

(Unclassified Paper)

NAVAL WAR COLLEGE  
Newport, R.I.

Influencing the World-Island:  
*A Maritime Strategy for the 21<sup>st</sup> Century*

By

Mark A. Becker  
Lieutenant Commander, U.S. Navy

A paper submitted to the Faculty of the Naval War College in partial satisfaction of the requirements of the Department of National Security Decision Making.

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: Mark A. Becker

21 October, 1999

20000920 161

Joe Caneva  
Mr. Joe Caneva, SFP Instructor

1. Report Security Classification: UNCLASSIFIED			
2. Security Classification Authority:			
3. Declassification/Downgrading Schedule:			
4. Distribution/Availability of Report: DISTRIBUTION STATEMENT A: APPROVED FOR PUBLIC RELEASE; DISTRIBUTION IS UNLIMITED.			
5. Name of Performing Organization: Dean of Academics Office			
6. Office Symbol: 1		7. Address: NAVAL WAR COLLEGE 686 CUSHING ROAD NEWPORT, RI 02841-1207	
8. Title (Include Security Classification): Influencing the World-Island: A Maritime Strategy for the 21 <sup>st</sup> Century			
9. Personal Authors: Mark A. Becker, LCDR, USN			
10. Type of Report: FINAL		11. Date of Report: 21 October 1999	
12. Page Count: 24			
13. Supplementary Notation: A paper submitted to the Dean of Academics, Naval War College, for the Naval War College Foundation Prize essay competition. The contents of this paper reflect my own personal views and are not necessarily endorsed by the NWC or the Department of the Navy.			
14. Ten key words that relate to your paper: Maritime Strategy, High-Low Mix, Mahan, MacKinder, small, Ships, Littoral, Sea Control, Arsenal, Pax Americana			
15. Abstract: Building upon a grand strategy vision of primacy, an analytical perspective of realism, and applying the strategic approaches of top-down, capability/mission, hedging, and technology, a new maritime strategy for the 21st Century has been formulated. This strategy is based upon an offensive littoral capability, an offensive/ defensive missile capability, and a sea control, open ocean capability. Concerned only with the venue of surface warships, this paper will not touch on the areas of nuclear or aviation forces that would also constitute part of a maritime strategy. This paper does not intend to propose a specific small ship design or define a specific number of ships needed to satisfy total ships strength. It merely intends to establish the requirement for a new maritime strategy and a corresponding mix of "high-low" ships needed to accomplish the United States Navy's global commitments within a National Security Strategy of Engagement and Enlargement and within a constrained resource environment.			
16. Distribution / Availability of Abstract:	Unclassified X	Same As Rpt	DTIC Users
17. Abstract Security Classification: UNCLASSIFIED			
18. Name of Responsible Individual: Dean of Academics, Naval War College			
19. Telephone: 841-2245		20. Office Symbol: 1	

INFLUENCING THE WORLD-ISLAND: .....	2
<b>A MARITIME STRATEGY FOR THE 21<sup>ST</sup> CENTURY .....</b>	<b>2</b>
ABSTRACT .....	2
DEFENSE PLANNING FOR THE 21 <sup>ST</sup> CENTURY .....	3
OBJECTIVES .....	6
SECURITY ENVIRONMENT .....	7
RESOURCE CONSTRAINTS .....	9
CURRENT NAVAL STRATEGY-LITTORAL.....	11
CONCURRENT NEED FOR A SEA CONTROL STRATEGY .....	12
WHAT SHOULD THE US MARITIME STRATEGY BE?.....	13
FORCES (MEANS).....	14
RISKS AND ALTERNATIVE STRATEGIES.....	20
CONCLUSION.....	21
BIBLIOGRAPHY .....	23

---

---

# INFLUENCING THE WORLD-ISLAND: A MARITIME STRATEGY FOR THE 21<sup>ST</sup> CENTURY

---

## ABSTRACT

Building upon a grand strategy vision of primacy, an analytical perspective of realism, and applying the strategic approaches of top-down, capability/mission, hedging, and technology, a new maritime strategy for the 21st Century has been formulated. This strategy is based upon an offensive littoral capability, an offensive/ defensive missile capability, and a sea control, open ocean capability. Concerned only with the venue of surface warships, this paper will not touch on the areas of nuclear or aviation forces that would also constitute part of a maritime strategy. This paper does not intend to propose a specific small ship design or define a specific number of ships needed to satisfy total ships strength. It merely intends to establish the requirement for a new maritime strategy and a corresponding mix of "high-low" ships needed to accomplish the United States Navy's global commitments within a National Security Strategy of Engagement and Enlargement and within a constrained resource environment.

## DEFENSE PLANNING FOR THE 21<sup>ST</sup> CENTURY

*There is no complete geographical region either less than or greater than the whole of the earth's surface.*

E.W. Gilbert, *The Scope and Methods of Geography and The Geographical Pivot of History*

For the foreseeable future, the successful powers will be those that have the greatest industrial and informational basis. It does not matter whether they are in the center of a continent or on an island; those nations that have the power of industry, information, and invention will be able to defeat or withstand all others. With the decline of the Soviet Union as a peer competitor and without the prospect of a new peer competitor visible on the horizon, is the world entering a period of Pax Americana? If so, how prepared is America for this preeminent role? Is the composition of its armed forces designed to meet this challenge? How long will it be able to sustain this period of prosperity and peace? And is it properly using this inter-war period to prepare for an uncertain future?

This role of leadership, in which the United States is cast as the guardian of the free world, must be carefully safeguarded and diligently sustained; any

### What is Pax Americana?

Pax American is an adaptation of the term that the author, Paul M. Kennedy, used in his book, "The Rise and Fall of British Naval Mastery" when referring to that time of peace for Great Britain between 1815 and 1859. "Pax Britannica. . . a long period of tranquility efficiently and firmly supervised by the Royal navy, and of an overwhelmingly powerful nation upon which all others were to a varying extent dependent. . . Great Britain was the only really industrialized nation. . . predominance in commerce, transport, insurance and finance. . . extensive colonial empire. . . she managed to maintain this dominance, this peace of Britain, at a cost to the nation of 1 pound or less per annum per head of population in defense expenditure. . . This, then, was the three-sided equation which the Pax Britannica represented. An adequate, not to say overwhelming, world naval force which utilized a whole host of bases and protected an ever-growing global trade; an expanding formal empire which offered harbour facilities for the navy and focal centres of power, together with a far larger informal empire, both of which provided essential raw materials and markets for the British economy; and an industrial revolution which poured out its products into the rest of the world, drew large overseas territories into its commercial and financial orbit, encouraged an enormous merchant marine, and provided the material strength to support its great fleets."

Kennedy, *Naval Mastery*, pp. 149-159

alternative to strong leadership by the United States now can only result in greater risks of aggression later. As the United States accepts the global role assigned to it, a national security strategy and associated military strategy must be created which matches the nation's foreign policy and national interests. The military strategy must be flexible, affordable, and proportionally balanced across the armed forces. In preparing a far-sighted strategy, the United States must: first, attempt to envision plausible characteristics of the security environment likely to face our nation; second, analyze the implications for use of power in this security environment; third, deduce some of the requirements for armed forces based on these analyses; and finally, consider some of the traditional problems. If tomorrow's armed forces fail in any respect to have greater relative effectiveness than their antecedents, it will be because America has not peered long and hard enough into the dense mists of the future.

But what military strategy the United States should pursue is the question. Should it pursue a continental strategy or a maritime strategy? Should we adapt our strategy to follow the teachings of Mackinder or Mahan? Both are relevant and correct in their appreciation for where a nation is located geographically and where a threat to national security might exist. If and when the United States foresees the other countries of North and Central America as the greatest threat to national security then I believe that a continental strategy in line with the

#### MACKINDER VS MAHAN

Mackinder viewed the future power of the world as being continental in nature, specifically in the region around the Caucasus, which he referred to as the Heartland. "Who rules East Europe commands the Heartland: Who rules the Heartland commands the World-Island: Who rules the World-Island commands the World."<sup>1</sup> Mahan viewed the world similar to the way in which Sir Walter Raleigh and Admiral Nelson viewed it. "Whosoever commands the sea, commands the trade. Whosoever commands the trade, commands the riches of the world, and consequently the world itself." Mahan saw maritime commerce strength in peacetime as the most telling indicator of a nation's overall endurance during war. The concept of command of the seas does not connote that a given naval power must be omnipresent in the world's oceans at all times. Rather, it must be able to mount sufficient capability and strategy to concentrate naval resources at any location of vital interest in the world, and defeat the combined naval forces of the strongest adversary"<sup>2</sup>

<sup>1</sup> H.J. Mackinder

<sup>2</sup> John F. Lehman, Jr., "Rebirth of a U.S. Naval Strategy," *Strategic Review*, Summer 1981, p. 9-11

teachings of Mackinder will be in order. Conversely, as long as the United States views Europe, Africa, and Asia as more likely to produce American immersion in economical, financial, and military issues, then a maritime strategy in line with the teachings of Mahan is both necessary and proper. What then should our maritime strategy be? According to the Chief of Naval Operations:

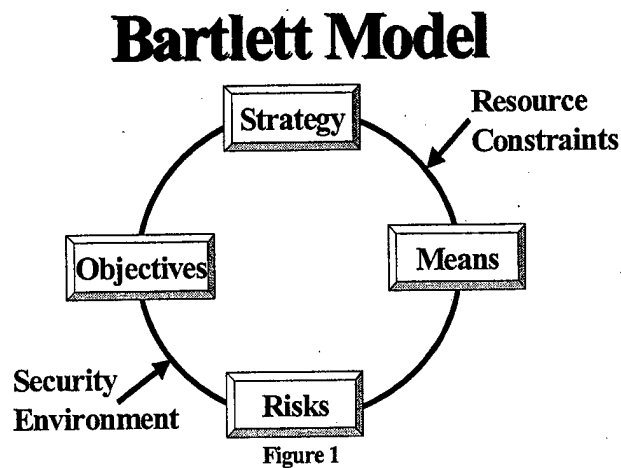
The purpose of the U.S. Navy is to influence, directly and decisively, events ashore from the sea— anytime, anywhere. . . . We cannot sacrifice today's readiness to invest in tomorrow's promises. . . . Mahan was right: navies are about more than just fighting other navies; they are powerful instruments of national policy whose special strength stems from their ability to command the seas. . . . We will have to merge our sea control seamlessly into control of the littorals and fully integrate our capabilities into the land battle.<sup>1</sup>

With this premise in mind, let us consider a new maxim for our maritime strategy. Physically the earth's surface is 70 percent water. When combining the geographic reality with the globalizing effects of commerce, finance, and information it can easily be argued that our continents have become a "world-island." Maritime strategies are key to island entities. Therefore, whosoever commands the seas influences this world-island.

As the United States heads into the 21<sup>st</sup> Century, in order to support a new maritime strategy, our current maritime force structure must be transformed from one of primarily high value, high technology, and multi-mission capable capital ships to a proportionally balanced mix of existing capital ships and affordable, state-of-the-art, modular, tailorable single-purpose ships. This transformation must take place and can be accomplished without a substantial increase in the defense budget. This "high-low" mix of warships is imperative if the United States is to continue its role as the influencer of the world-island and concurrently attempt to live within an environment of economic constraint yet expanded military involvement. It is also the best way to elude the trap of imperial overstretch to

which succumbed the previous empires of Athens, Great Britain, and, most recently the Soviet Union.

Using the Bartlett model (Figure 1) as the basic outline structure, this paper will examine the objectives, security environment, resource constraints, national security and military strategies, means, and risks which will mold the new maritime strategy.



## OBJECTIVES

Modern history has seen the emergence of the United States as a world power. Throughout this evolution, we as a nation have developed a heritage based on our worldwide interests, our vital alliances, the advantage of global communications, and our participation in the growth and expansion of the global economy. These factors have allowed us to grow and prosper both economically and politically. Throughout this period, the United States has designed its national security strategy around the pillars of deterrence, forward defense, and strong alliances. It is not the objective of America to lose its current position as world leader and influencer. Consequently, it is crucial that the United States

---

<sup>1</sup> Admiral Jay Johnson, U.S. Navy, "Anytime, Anywhere: A Navy for the 21<sup>st</sup> Century," *Proceedings*, November 1997, pp. 48-49



develop a strategy consistent with our national interests and which strikes a balance with our security responsibilities and global commitments. This requires balanced capabilities for our force projection and sea control. The current maritime strategy of the United States over-emphasizes force projection in the littorals and thus risks insecure seas in this new century. It is in America's interest to safeguard freedom of navigation, and this need argues for different ships designed for a different mission than littoral warfare. The current Information Age and its technology now have opened the door to the possible distribution and dispersal of combat power through the use of smaller surface ships. This creates an opportunity to provide balanced force projection and sea control capabilities economically..

## SECURITY ENVIRONMENT

*Overall strategy must handle multiple scenarios.*

Richard K. Betts, "Conventional Strategy: New Critics, Old Choices,"  
*International Security*

The historical trend of globalization brings with it both the promise of prosperity and the assurance of unpredictability. Globalization leads to equalization. As each nation prospers through global commerce, finance, and information exchange, the edge that the United States currently enjoys in these areas will slowly but surely dwindle. America may have to surrender local naval mastery in certain regions if it now does not prepare for this contingency. The population growth of the United States during the next century will be followed by an increased demand for foodstuffs and raw materials, resulting in heightened dependence on the global market and greater susceptibility to foreign intervention in the way of sanctions and trade limits. An expanding global economy brings with it an increased reliance on surface ships to transport products.

As globalization equalizes the scale of world power, America will have to face the realization that it is no longer the sole superpower and instead may be confronted with a peer competitor in a multi-polar world. Geography, industry, information, and technology may promote an existing rising power to peer status or awaken nations long dormant into becoming regional powers. The growing competition and reliance on oil may become the catalyst that allows a nation in the Middle East, Caspian Sea Region, or Africa to emerge as a regional hegemon and potential rival. The rebirth of nationalism which appears to be mounting in the Balkans, the Caucasus, Eastern Africa, Indonesia, the Ukraine and Russia may create security risks in those areas. Likewise, China may seize the opportunity provided by the decline of the Soviet Union to fill the existing vacuum in the Russian Far East.<sup>2</sup> And finally, the developments in potentially pivotal areas such as Korea, South America (Brazil in particular), the Mediterranean (Turkey, Algeria, Egypt, Romania, and Bulgaria), South Africa, Pakistan, India, and Indonesia provide the opportunity for these littoral regions to become major influencers in the sphere of world affairs.<sup>3</sup> The implications of this security environment are clear. The United States cannot afford to concentrate on one area of the world at the expense of another. History has made this quite evident. Navy involvement in peacemaking operations has grown. From 1970 to 1989 the number of crises involving the U.S. Navy averaged 2.1 per year. From 1990 to 1996, with far fewer forces, the Navy responded to an average of 2.6 crises per year.<sup>4</sup> These activities have made it harder for the Navy to sustain even its present, reduced force composition, let alone restore and enhance it. The future diffusion of power and the global nature of oceanic trade and commerce dictate a

---

<sup>2</sup> Valery V. Tsepikalo, "The Remaking of Eurasia," *Foreign Affairs*, March/April 1998, p. 112

<sup>3</sup> Robert S. Chase, Emily B. Hill, and Paul Kennedy, "Pivotal States and U.S. Strategy," *Foreign Affairs*, January/February 1996, pp. 33-51

<sup>4</sup> Data from C.B. Barfoot, Center for Naval Analyses representative, CINUSNAVEUR, December 1997

division of naval effort into two mainstreams: power projection and sea control. In order to survive, prosper, and continue to influence the world well into the 21<sup>st</sup> Century, America must remain engaged throughout the globe,<sup>5</sup> and it must do this in a manner that is affordable, politically acceptable, and achievable.

## RESOURCE CONSTRAINTS

*Strategy is the art of making realistic choices in a context of constrained resources. . . . The real issue is not whether we need a strong navy— of course we do. We must remain capable of commanding the seas at times and places of our own choosing in order to carry out any force-projection strategy. The issue is rather what kind of navy we can afford for this purpose, given other equally pressing needs. It is a question of priorities for the allocation of constrained resources, and of the likely implications for our strategy of the overall force posture that results.*

Robert W. Komer, *Maritime Strategy or Coalition Defense*

Navies cost money— lots of money. The history of America's rise as a naval power throughout the 20<sup>th</sup> Century has revealed a corresponding increase in the size of a combatant vessel as collateral missions and sophisticated technical weapons systems were added to handle these expanding tasks. As the size of vessels steadily rises because of military and technical reasons, so their cost has increased also— but at a far greater pace. This trend suggests that the number of Navy ships is going to decline. The reason is that the types of ships that are being built are so expensive.<sup>6</sup> With fewer and fewer ships in its inventory the question must be raised as to how the United States will preserve its credible deterrence and defense at a cost that is politically acceptable. Deterrence and forward presence require numerous peacetime forces as contrasted to mere wartime mobilization. An equally

---

<sup>5</sup> Department of the Navy, 1999 Posture Statement: America's 21<sup>st</sup> Century Force (Washington, 1999), p. 11

<sup>6</sup> Komer, Comment on Stansfield Turner and George Thibault, "Preparing for the Unexpected: The Need for a New Military Strategy," Foreign Affairs, Fall 1983, p. 457

important question concerning deterrence and defense is the one concerning present requirements and modernization. "We're like a bus company trying to maintain the same schedule with fewer buses— each bus has to cover more territory per day. Increased wear and tear result. Increased repairs are required."<sup>7</sup> A new maritime strategy, which promotes the building of affordable ships, provides the perfect answer to this dilemma. While providing the numerous forces needed for deterrence and present operational requirements, it also ideally provides the platforms essential for methodical modernization and future defense.

Military conservatism and a shift in focus towards domestic issues and concerns tend to prevail in long periods of peace. During such times, the battle for defense funding, even as budgets rise, follows familiar paths, skirting controversial questions and avoiding delays that new ideas inevitably prompt.<sup>8</sup> The current Carrier Battle Group navy cannot meet our basic strategic needs. As long as resources remain constrained, the United States must rethink its strategy and ensure that its forces are designed to preserve its vital interests. "We must relate our conventional forces primarily to a strategy designed to preserve our vital interests, if necessary at the expense of much else."<sup>9</sup> Otherwise, this country will find itself with a naval force structure that does not support its security strategy.

---

<sup>7</sup> Captain A. F. Schade, The Strategic Importance of Control of the Seas (Cambridge, Ma, Center for International Affairs, January 1960), p. 29

<sup>8</sup> Elmo Zumwalt and Worth Bagley, "Military doctrines old and new: conservatives retain upper hand," Washington Times, 21 February 1983, p. 2C

<sup>9</sup> R. W. Komer, Maritime Strategy or Coalition Defense (Cambridge, Ma., ABT Books, 1984), p. 70

## CURRENT NAVAL STRATEGY-LITTORAL

The Navy and Marine Corps operate forward to project a positive American image, build foundations for viable coalitions, enhance diplomatic contacts, reassure friends, and demonstrate U.S. power and resolve. The end of the Cold War brought the end to a blue water, peer competitor. In searching for a role in the new security environment, the Navy perceived that the future of naval conflict lay in the littorals rather than the oceans of the world. Since the early 1990s, the United States Navy has developed “. . . From the Sea,” “Forward . . . From the Sea,” and “Anytime, Anywhere,” strategic visions that promulgate this shift of naval focus from blue water to littoral zones. They each argue that the Navy must be engaged in forward areas, preventing conflicts and controlling crises through power projection and forward presence. They strongly emphasize a tailored, capable, and affordable navy.<sup>10</sup> The current and future navy as proposed and budgeted, however, appears to be inconsistent with this premise. Existing naval warships and proposed designs— CG-47 Ticonderoga Class, DDG-51 Arleigh Burke Class, and DD-21 Land Attack Destroyer— seem to be following a one-size-fits-all requirement, which stems from the understandable concern that, if you are going to build only one class, it had better be good.<sup>11</sup> Each of these designs is extremely expensive and cost prohibitive to build in large enough quantities required to satisfy all of the United States’ current global commitments.

---

<sup>10</sup> U.S. Navy Department, 1992 Posture Statement, . . . From The Sea (Washington, 1992), pp. 7-11

<sup>11</sup> James L. George, “Where are the [Experimental] Dreadnoughts?” Proceedings, October 1999, p. 68

## CONCURRENT NEED FOR A SEA CONTROL STRATEGY

There is no forward presence on the sea nor power projection— littoral warfare— from the sea without control of the sea. “Sea control is absolutely necessary, the thing without which all other naval missions, and most national missions, precariously risk catastrophic failure.”<sup>12</sup> Sea control reserves the United States the right to participate in a foreign sphere of influence. It provides the position to exert direct military pressure upon the life of our enemy ashore while concurrently preventing his ability to exert direct military pressure on us.

The true use and control of the seas is the central link in the chain of exchange by which wealth accumulates in the vitality of national economic life. If we examine more closely the rise and fall of the maritime states, one lesson clearly emerges: dominant sea power resides not in the nation which launches the largest merchant fleet per se, but with the state that reinforces the sea-fairing prosperity with balanced economic growth. Naval mastery is also taken to imply that the nation achieving it will usually be very favorably endowed with many fleet bases, a large merchant marine, considerable national wealth, etc., all of which indicates influence at a global rather than at a purely regional level.<sup>13</sup> If the United States can control the 70 percent of the earth’s surface that the seas comprise, it can achieve the following benefits. First, it would ensure the continuous flow of resources and industrial output throughout the free world. Second, it guarantees the logistic support to allied countries, most of which we are committed to defend against aggression. Third, it allows the U.S. to bring to bear preponderant military strength in areas of crisis and tension almost anywhere in the world. The stabilizing and deterring effects of strong forces whose intentions are recognized

---

<sup>12</sup> Admiral J. Paul Reason, *Sailing New Seas* (Newport, Naval War College Press, 1998), p. 18

<sup>13</sup> Paul M. Kennedy, *The Rise and Fall of British Naval Mastery* (London, The Ashfield Press, 1983), pp. 2-9

as not aggressive cannot be measured, but have frequently been demonstrated. Fourth, it allows us to move a significant portion of our deterrent, retaliatory strike forces to the oceans, thereby making them much less vulnerable. Fifth, it would help assure equitable use of the fisheries and other maritime resources. Sixth, it would accommodate testing, missile ranges, and specialized operations which should not for reasons of safety be conducted on land.<sup>14</sup> Seventh, it would allow the U.S. to exert military-economic pressure on the enemy at times of war. Sea control can provide an economy of means. Sometimes it may be the only means of forcing the decision we seek. At other times, it may provide the means of exerting secondary economic pressure. Sea control can cripple many nations' economies.

Traditionally it has been the side with the longer purse that has prevailed. Sea control can provide time for political and military maneuver to reduce the dangers of undue speed in action—it can be used to avoid “trigger happy responses.” Eighth, sea control is vital for assured access—for providing the needed capability for forced entry into hostile areas such as choke points, sea ports of debarkation or air ports of debarkation. A sea control force can provide a transition force awaiting the arrival of littoral combatant forces. And tenth, sea control forces provide the visible symbols of U.S. commitment throughout the world.

#### WHAT SHOULD THE US MARITIME STRATEGY BE?

*Relative power, not absolute power, is the only meaningful measure of the adequacy of a conventional force.*

Richard K. Betts, “Conventional Strategy: New Critics, Old Choices,” *International Security*

---

<sup>14</sup> Schade, Control of the Seas, pp. 9-25

The sea is the greatest of all highways. Our maritime strategy must satisfy several conditions. First, it must fit well into the national security strategy. Second, it must be effective in both peace and war. Third, it must remain public—it must remain explainable to those who assign its resources. Fourth, it must be flexible and agile; able to move forces wherever they are needed in the world. Fifth, it must provide deterrence. It must create a credible threat to a potential adversary should he break the peace. Sixth, it must be able to seize the initiative. We must be able to get there first with the most. Seventh, it must be able to carry the fight to the enemy; to allow us to fight on their home turf. Eighth, it must not only deal with the forces we have available today but must also take into account the forces we can build tomorrow. Ninth, it must be affordable. Tenth, it must be balanced between sea control and power projection.

“ . . . The quantitative balance must remain an important element in discussion because it is the closest thing we have to a simple index of relative power.”<sup>15</sup>

#### FORCES (MEANS)

*How to bring the navy into balance by supplementing the high-performance ships it was building in small numbers, because they were so expensive that small numbers were all it could afford, with new types of ships that had adequate capability for many missions and at the same time were inexpensive enough to build in the larger numbers required for an American naval presence in many parts of the oceans. . . . To perform both missions [sea control and power projection] and be the best balanced, most powerful navy the world has ever seen.*

Elmo R. Zumwalt, Jr., Admiral USN (Ret), *On Watch: A Memoir*

---

<sup>15</sup> Ibid, p. 142



One lesson of the British loss of the HMS Sheffield during the Falklands War is that navies should distribute their power and value over as many ships as possible rather than concentrating them in just a few. An enemy is almost bound to seek out and attack these high-value ships. For simple survival our naval power must be distributed over more ships. The loss of three or four of the Navy's capital ships would be a major catastrophe. This risk argues for having numbers of ships. Sea control during times of war is ultimately a war of attrition and losses are inevitable. We cannot currently afford high attrition in ships because they are so expensive, even though we must expect some.<sup>16</sup>

Two of the greatest determinants of tactical naval victory have always been strong numbers and successful scouting. For these purposes it is better to have a large number of light ships than a small number of heavy ones. Seven, five, or even three moderate warships are better than one supership. It has always been numbers rather than individual capability that have dominated battle. Smaller ships are naturally more stealthy due to their smaller radar cross section and therefore more difficult to locate. The smaller the target, the more difficult for the enemy to detect, identify and home a weapon onto it. Telltale signatures increase with size. A large ship offers a large radar return, puts off more heat, disturbs the earth's magnetic field more, and is more visible than a small ship. Ships whose signatures stand out from others in almost any dimension are more likely to be singled out by homing weapons.

Small ships also increase the ability to perform multiple missions simultaneously. They are able to provide individual ships to handle missions such as carrier shotgun, theater

---

<sup>16</sup> Turner, Preparing, p. 125-127

air defense roles, undersea warfare screen, maritime interdiction force components, and advance scouting assets.

“The lethality of weapons has increased by five orders of magnitude—that is, one hundred thousand times—between the middle of the sixteenth century and the present time. . . While weapon lethality on the battlefield grew, the rate in personnel casualties per unit time shrank. Why? One prominent reason was the increased dispersion of troops on the battlefield.”<sup>17</sup>

Distribution of small ships provides defense in mass. In war, ships and aircraft will be lost at an agonizing rate.<sup>18</sup> The strategic imperative therefore is to buy enough time to deliver a massive strike ashore.<sup>19</sup> Small ships can provide focused and heavy firepower from distributed sources. Distribution provides the ability to decouple core capabilities such as weapons, sensors, and command and control from platforms. The concept of network-centric warfare supports the ability to disperse forces while using command and control to concentrate firepower from dispersed formations and dispositions. Dispersion also increases network survivability and complicates an adversary’s scouting problem. Dispersion of small ships also helps reduce the historical tendency towards risk aversion. History shows that military commanders in the field have a tendency to back away from opportunities if the odds of winning are not very high and the consequences of defeat would be high. This tendency has already beset a U.S. Navy whose fighting power is concentrated in its few large carriers.<sup>20</sup>

The prominent trend in defense is away from survivability through armor, compartmentation, bulk, and damage control, and toward cover, deception, dispersion, and

---

<sup>17</sup> Ibid, p. 155

<sup>18</sup> Ibid, p. 180

<sup>19</sup> Ibid, p. 161

<sup>20</sup> Turner, Preparing, pp. 131-132

maneuver. The smallest unit that can be dispersed is a ship. When dispersion is an important means of defense, small ships and distributed firepower are important advantages.<sup>21</sup>

Two trends have appeared in maneuver today: a shift of emphasis from speed of platform to speed of weapon and more emphasis on scouting. The significance of this development is that firepower might be more easily concentrated at long range, when naval forces are physically divided. Historically, maneuver has been used for three purposes: advantageously concentrating offensive or defensive force; striking more quickly; and protection by evasion of weapons.<sup>22</sup>

Since the 17th Century, warships have tended to evolve into specialized types; the "ship-of-the-line" or capital ship— meaning strong enough to fight in the line— and the frigate or cruiser which was generally swifter and more maneuverable. Since the battleship was so often condemned for its costliness— as are the modern aircraft carrier and AEGIS destroyer and cruiser— it is worthwhile to examine the lower as well as the upper limits of ship size. In other words, considerations of economy dictate the very existence of ship type.<sup>23</sup> What then should be the considerations and capabilities designed into new classes of small ships? First, they should be a combination of both general purpose and specialized ship types. Second, they should more or less resemble in size the destroyers of the past— roughly between 1,500 and 3,000 tons. Third, they should assist the Navy and Coast Guard with achieving a shared purpose and common effort focused on tailored operational integration to maximize our joint effectiveness across all maritime roles. Fourth, they should be affordable— somewhere around the \$200-350 million dollar price range. They should be

---

<sup>21</sup> Captain Wayne P. Hughes, Jr., USN, Retired, Fleet Tactics: theory and practice (Annapolis, Md, Naval Institute Press, 1986), pp. 158-162

<sup>22</sup> Hughes, Fleet Tactics, pp. 148-151

<sup>23</sup> Bernard Brodie, A Guide to Naval Strategy (Princeton: Princeton University Press, 1958), pp. 16-21

designed with a lower cost per unit using simpler technology to reduce procurement cost and maintenance loads. Fifth, they should have survivability built into them depending on where their mission takes them. More survivability for littoral warships and decreasing survivability the further from the fight they are expected to operate. Sixth, they should be built in such quantities to ensure that America can meet its strategic commitments.<sup>24</sup> A total force of somewhere between 400-600 ships should be maintained for this reason.

How should smaller ships fit into the battle group and supplement and complement existing capital ships? The smaller ships should be used through the incorporation of three separate task groups within a Battle Group. These task groups would compose a littoral task force, an arsenal task force, and a sea control task force. The solution to the problem of existing capital ships is to deploy big carriers out of reach of cruise missiles and other assured access threats and replace them with low-value ships that at the same time have a defensive capability.<sup>25</sup> The Littoral Task Force would be designed to conduct the land attack close ashore, to directly support Operational Maneuver From The Sea, and to provide direct and indirect fires through extended range guided munitions (ERGM) and electro-magnetic rail guns (EM Guns). The formation of this task force is consistent with the premise that domination of the littoral waters opposite the enemy coast will be necessary to support and sustain war on land. It also follows from the belief that littoral combatants should be a minor part of the Navy in terms of cost and personnel, but should be numerous and capable of taking a disproportionately large share of losses in terms of number of ships. It follows that the small inshore combatants must have small crews with short mission times. Sustainable in forward areas through the use of a flotilla of surface vessels operating from a

---

<sup>24</sup> James H. Webb, Jr., "The Silence of the Admirals," Proceedings, January 1999, pp. 33-34

<sup>25</sup> Zumwalt, On Watch, p. 76

controlling and sustaining mother ship, tender, or shore site. A crew size of approximately 50-100 should be considered for design purposes. This task force would also be utilized for mine clearing, mine laying, inshore surface warfare, shallow water undersea warfare, patrol and scouting, mark and trail, amphibious operations, raids and other special operations, and blockade, inspection, seizure, and prize crew duties. The littoral task force ships trade off size and multi-mission capabilities for specific firepower capabilities and survivability.

The second task force, the Arsenal Task Force, would be stationed well off the littoral and have a reduced force protection requirement. This task force would consist of small ships and existing capital ships designed as VLS Platforms and would utilize their vast inventories of cruise missiles and guided missiles. This force will be designed to complement both the Littoral Task Force and the Sea Control Task Force. It would provide deep strike capability in the form of cruise missiles to support the littoral campaign while concurrently serving as a screen for the sea control forces. It need only be better when operating as a blue-green combination than blue operating alone. The arsenal task force trades off survivability and naval gunfire for massive missile magazines and air defense fire control radar.

The Sea Control, or Maritime Task Force would consist of small ships and existing capital ships designed to function as carriers, force protection assets, and logistic and sustainment ships. This force would provide the hub and focal point for the initially deployed Battle Group and constitute the nucleus from which to disperse. It would be used to deter local aggression, protect sea lines of communication, serve as a visible symbol of our country's commitments, protect U.S. interests—specifically freedom of navigation—and allow us to attack as far forward as possible, and be globally deployed well before hostilities begin. The sea control task force trades off survivability and massive missile magazine

capacity for specialization in force protection capabilities such as undersea warfare, surface warfare, air warfare, theater missile defense, and large-deck carriers capable of providing carrier air patrol and deep strike interdiction.

We should seek to fight on terms that are advantageous to us. We should be offensive in orientation. We should choose the time and place of naval engagements. And we should provide multiple options and flexibility in operations. We should seek to increase the cost of victory for the enemy to a point that it is unacceptable. A three-tiered task force approach provides all this.

### RISKS AND ALTERNATIVE STRATEGIES

Every strategy brings with it an element of risk. A maritime force structure based upon an increase in smaller ships posts a heavy gamble on whether network-centric warfare will deliver on its promise of massing combat power from distributed sources. It also forces greater reliance on the entire battle group to coordinate its offense and defense and minimizes the potential for individual ships to perform and survive in a stand-alone role. Specialized, single-mission platforms appear to be less capable and cannot be assigned multiple tasks. They fail as general-purpose—jack-of-all-trades—types of ships. Building small ships can also be misinterpreted—they can be viewed as nothing more than cheap ships, incapable of rigorous battle group operations. They may be designed as ineffective platforms or used incorrectly for the mission for which they were initially designed. Witness the FFG-7 Oliver Hazard Perry Class of warships designed in the late 1970s as an example. Originally designed as “low-end” ships as part of the Admiral Zumwalt’s “High-Low” mix strategy and intended as a patrol vessel or as an escort for convoys of merchantmen or naval

auxiliaries, they were quite often used as part of a carrier battle group and have been considered quite inadequate for this role.<sup>26</sup>

The ultimate way to minimize risk and maximize the chances for success is to hedge your bets with a combination of strategies. "The choice between simple and sophisticated systems is not dichotomous; the logical solution is a 'high-low mix,' combining both for a force structure of balanced capability and cost."<sup>27</sup>

## CONCLUSION

*If the object of naval warfare is to control communications, then the fundamental requirement is the means of exercising that control. Logically, therefore, if the enemy holds back from battle decision, we must relegate the battle-fleet to a secondary position, for cruisers are the means of exercising control; the battle-fleet is but the means of preventing their being interfered with in their work. . . .if, then, we seek a formula that will express the practical results of our theory, it would take some such shape as this. On cruisers depends our exercise of control; on the battle-fleet depends the security of control. . . . The maxim that the command of the sea depends on the battle-fleet is then perfectly sound so long as it is taken to include all the other facts on which it hangs. The true function of the battle-fleet is to protect cruisers and flotilla at their special work. The best means of doing this is of course to destroy the enemy's power of interference. The doctrine of destroying the enemy's armed forces as the paramount object here reasserts itself, and reasserts itself so strongly as to permit for most practical purposes the rough generalization that the command depends upon the battle-fleet.*

Julian S. Corbett, *Some Principles of Maritime Strategy*

The major problem is to provide sufficient forces to enable America to meet her obligations which, if she is to retain her greatness, she must do. The nation needs to be made conscious of its heritage and its dependence on sea power for its daily bread and butter.<sup>28</sup>

---

<sup>26</sup> Zumwalt, *On Watch*, p. 75

<sup>27</sup> Betts, *Conventional*, p. 161

<sup>28</sup> B. Schofield, *British Sea Power*, (London, 1967) p. 237

This paper has established that with no visible peer competitor, the world is entering a potential era of 'Pax Americana.' How the United States accepts this role and plays its part will determine the course of history throughout the 21<sup>st</sup> Century. If America intends to retain her status as influencer of the world-island, it must ensure that it can meet all of its security requirements and national interests. Without a substantial increase in defense spending, the United States will need to develop a strategy that spreads its armed forces across the spectrum of global commitments. In a resource constrained environment, a "high-low" mix of existing capital warships and the design and procurement of numerous smaller, affordable, special purpose ships presents a viable solution.



## BIBLIOGRAPHY

- Betts, Richard K., "Conventional Strategy: New Critics, Old Choices," International Security, Spring 1983
- Brodie, Bernard, (1958) A Guide To Naval Strategy, Princeton, NJ, Princeton University Press
- Chase, R.S., Hill, E.B. and Kennedy, P. (1996) "Pivotal States and U.S. Strategy," Foreign Affairs, 75(1): 33-51
- Corbett, Julian S., (1911) Some Principles of Maritime Strategy, London, Longmans, Green and Co.
- Edwards, Michael B., Commander, USN, "Supporting the Six Hundred", Proceedings, August 1983
- Friedman, Norman (1988) The US Maritime Strategy, London, Jane's Publishing Company
- Hughes, Wayne P. Jr., "United States Maritime Strategy and Naval Power in East Asia in the 21<sup>st</sup> Century," Unpublished paper, August 1999
- Kennedy, Paul M., (1987) The Rise and Fall of British Naval Mastery, London, The Ashfield Press
- Komer, R.W. (1984) Maritime Strategy or Coalition Defense, Cambridge, MA, Abt Books
- Lehman, John F. Jr., "Rebirth of a U.S. Naval Strategy," Strategic Review, Summer 1981
- Mackinder, Sir Halford J., (1904) "The Geographical Pivot of History," Geographical Journal
- Mahan, A. T., Captain, USN, (1987) The Influence of Sea Power Upon History: 1660-1783, New York, Dover Publications, Inc.
- Reason, J. Paul, Admiral, USN, (1998) Sailing New Seas, Newport, RI, Naval War College Press, 1998
- Schade, A. F. Captain, U.S. Navy (1960) The Strategic Importance Of Control Of The Seas, Cambridge, MA, Center for International Affairs, Harvard University
- Department of the Navy, (1992) Posture Statement: ... From The Sea, Navy and Marine Corps White Paper
- Department of the Navy, (1996) Posture Statement: Forward ... From The Sea, Navy and Marine Corps White Paper
- Sexton, James P., Lieutenant Colonel, USMC, The United States Maritime Strategy, Research Paper, Maxwell Air Force Base, Alabama, Air War College, Air University
- Trost, Carlisle A. H., Admiral, USN, "Looking Beyond the Maritime Strategy," Proceedings, January 1987
- Turner, Stansfield, Admiral, USN, and Thibault, George, Captain, USN, "Preparing for the Unexpected: The Need for a New maritime Strategy," Foreign Affairs, Fall 1983
- Weinraub, Bernard, "Claytor Criticizes Pentagon Aides on Plans to Reduce the Navy's Role," The New York Times, Tuesday, March 28, 1978

- Zumwalt, Elmo and Bagley, Worth, "Military doctrines old and new: conservatives retain upper hand," The Washington Times, 21 February, 1982
- Zumwalt, Elmo R. Jr., Admiral, USN (Ret), (1976) On Watch: A Memoir, New York, Quadrangle, The New York Times Book Co.
- Zumwalt, Elmo R., Captain, USN, "A Course for Destroyers," Proceedings, November 1962