until the other aspects of naval warfighting have made the ships less vulnerable to detection and interdiction when they attack land targets. Additionally, in literature addressing power projection, there appears to be a focus on the northern flank. The Kola peninsula is frequently the hypothetical target of both naval air strikes and amphibious landings. The obvious goal is to strike both the flank and the Soviet homeland at the same time. In this kind of scenario, the U.S. Navy would first have to face a considerable threat because it is in the Atlantic and the Barents Sea where the Soviets keep the bulk of their navy. It is perhaps this significant threat that has perpetuated the philosophy of prosecuting sea control before initiating power projection. Another option for power projection is an attack against the southern flank of NATO, and most considerations for this option are also directed against the mainland through the eastern Mediterranean Sea or the Black Sea, again going through the teeth of Soviet defenses provided through naval air, and the eastern Mediterranean and Black sea fleets. There are variations to these extremes, and one of them is outlined in this chapter.

The following table provides a general comparison of NATO versus Soviet naval forces in the Mediterranean:[27;49]

	Soviet		Totals		NATO							
	Black Sea	Med.			US	GB	FR	IT	SP	GR	TU	
Car. VTOL	1	0	1	0	0	0	0	0	0	0	0	0
Car. HELO	2	0	2	0	0	0	0	0	0	0	0	0
Car.	0	0	0	6	2	0	2	1	1	0	0	0
Subs	25	6-8	31-3	58	6	0	9	10	8	10	15	
Cbt. ship	27	6-8	83-5	343	14	0	21	70	63	62	113	

While some of the Soviet ships are more modern than many of the NATO vessels, there is nonetheless an overwhelming superiority in numbers toward the Allied side. The strength is even more biased when one includes the friendly control of the three major choke points, the Dardanelles, the Suez Canal and Gibraltar. Land and air power however belong on the other side. The WP has an almost two to one superiority in tanks (9500 vs 5820) and an almost five to one edge in fighters (1,695 vs 353)[40;285-7]. Clearly, the above force ratios lay a foundation not unlike that seen in the Falklands campaign.

At the present, NATO planning considers using the 6th U.S. Mediterranean Fleet to protect the southern Flank of NATO.[35: 43] This mission would include destroying or rendering impotent the Soviet Mediterranean Fleet. Given the overwhelming numerical advantage of NATO's navy and the disposition of the Soviet Fleet, taking it out of action should be neither

difficult nor time consuming, nor should it absorb all of the available resources since the NATO naval strength depicted in the preceding chart would receive a wartime augmentation of a U.S. Battleship SAG and one to two additional U.S. carrier battle groups.[28;34] It is unlikely that the Black Sea Fleet would become involved in a fight in the Mediterranean because it is guarding the vulnerable approaches into the Soviet Union through land lines of communication via Black Sea ports. To egress would also be complicated by the allied control of the Dardanelles.

Assuming away the naval threat in the south, the AFSOUTH (Allied Forces, Southern Region) Commander now has other options available for the application of his forces. Taking for granted that the neutral countries will either align themselves with the Allies, or at least allow overflight rights, one of these options includes providing direct support to the commander in the Central Region. Relocating a naval task force to the vicinity of the Ligurian Sea would both provide defensive advantages as well as put naval weapons in range of not only targets in the Central Region but also put them in a position to indirectly support the Central Region Commander.

Moving a naval force to the Ligurian Sea enhances its security since the most significant threat to this force would be WP air which would have to run a gauntlet of land based air surveillance and defense systems. Like the Argentines, the WP

aircraft would use the bulk of their fuel to get to and from the target.

Range rings have been drawn on a map at annex A. These ranges assume launch from a carrier in the vicinity of Genoa, the aircraft carrying maximum ordinance [no external fuel pods], and flying evasive flight paths. The latter may only be necessary as the aircraft approach the eastern boundary of West Germany, depending upon the situation on the ground or in the air. Current peacetime allocations include about 1.3 carrier battle groups in the 6th US Fleet. Wartime plans, however, increase this to three to four carrier battle groups.[28:34] With a carrier's average complement of 90 aircraft^[7:186], this addition of 180 to 240 planes would make a weighty contribution, especially if the two opposing air forces have neutralized each other.

The Tomahawks are currently only suited for fixed targets; however, even with this operational limitation they represent a major contribution in fighting the deep battle. Their utility will improve even more as they are fitted with improved Cruise Missile Advance Guidance Program enhancements which pinpoint targets to within inches.[35:43] With this kind of accuracy, the Tomahawk will be able to take out bridges, railroads, highway nodes, and logistics facilities west of the area indicated on the annex. While this doesn't destroy follow on forces, it does prevent or at least slow down their advance. This utilization would also isolate committed Pact forces.

In addition to this direct attack on committed and follow on forces in the Central Region, naval forces operating from the same area could indirectly influence that fight by attacking follow on forces in the Southern Region. If resistance in the South is stiff enough to prevent a penetration, it could tie down Soviet Southern Group of Forces and thereby prevent their commitment to the Central Region. A traditional invasion route into Northern Italy is from Yugoslavia, through the Gorizia Gap[see annex A1. Once through the narrow Gap, the terrain opens up to the flat Po river valley with minimal obstacles into the industrial and agricultural heartland of Italy. The Commander LandSouth has only an outnumbered air force and a few Lance missiles with which to fight follow on forces. Loss of this area would possibly take Italy out of the war and would pose the threat of outflanking AFCENT through France. Naval air and Tomahawks would make a significant difference.

This scenario demonstrates the benefits of using naval power as a ground force multiplier, especially in the employment of operational fires and illustrates the potential for the use of power projection, with or without gaining control of the sea. To adequately support the ground war in either region does not require employment of the entire fleet. A Battleship Surface Action Group (SAG) including an Aegis cruiser and three Aegis destroyers could launch approximately 200 Tomahawks carrying a total of about 100 tons of explosives.[7:84] Similarly, a SAG consisting of an Aegis cruiser, a guided missile destroyer and two Spruance class destroyers can carry out a conventional land

attack at 700 miles. They could routinely carry 60-100 Tomahawks which is the equivalent firepower of thirty loaded A-6Bs.[19:52] A Spruance class destroyer has a sixty one cell Tomahawk and anti submarine rocket launcher. Even if only half loaded with Tomahawks, that would provide the ground commander with the equivalent firepower of six A-6Bs heavy attack aircraft with full combat loads.[19:52] With the force array as depicted, the sea battle for the Mediterranean could still be in process as the above described ground support is being provided, much in the way the British Task Force Commander continued to support the ground war in the Falklands campaign with naval air and gun fire while simultaneously fighting for control of the air and sea.

The U.S. Army, like all successful ground forces, believes in seizing the initiative to accomplish the mission. FM 100-5 describes the object of all operations

"...is to impose our will upon the enemy, to achieve our purpose. To do this, we must throw the enemy off balance with a powerful blow from an unexpected direction, follow it up rapidly to prevent his recovery and to continue operations aggressively to achieve the higher commander's goal." [42:14]

Naval operational fires and carrier air, launched from the Mediterranean during the initial days of war provide that powerful blow from an unexpected direction.

CONCLUSION

This paper has not been an argument for a continental navy. Rather, it has been an attempt to outline the operational capabilities of a navy practicing a maritime strategy, with an emphasis on providing early support to the ground commander. This emphasis on power projection before the navy has had the opportunity to establish control of the sea, runs counter to the existing maritime strategy. Traditionalists feel that exposing the U.S. Navy in a power projection role, before the seas are under control, greatly increases the risk that those naval resources may be engaged by enemy air and sea assets. While aircraft carriers are expensive and limited in number, many naval officers would probably agree with Vice Admiral Mustin, a previous Commander, Striking Fleet Atlantic, when he said:

"In war, ships get sunk and men are killed. The Soviets acknowledge that a moving target ranging over thousands of square miles of blue water is much more survivable than a fixed airfield ashore. No one suggests that we should abandon all airfields in Norway at the start of hostilities, and yet some quake at the notion of less vulnerable carriers operating hundreds of miles at sea." [31;76]

In NATO, ground forces plan to fight their war by attacking the follow on forces. Since there are only limited ground systems and air forces available to attack deep, and since it is unlikely that NATO's military will be immediately resourced with an extensive capability to conduct FOFA, the power projection assets of a naval task force should be considered to support the ground commander when and where he needs it.

Contemporary maritime strategy considers the battle for the central region of Europe to be important, but if lost, it is only a lost campaign. The investment made by the U.S. Army and Air Force, with half their strength stationed in Europe and most of the rest scheduled to deploy there in war, suggests that this struggle will be more than a campaign. Losing the central region certainly would not be grounds for a U.S. capitulation, but it would force a significant NATO political military decision concerning what price would be paid to win it back. Even if the U.S. and whatever allies remained could muster the will and the resources to attempt to re-take Europe, it would be a monumental undertaking. A prominent maritime historian, Herbert Rosinski, speculates:

"From her position astride the great *Eurasiatic Plain*, Russia could by a few relatively short advances in Central Europe, the Middle East and possibly in North China make herself for all practical purposes mistress of the continental block of the Old World north of the great desert belt. This would not mean in itself that the sea powers would simply be constrained to bow without hope before her domination; but it would mean that in any conflict, whether with the traditional weapons or with the new instruments of the atomic age, they would find themselves so heavily out matched in man power, in resources, and above all in territory that their chances of a successful resistance would be precarious indeed." 13; 132₁

Mahan has said that nations having long borders with potentially hostile neighbors should concentrate their defense expenditure in their armies, and that nations can't have both a world class navy as well as an army. Both the U.S. and the U.S.S.R. have proved Mahan wrong. The U.S., a maritime nation, has a relatively strong army perhaps in large part because of her commitment to her continental allies in NATO. The U.S.S.R., a

continental nation, has a much improved navy perhaps because of the U.S. naval capability. As provided in preceding chapters, the Soviets intend to use their navy in a defensive role. The U.S. Navy is seen as more offensive in nature. The navy could significantly influence the ground war in the central region. It may be crucial that this support be provided in the early days, perhaps before the navy has had the opportunity to gain control of the sea. When and how the U.S. Navy supports the ground commander is a decision that must be made at theater, or perhaps higher level. That decision must be made after assessing the importance of the central region, and before the war starts because that decision will determine how and when forces are to be employed. Clausewitz considers these kind of decisions basic, but critical.

"The first, the supreme, the most far reaching act of judgment that the statesman and the commander have to make is to establish the kind of war on which they are embarking, neither mistaking it for, nor trying to turn it into something that is alien to its nature. This is the first of all strategic questions and the most comprehensive."2: 88

The advantage of employing navies in an uninhibited ground support role includes providing an immediate cost effective solution to the problem of not having sufficient long range weapons and intelligence systems to fight follow on forces. A more useful long term solution is to build more and better ground and air based systems to give the ground commander the capability to attack follow on forces. This option is only feasible if funds are available to support it. A former U.S. Ambassador to NATO has said that "...NATO needs to look for

leverage, synergy and multiplier effects.....rather than each nation doing more on its own."38; 19-20 Power projection in the central region is a solution in an environment of resource austerity. It also focuses forces against the enemy's main effort rather than violate the principle of mass. In contemporary exercises, however, naval assets are not even considered as an option to support the central battle, and even if they were, there is no system at the campaign level to coordinate this assistance in an expeditious manner.33; 33 This shortfall would have to be remedied if the navy is to be employed as the effective operational level force multiplier it so easily could be in this particular localized theater.

0.005
WEST EUROPE

ANNEX A

WEST EUROPE



• GORIZIA GAP

REPRO

GOVT EXPI CARL

BIBLIOGRAPHY

BOOKS

1. Brodie, Bernard, A Guide To Naval Strategy.
Princeton: Princeton University Press, 1958.
2. Clausewitz, Carl von. On War. Edited and translated
by Michael Howard and Peter Paret. Princeton:
Princeton University Press, 1982.
3. Couhat, Jean Labayle et al. Combat Fleets of the
World. Annapolis: Naval Institute Press, 1988
4. Corbett, Sir Julian S., Naval Operations Vol. 1.
London: Longmans, Green and Co., 1938.
5. Earle, Edward Meade, ed. Makers of Modern Strategy,
Military Thought from Machiavelli to Hitler.
Princeton, New Jersey: Princeton University Press,
1973.
6. Fox, Robert. Eyewitness Falklands: A personal
account of the Falklands Campaign. London:
Methuen, 1982.
7. Friedman, Norman. The U.S. Maritime Strategy.
London: Jane's Publishing Co., 1988.
8. Great Britain, Ministry of Defence. The Falklands
Campaign. London: HMSO, 1982.
9. Mahan, Alfred Thayer. The Influence of Sea Power Upon
History 1660-1783. Boston: Little Brown & Co.
1965
10. Martin, L.W., The Sea in Modern Strategy. New York:
Frederick A Praeger, 1968.
11. Paret, Peter ed. Makers of Modern Strategy from
Machiavelli to the Nuclear Age. Princeton, New
Jersey: Princeton University Press, 1986.
12. Potter, E.B. Sea Power, A Naval History. Annapolis.
Maryland: Naval Institute Press, 1981.
13. Rosinski, Herbert. The Development of Naval Thought.
Newport, Rhode Island: Naval War College Press,
1979.

ARTICLES

14. Brooks Linton, F. "Naval Power and National Security"
International Security [Fall 86] pp55-88.
15. Buckley, Wm. F. "How Much for Defense?" Kansas City Times [December 1 1988] Editorial.
16. Bull, Hedley. "Sea Power and Political Influence."
Adelphi Papers 122 [1976]: pp 1-9.
17. Chipman, Donald, D. "Rethinking Forward Strategy and the Distant Blockade". Armed Forces Journal International [August, 1987]: pp 82-88.
18. Duffner, R.W. "Conflict in the South Atlantic"
Air University Review [Oct, Nov 84] pp78-90
19. Froggett S.J. "The Maritime Strategy-The Tomahawk"
Proceedings [February 1987].
20. Friedman, Norman "US Maritime Strategy".
International Defense Review [No 7/1985].
21. Gray, Colin. "The Maritime Strategy-1988. Global Deterrent." Proceedings [February 1988] pp52-59.
22. Griggs, Maj. Roy F. "Maritime Strategy on NATO's Central Front." Military Review [April 1988] pp54-65.
23. Haines, Stephen. "Naval Support of Ground Operations"
NATO's Sixteen Nations. [November 1987] pp36-44.
24. Hickok Stephen, W. "Follow on Forces Attack".
Unpublished paper, Naval War College, May 1988.
25. Hughes, Capt. Wayne P. "On the Integration of Naval Tactics and Maritime Strategy". Unpublished paper
Naval Post Graduate School.
26. Hunt, Barry. "The Outstanding Naval Strategic Writers of the Century." Naval War College Review [September-October 1984]: pp 86-107.
27. Kolodziej, Edward A. "The Southern Flank: NATO's Neglected Front." AEI Foreign Policy and Defense Review [Vol. 6 No. 2 1985] pp45-57.

28. Lehman, John F. Jr. "The 600 Ship Navy" Proceedings
[January, 1986]: pp 30-40.
29. Liebstone, Marvin "NATO's Critical Options."
Strategic Review [Spring 1988] pp43-50
30. Lind, William S. "The Maritime Strategy-1988, Bad
Strategy." Proceedings [February 1988] pp 52-59.
31. Mearsheimer, John J. "A Strategic Misstep: The
Maritime Strategy and Deterrence in Europe."
International Security [Fall 1986] pp3-52.
32. Nott, John. "Falklands Campaign." Proceedings
[May 1983].
33. Prokopowicz, Col. John, H. "Intelligence Exchange-The
Critical Element in Joint Warfare Prosecution".
Military Intelligence [January 88] p 33.
34. Watkins, Admiral James, D. "The Maritime Strategy."
Proceedings [January, 1986]: pp 3-17.
35. Weickhardt, George E. "US Maritime Strategy and
Continental Options." Strategic Review [Fall
1988] pp36-44.
36. West, F. J. Jr. "Maritime Strategy and NATO
Deterrence." Naval War College Review
[September-October 1985] pp 7-18.
37. West, F. J. Jr. "The Next Step" Proceedings
[January 1987]: pp 40-49.
38. Will, George F. "Soviet Military hasn't changed, says
Supreme Allied Commander." Kansas City Times
December 5 1988. Editorial.
39. _____ "Senate Hearings Assess INF Treaty's
Impact on NATO." Army [March 1988] pp 16-29.
40. _____ "Janes Defence Weekly" [15 Aug. 87]
41. _____ "Soviet Military Power" [1986]

FIELD MANUALS

42. Field Manual 100-5, Operations Washington, D.C. HQ
Department of the Army, 1986