Strategy Research Project

Back to the Sea: U.S. Strategic Requirements and Sea Control

by

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United States Army War College
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BACK TO THE SEA:
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Since the end of the Cold War in 1991, and particularly during the decade since September 11th, the U.S. Navy has under resourced sea control capabilities. For two decades, the United States has been able to assume U.S. Navy control of the seas. Department of Defense and Navy leaders have focused on power projection capabilities as the number one defense resourcing priority. However, the strategic environment has changed and U.S. strategic priorities are being adjusted accordingly. Likewise, the U.S. Navy must reorient its resourcing priorities to recapitalize its sea control capabilities by turning its attention "back to the sea." The Navy must develop a comprehensive strategy to meet the challenges of 21st Century sea control. The Navy's value to the Nation will be measured against its ability to exercise sea control to support the attainment of national strategic objectives. This SRP examines the Navy sea control capabilities required to support new U.S. strategic priorities. It concludes that the Navy must "rebalance" the priority assigned to the core mission of sea control and recommends the crafting of a new maritime strategy that adequately considers the realities of the new strategic environment and addresses resourcing priorities.

BACK TO THE SEA: U.S. STRATEGIC REQUIREMENTS AND SEA CONTROL

> …the free nations of the world claim preeminent control of the seas …as a result national maritime policies can afford to de-emphasize [some] efforts…
>
> – Sean O'Keefe[1]

At the end of the Cold War, the U.S. Navy assessed the strategic environment and altered its focus and capabilities to meet the challenges of a perceived "new world order."[2] As the Soviet Union dissolved, the sole challenge to U.S. control of the seas faded. So too did the U.S. Navy's focus on sea control capabilities. The 1992 joint Navy and Marine Corps white paper "…From the Sea" re-defined the U.S. Navy's vision and purpose in the post Cold War era.[3] Clearly, as that generation of leaders saw it, the requirement for sea control to assure delivery of ten divisions in ten days to Europe was no longer valid – the U.S. Navy needed a new raison d'être. The Navy's "new reason for being" was its ability to project power from the sea. "Forward From the Sea" formalized this thinking and set a new course away from sea control and toward power projection.[4]

Since the end of the Cold War, circumstances have both helped to set and then reinforce this new course. The successful employment of Tomahawk Land Attack Missiles (TLAMs) and carrier air power during Operation Desert Storm was both a leading indicator of and an impetus for a power projection-centric strategy. The decade since 9/11, with campaigns in Iraq and Afghanistan, has reinforced the perceived correctness of Navy's decision to assign power projection ashore a higher priority than sea control. The current maritime strategy written in 2007, "A Cooperative Strategy for 21st Century Sea power," affirms power projection's pre-eminent status: "Power

Projection. Our ability to overcome challenges to access and to project and sustain power ashore is the basis of our combat credibility."[5] Perhaps the decisions made over the past twenty years were appropriate for their time. But, the strategic environment has changed yet again.

In 2011, President Obama declared that the United States has arrived at a moment of transition. U.S. strategy going forward will place a higher priority on the Asia-Pacific region.[6] To be sure, other regions and strategic challenges, particularly in the Greater Middle East, will necessitate U.S. power and presence. But, the "signal is in the air": U.S. strategy and defense resourcing will be increasingly optimized towards the Asia-Pacific region. Accordingly, the U.S. Navy must re-assess the strategic environment, craft an appropriate maritime strategy and then allocate resources to support this new strategic priority. If the last twenty years has been about what our Navy has done "from the sea," the next twenty – and possibly longer – will be about how the U.S. Navy sets and navigates a new strategic course "back to the sea."

A Changed Strategic Environment

The strategic environment has changed significantly since 1992. Words like volatile, uncertain, complex, chaotic, and ambiguous appear frequently in discourse on security, economics, and global politics. Western European powers continue to reduce their investments in defense as the cost of social programs and debt consume an ever increasing share of resources.[7] The European Union is fighting for its fiscal future – and perhaps even its political existence. The "re-set button" for the U.S.-Russia relationship seems to be broken. Consequently, U.S. policy and strategy must still account for Russia because many of its Soviet era capabilities remain, the most

significant of which are her strategic forces. Russia's latent economic power provides sufficient resources to re-capitalize its military – including its Navy – with the revenue acquired from export of its vast energy resources. Although Russia's demographics argue against a sustained resurgence, it maintains the military capacity to do more harm to the United States than any other country.

In contrast to the ebbing power of European nations, Asian power is surging. The rise of the Peoples Republic of China (PRC) continues unabated – seemingly immune to the financial and economic problems plaguing the West. China's increased economic might has elevated it to global power status. This status is more prominently manifested in its modernized and increasingly active military. China's increased economic and military might, combined with its maritime claims and recent actions in the South China Sea, have raised concerns about how a resurgent China will use its power. India too is rising. Its economic and military power has grown and can be expected to continue. Japan seems to be inching closer to making the transition to a more conventional approach to military affairs as her neighbors present greater challenges. But, Japan also faces an aging and shrinking population and has yet to emerge from two decades of relative economic stagnation. In the Middle East, the challenge posed by Iran is taking center stage. Iran appears to have used the windfall of higher energy prices to invest in military capabilities to counter U.S. military advantages and is assessed by some observers to be pursuing nuclear weapons under the guise of a peaceful nuclear energy program. Additionally, in the Middle East and North Africa, the "Arab Spring" has brought down four governments and threatens a fifth while a multiplicity of forces remain in play for the allegiance of the region's people. It

remains to be seen whether the future security environment will be more or less threatening.

Amongst all this complexity of the changing strategic environment, there exists one dominant feature – the rise of China. Zbigniew Brzezinski, the National Security Adviser in the Carter Administration, has stated that for the United States, "the central challenge over the next several decades will be to revitalize itself while promoting a larger West and accommodating China's rising global status."[8] The unipolar world that emerged at the end of the Cold War is evolving into something different – but, as yet un-defined. Generally, there is a "rise of the rest" within the context of a perceived decline in U.S. power and an increasing tendency towards multi-polarity.[9] On the one hand, emerging powers create potential emerging markets that could "refuel" U.S. "economic engine." On the other hand, as emerging powers develop military power commensurate with their interests and aspirations, economic issues yield to strategic concerns. Because of an increased diffusion of power and the unpredictability of the alchemy of fear, honor and interests, any transition from a uni-polar world to some other international order will bring with it greater uncertainty regarding the stability and durability of a peaceful international order. Within the context of this changing strategic environment, the United States has shifted its strategic priorities to the Asia-Pacific region. Now, DoD, and in particular the Navy, must craft a new, comprehensive strategy to address what is an increasingly challenging and changing operational and tactical environment in a time of fiscal austerity.

The Changing Operational & Tactical Environments

> In practice we always base our preparations against an enemy on the assumption that his plans are good; indeed, it is right to rest our hopes not on our belief in his blunders, but on the soundness of our provisions. (Thucydides, Book One, 1.84)[10]

Driven by the larger strategic environment, the tactical and operational environments are also changing. Rapidly evolving and proliferating technologies, in combination with existing capabilities, demand continuous reassessment of U.S. capabilities and their utility in this new environment. The Russo-Japanese War provides a historical cautionary tale, particularly with respect to naval warfare. In 1905, the world's navies were undergoing rapid and accelerated change. The velocity and momentum of this change was largely driven by new technology. Rising powers boasted newly minted fleets of formidable battleships and smaller vessels that created new synergies from innovative combinations of speed, armor, and large caliber weapons. The established maritime powers faced a myriad of new challenges but they were largely ignorant of the depth, breadth and scope of these challenges due to institutional overconfidence. On 27-28 May 1905, the Russian and Japanese fleets met in the Tsushima straits. In two days of fighting, Japan stunned the world by decisively defeating the Russian fleet and establishing itself as a formidable naval power. In 1905, a well-prepared rising power, Japan, defeated a historical great power, Russia, by innovating, building a fleet, and training its way to victory. As in 1905, the post-WW II technological advances in naval and air warfare have been incorporated in various ways by a number of armed forces without being battle tested. Recent events, like the 2010 sinking of the South Korean vessel Cheonan by a North Korean submarine , should serve as a stark warning about the potential consequences of institutional overconfidence based on past success in permissive maritime environments. As one of

my mentors frequently asked, “Are we lucky or good?” This question should prevail as we craft and resource a new maritime strategy. Providing humanitarian assistance and disaster relief and medical care to people in need around the world are worthy missions. Projecting power into and over Iraq and Afghanistan is essential. But, repeated success in these operations and the perceived absence of an enemy capable of defeating – or significantly harming – the U.S. Navy in sea combat is not sufficient as the principle metric against which our capabilities are measured. Absent the ultimate arbiter of war at sea, we must conduct threat based analysis down to the tactical level to adequately assess the operational and strategic risks posed by current tactical capability gaps. The U.S. Navy’s ability to control the seas is becoming one of those capability gaps.

Control of the Seas

> Control of the seas means security. Control of the seas means peace. Control of the seas can mean victory. The United States must control the sea if it is to protect our security.[11] -- President John F. Kennedy

Our nation has long recognized the value of sea power and the need to maintain a navy capable of controlling the seas to the extent our nation’s interests demand. The U.S. Navy, like all navies, is built to support the nation’s strategy. A sound maritime strategy balances ends, ways and means in the particular environment in which a navy must operate. When Joshua Humphries designed the U.S. Navy’s first six frigates, they were intended to outgun and outrun opposing naval vessels of similar type. He provided an innovative ship design for a fiscally constrained nation that required naval power for protection and to exert its sovereignty. The balancing of vessel size, speed, number and types of guns, and armor dominated naval architecture, to varying degrees, from the age of sail until WWII. These factors are much less important today. To support the national strategy, the U.S. Navy relies on technology adapted to current

tactical and operational environments. Vessel speed has, except in rare circumstances, lost its importance because it no longer affords the faster fleet the opportunity to choose the time and place of battle when facing today's threats. Sensor capabilities, information exchange, and the range, speed and precision of weapon delivery have combined to make increases in vessel speed of little advantage. Likewise, armor has been overtaken by other means of decreasing vulnerability and increasing survivability. Thermal and radar signature reduction and defensive systems, both active and passive, are of greater importance. Lethality now rests in fewer, technologically advanced platforms networked by sensors and command and control systems and armed with relatively small numbers of technologically advanced precision weapons. The U.S. Navy's force composition, because of our global interests, is designed to be expeditionary and self-sustainable. Extended lines of communication and operations require vessels to operate for prolonged periods at sea with sufficient fuel and stores to conduct global operations. Consequently, the U.S. Navy possesses relatively large surface combatants, nuclear aircraft carriers, amphibious ships, and submarines. Nuclear power gives our submarines and aircraft carriers unmatched endurance and flexibility. Super carriers remain the centerpiece of U.S. naval power. Escorted by highly capable surface combatants, our Carrier Strike Groups (CSGs) and Amphibious Ready Groups (ARGs) provide potent, flexible, responsive power projection capability across the globe. But, this power can be brought to bear only if we control the seas.

So, the rising challenge to our ability to control the seas is the central problem facing the U.S. Navy. The ability to use U.S. naval power to achieve a political objective rests on the ability to control the seas. While we have been busy projecting power from

the sea in the skies above Iraq and Afghanistan for the last decade, the global strategic, operational, and tactical environments have undergone radical change. We now face the threat posed by potential adversaries' anti-access and area denial capabilities.

Rise of Anti-Access and Area Denial Threats

The anti-access and area denial (A2/AD) capability either possessed or being pursued by potential adversaries is irrefutable. It is clear that countries seeking to avoid facing the full force of U.S. military power have learned a few key lessons. First, block U.S. access to the theater. This is achieved by denying our use of sea lines of communication, ports of debarkation (PODs), and bases. To achieve this aim, potential adversaries have developed anti-access/area denial capabilities. For example, Iran has developed small indigenously built submarines, fast attack craft (FAC) and fast in-shore attack craft (FIAC) armed with various types of anti-ship cruise missiles, torpedoes, guns, and crew-served weapons, increasing the threat – density and lethality – to maritime operations in the Arabian Gulf. Unmanned aircraft, land based anti-ship cruise missiles and ballistic missiles further complicate the tactical and operational environment vis-à-vis Iran. Likewise China has increased the number and technological sophistication of submarines, surface combatants and coastal patrol craft, many armed with anti-ship cruise missiles of considerable capability. China's widely reported DF-21 anti-ship ballistic missile combined with various types of torpedoes and air launched cruise missiles increases the threat posed by the PRC.[12]

Arguably, as technology moves ahead and emerging powers develop military capability, they will pursue capabilities to deny U.S. global reach and access by challenging our ability to project power from the sea. To do this, they will deprive us of

what we most need to get to and support operations – control of the seas. The recent establishment of the Air Sea Battle (ASB) Joint Program Office demonstrates both the seriousness of the problem and the extent to which Navy leaders are committed to working toward joint solutions. As DoD sees the problem,

> The ASB concept is a natural and deliberate evolution of U.S. warfighting to counter emerging A2/AD threats that include conventional ballistic missiles, long-range precision cruise missiles, advanced integrated air and missile defense systems, electronic and cyber warfare capabilities, submarines, surface combatants, and modern combat aircraft. Air-Sea Battle will enable the projection of force in defense of U.S. interests and those of our allies and by sustaining stability and freedom of access throughout the global commons.[13] (Emphasis added)

The ability to project power endures, but assured access enabled by control of the seas is a prerequisite for assuring freedom of maneuver, logistics support, and flexibility to achieve national objectives. The risk of not being able to control the seas has risen significantly as A2/AD capabilities have proliferated. U.S. Navy resourcing decisions over the last twenty years, perhaps appropriate for their time, have divested, atrophied and diluted U.S. sea control capabilities.

U.S. Sea Control – Divested, Atrophied and Diluted

Since 1989, the Navy has divested itself of significant sea control capability and capacity. Thirty-four Spruance Class (DD-963) and Kidd Class (DDG-993) destroyers - with significant anti-surface, anti-air and anti-submarine warfare capabilities – were decommissioned well before the end of their planned service lives. Oliver Hazard Perry Class (FFG-7) frigates had their missile systems removed in 2003 as a cost saving measure. These ships are now programmed for decommissioning and foreign military sale. Arleigh Burke (DDG-51) destroyers are highly capable vessels, but they lack important sea control capabilities. The first 27 Arleigh Burke Destroyers (DDGs 51-78)

are unable to embark a helicopter detachment. Consequently, they are severely limited in extended range surface surveillance and over-the-horizon targeting. They also cannot conduct anti-submarine search, detect track and engagement at extended ranges. The more recently built Arleigh Burke Class Destroyers, DDGs 79 through 110, gained an embarked helicopter capability but possess neither a Tactical Towed Array Sonar System (TACTASS) nor an anti-surface ship cruise missile (ASCM) capability. Without these systems, these ships' sea control capability is handicapped.

Sea control ordnance for both ships and aircraft has similarly been divested. The Tomahawk Anti-Ship Missile (TASM) was phased out of the fleet in the early 1990s. Procurement of Harpoon anti-ship cruise missiles, first introduced in the 1970s, was terminated in 1991. The Stand-Off Land Attack Missile Extended Range (SLAM-ER), which can be employed by carrier aircraft against ships as well as land targets, was last procured in 2004. The lone anti-ship missile employable from our shipboard helicopters, the Penguin missile, has been removed from the inventory. Most frustrating to current tacticians is the fact that none of the remaining ASCM variants have kept pace with those of potential adversaries in terms of range, speed, and lethality.

U.S. Navy Carrier Air Wings (CVWs) have also been affected in significant ways by the institutional divestiture of sea control capabilities. Today's CVWs have fewer aircraft, a shorter effective combat radius, and less mission endurance. The F/A-18 Hornet and Super Hornets, for all their advantages, are a compromise. They are neither dominant in air superiority nor superior in attack missions. They lack the range and endurance of the F-14 Tomcat and the payload of the A-6 Intruder. In addition, the loss of CVW organic tanking capability (KA-6, S-3) requires the use of limited numbers

of F/A-18s as mission tankers, further challenging the ability of the CVW to meet the competing requirements for defensive and offensive sea control tasks while simultaneously supporting power projection mission. In the meantime, potential adversaries have increased the quality and quantity of their offensive anti-surface warfare capabilities, specifically anti-ship cruise missiles and air defense capabilities. Additionally, because of manpower limitations, carrier air power lacks the flexibility and persistence needed to prevail in the current tactical environment.

Taken as a whole, the decisions taken over the last twenty years resulting in the divestiture of critical sea control capabilities have weakened the U.S. Navy's ability to control the seas. To be sure, a number of programs and initiatives show promise. The improved anti-submarine warfare suite (SQQ-89 AV15) being fitted on DDGs 79 and higher, the Mark 54 torpedo, and efforts to develop a new ASCM are encouraging. But, the pace at which these systems are being fielded appears only to slow a decline when a surge ahead is required. In addition to the divestment of sea control capabilities, the U.S. Navy's sea control skills have atrophied.

Many factors have resulted in the atrophy of vital sea control skill sets. The removal of ships and weapon systems from the inventory without replacement is one. An axiom of naval warfare asserts that, "to know tactics, know technology."[14] A revealing corollary to this axiom is that if you don't have the technology, you can't develop new tactics. Consider the example of a recent Carrier Strike Group (CSG) deployment: This CSG deployed with only one surface combatant escort with ASCM and passive anti-submarine warfare capabilities. Consequently, throughout an entire deployment, there were few opportunities to train and develop Sailors who think through

sea control problems and know how to apply sea control capabilities from the unit level up through carrier strike group level – much less the strike force level. Another problematic factor is the design of Navy training and certification processes. Ships and air wing squadrons spend little time conducting coordinated anti-submarine, anti-surface warfare, and air defense exercises. The competing demands for air wing proficiency to achieve blue water and power projection certifications, combined with constraints on steaming days and flight hours, has forced sea control training and proficiency to the bottom of the priority list. The surface force also needs to re-prioritize sea control training and proficiency and allocate sufficient resources to return it to a top priority status.

As the U.S. Navy and U.S. Air Force develop the Air-Sea Battle concept the U.S. Navy must concentrate on sea control across our communities by eliminating the "stovepipes" created by enterprise centers of excellence. Both the Naval Surface Warfare Center (NSWC) and the Naval Strike and Air Warfare Center (NSAWC) need re-tooling. The names of these two organizations imply that they have similar mandates – but they do not. What is of even greater concern is the extent to which these centers of excellence are isolated from one another in what some have derisively called "cylinders of excellence." NSWC performs primarily enterprise functions and is, therefore, primarily oriented towards "providing cost effective technical solutions."[15] The organization that was responsible for surface warfare tactics, the Surface Warfare Development Group (SWDG), has been disestablished. Conversely, NSAWC focuses entirely on training and tactics.[16] Indeed the Strike Fighter Air Readiness Program (SFARP) provides superb training for our pilots, but its curriculum is too narrow.

Currently, it focuses on overland strike warfare and is preoccupied and overburdened with operations in support of OIF/OND and OEF. Additionally, the tactics developed and taught at the Naval Fighter Weapons School (Top Gun) for fleet air defense do not account for the competing demands imposed on limited CVW assets to maintain proficiency in multiple mission areas. As valuable as the Tactical Training Groups are for providing staffs integrated training in virtual environments, they are unable to provide the "ground-truth fidelity" to orient the participants on the friction points presented by current threats, to say nothing of emerging ones. Additionally, as much as Strike Force Training Groups would like to provide realism to train as we would fight, they do not appear to be resourced (subject matter experts, opposition force capacity) to develop and execute operationally and tactically realistic scenarios.

In addition to divestment and atrophy, Navy sea control capability has been diluted by multiple mission demands. The Maritime Patrol and Reconnaissance Force has spent much of the last decade conducting overland ISR dedicated to the counter-insurgency and counter-terrorism fights. The time left over for training is inadequate to meet the requirements of sea control training and proficiency. Anecdotal evidence provided by several P-3 Squadron Commanders affirms that a significant portion of P-3 Aircrews have only marginal sea control mission experience and expertise. The surface combatant sea control capability has likewise been diluted by the demands for ballistic missile defense deployments separate from carrier strike group deployments. The nation's once formidable carrier battle groups have, in some cases, been reduced to a carrier and a single surface combatant escort for extended periods during deployments. The U.S. Navy's faith in its ability to improvise, adapt, and overcome is central to its

culture. But, such faith must be informed by honest and substantive risk analysis. Key to such analysis is the development of Sailors who exhibit the ability to analyze and evaluate critical issues and provide forceful back-up to leaders during the planning, deliberation and decision-making process. Tough questions need to be asked before critical trade-offs are made. Is planning and execution of operations for large numbers of escorts simply a matter of scale? Do too few assets diminish tactical acumen? My own observations convince me that Sailors limited to independently deployed ships are ill-prepared to perform in the faster paced, symbiotic environment of carrier strike groups – particularly when that CSG is operating in a non-permissive environment. Officers serving on ships without passive anti-submarine warfare systems and anti-ship cruise missile capabilities have a "gaping hole" in their core war fighting competency. Their future crews are left to fill those gaps. Destroyer squadron staffs were reorganized and reduced in manning in the 1990s as the Soviet submarine threat "evaporated." At the same time, the mission requirements for these staffs were significantly increased. These smaller "mission saturated" staffs are now faced with a growing threat in the Pacific. Commanders and their staffs who are unaccustomed to the routine use of the quantity and variety of sea control tools because they are not provided with them for training are ill-prepared to execute war-at-sea.

The Balisle report's comments on the surface force's readiness are equally applicable to the Navy's ability to control the seas from the perspective of tactics, techniques and procedures.[17] The confluence of a number of unintended consequences of well-intentioned decisions over the last twenty years - the divestment of significant tools (ships, aircraft, sensors, weapons), the atrophy of critical skills

because of inadequate training, and the dilution of our capabilities across more missions areas executed with fewer assets have created a “perfect storm.” We have, however, encountered storms before and righted the ship. The way ahead begins with a new maritime strategy.

Setting Strategic Priorities – New and Enduring

U.S. policy and national strategy are adjusting to meet the demands of a new strategic environment. The Obama Administration has clearly signaled a shift in U.S. strategic priorities. In a recent article in Foreign Policy, Secretary of State Clinton declared that, “the United States stands at a pivot point.” She goes on to assert that, “one of the most important tasks of American statecraft in the next decade will therefore be to lock in a substantially increased investment…in the Asia-Pacific region.”[18] Her observations were recently affirmed in an agreement with Australia to host up to 2,500 U.S. Marines on a rotational basis as well as an engagement within ASEAN to advocate its use as a multi-lateral instrument to resolve territorial disputes with China. Given U.S. economic and security interests in the region and the rise of China and India, this shift in priority is appropriate, and is likely to be sustained by future administrations.

This shift in U.S. strategic priority to the Pacific does not negate other enduring U.S. interests. The need to ensure free flow of global commerce and energy supplies from the Middle East will endure. The 2010 QDR clearly states, “Global security and prosperity are contingent on the free flow of goods shipped by air or sea, as well as information transmitted under the ocean or through space.” Global prosperity relies on rising global trade, therefore maritime security will increase in importance as the demands for energy and goods also rise. So, while the scale of strategic priorities must

tip in the direction of the Pacific, the need to sustain presence and capabilities in the Middle East persists.

These two vital regions present a number of security challenges. Among these are piracy, disputed territories rich in natural resources waiting to be extracted, natural disasters, ungoverned spaces, proliferation of Weapons of Mass Destruction (WMD), and violent extremist organizations. But, because of their accumulation of military capabilities and stated or implied intent, only two countries pose a threat to U.S. vital interests – Iran and China. These two countries possess capabilities that threaten U.S. ability to control the seas. These threatening capabilities must be adequately accounted for in a new maritime strategy.

In the current fiscal environment, the acute competition for resources between and within services presents significant challenges as strategic leaders seek to formulate force sizing and employment concepts that will require reallocation of scarce resources. The U.S. Navy's successful support of the current fights in Iraq and Afghanistan over the past decade enhances the appeal of a "steady as she goes" approach. However, the shift in U.S. strategic priority to the Pacific and the enduring challenge from Iran demands an adequately resourced strategy, not a resource-driven strategy.

The Current Maritime Strategy

The current maritime strategy, *A Cooperative Strategy for 21st Century Sea power*, does not address specific threats. In effect, it overlooks emerging challenges and evades addressing the requirement for change. Published in 2007, it reflects two perspectives. The first perspective is domestic. This strategy was an effort to convince

Congress and the public of the Navy's continuing relevance to national security as the nation was engaged in two substantial land campaigns. The second perspective was international. This strategy was intended to communicate the U.S. Navy's commitment to multilateral and coalition operations. The document may reflect both of these perspectives, but it is not a true strategy because it does not describe the maritime environment – to include evolving threats within the operational and tactical environments – no does it provide sufficient detail about the ways in which naval power will be brought to bear and the means required to achieve national objectives. The current recruiting slogan, "A Global Force for Good," is a parallel re-branding effort reflecting a "feel-good" perspective on an altruistic cooperative strategy.[19] Given the strategic environment in 2007, the aims of this strategy may have been appropriate. However, it is apparent that the strategic environment has changed. The nation must craft a new maritime strategy.

A New Maritime Strategy

A new maritime strategy needs to reorient Navy priorities on fighting and winning in high intensity multi-threat sea combat. With this in mind, a new maritime strategy should address six key issues. First, it needs to provide a detailed description, analysis and assessment of the strategic, operational and tactical environments out to 2025. Second, the strategy must identify the national ends that our maritime instrument of power will be used to achieve. Third, it must prioritize the ends that the Navy will support. These priorities must place sea control as a pre-requisite for projecting power ashore. Fourth, the strategy must specify potential threats. If a classified version is needed to avert unwanted political consequences, then classify that part of the strategy.

Fifth, the strategy should describe the ways in which U.S. naval power will be used to carry out the key tasks in support of the priority objectives. Finally, it must describe the necessary means – size and composition of the fleet – required to achieve the strategic ends.

Naval Capabilities

The development of naval capabilities has long been recognized as a complex and long-term endeavor. A number of factors are strategically relevant for winning a war at sea. First is the relationship between the Sailor and the machines of war. "But what is true in ground combat, where machines serve men, is magnified at sea, where men serve machines."[20] The corollary to this axiom is the requirement in naval warfare, "to know tactics, know technology."[21] So there is an inextricable link that runs through the development of the means of war at sea: As the machinery of naval warfare is developed and fielded, it must be accompanied by appropriate tactics and doctrine. To understand naval warfare, strategists must first understand the technical capabilities and limitations of the means of this warfare – and what the future might bring. Then it is up to the practitioners to develop doctrine, structure the organization, and provide appropriate training and education. The divestment of sea control capabilities has had significant impact on the U.S. Navy's current ability to control the seas. The impact of this divestment on naval capabilities can be examined in four key dimensions that directly bear on the Navy's ability to meet the challenges of 21st Century sea control requirements: Material deficiencies; doctrinal requirements; fleet centers of excellence and operational organization; and cultural barriers.

Material Deficiencies: The U.S. Navy has several critical sea control material deficiencies. First, the Navy lacks persistence and reach in ASCM capabilities. Since the retirement of the Tomahawk Anti-ship Missile (TASM) and shrinking of surface combatant ASCM capability, the burden of striking enemy ships at sea has fallen upon carrier air wings. Unfortunately, carrier air wings do not provide persistence and are lacking in flexibility and responsiveness. Additionally, smaller air wings faced with meeting the competing demands of multiple mission areas – of which sea control is a low priority – has reduced the availability of aircraft and the flexibility of tactical commanders. Further, as adversaries develop and field modern air defense capability (enhanced over-the-horizon targeting (OTH-T) and surface-to-air missile range), the lack of a capable air launched cruise missile increases risk to the force and decreases the probability of mission success. The Defense Advanced Research Agency's (DARPA) work on the Long Range Anti-Ship Missile (LRASM) and the current focus on moving the Offensive Anti-Surface Warfare (OASUW) analysis of alternatives (AoA) through the Joint Capabilities Integration and Development System (JCIDS) are encouraging. But, the U.S. Navy is years away from a fielded system; in the meantime potential adversaries are raising the stakes in this area. There is no more urgent requirement than deploying a persistent, long-range ASCM with the fleet to provide Joint Force Commanders with the reach and persistence to deter an adversary by holding its forces at risk or to defeat the enemy should deterrence fail.

Next, we must move forward with advanced electronic warfare systems that provide both the awareness of an adversary's attempts to detect, localize, and engage our ships and aircraft as well as the ability to disrupt enemy surveillance, localization,

and targeting efforts. The Navy's renewed emphasis on the basic war fighting skills of deception and maneuver during integrated training is helpful. But new tools are needed to turn the tables on an enemy at the tactical level.

The new maritime security environment must be considered in our shipbuilding and ship modernization plans as well. The Littoral Combat Ship (LCS) may have been a logical strategic investment when it was conceived. But, perhaps a new maritime strategy would raise new questions regarding assumptions underpinning LCS acquisition. The costs – in terms of trade-offs – involved in achieving forty knots of speed and plug-and-play modularity now appear questionable. Is the cost of plug and play worth it if the actual use of that capability proves increasingly impractical? Do current and future threats warrant the acquisition of a vessel that cannot adequately fight both offensively and defensively in multiple mission areas simultaneously? Do we have the logistics capacity to support even routine use of the high-speed capability of the LCS while also supporting mission module requirements? Will the complex requirements of mission module change-outs render the LCS's plug and play advantages a seldom used capability? What would a current analysis of alternatives tell us? Are we sticking with LCS because of sunk costs? Have we analyzed the institutional risks of further diluting core multi-mission area sea control knowledge and proficiency by having 55 single mission LCS's in the Fleet? Re-opening these debates will be difficult. But, given the significant changes in the fiscal and strategic environments, the window of opportunity to ensure we have taken a final "fix before heading into the channel" is rapidly closing.

Regarding modernization, important upgrades to surface combatants are programmed. But as fiscal constraints increase, the pressure to decommission additional ships and slow modernization will increase. Installation of up-graded passive anti-submarine warfare and ASCMs on Flight II DDG-51 Guided Missile Destroyers is urgently needed. These modernizations will provide operational commanders with persistent surveillance and credible sea control capabilities. These modernization programs should be protected and accelerated.

The ways that Navy leaders define and consider attributes for the material solutions to improve sea control capabilities are critical. During the determination of requirements, persistence and responsiveness must be considered. Often when describing capability, Navy planners assign value to the range that a pairing of platform and weapon provides. Over the past two decades, appropriate value has not been placed on the attributes of persistence and responsiveness. Reach is important, but, if the performance objective of additional range is achieved at the expense of responsiveness and persistence, Navy planners must be sure that those decisions are validated through honest, substantive and rigorous analysis. This is particularly relevant with regard to the problem of transitioning from Phase I to Phase II Operations. In the ambiguous minutes – or months – between deterrence operations and commencing hostilities, the force with the more persistent and responsive capabilities will be able to apply effective precision firepower first - the tactical objective in naval combat.[22] If the capability we rely upon today, or develop for the future, cannot be employed without tactically important delays, then perhaps we need to rethink the design of the force.

Doctrinal Requirements: If "doctrine is the glue of tactics," then the Joint Force's glue is old.[23] Joint Doctrine is losing its ability to bind the Joint Force together into formidable combinations of sea power. Efforts to develop the Air-Sea Battle concept and the recently completed Joint Operational Access Concept are welcome developments.[24] They may provide the intellectual stimulation needed to re-focus priorities on the competitive advantage provided by control of the seas. However, in the absence of new, more advanced weapons and operational experimentation with sea control technologies, tactics, techniques and procedures, the Navy's doctrine cannot substantially improve. There is room, however, to refresh sea control doctrine. The Navy must make a concerted effort to focus on the revision, promulgation and exercise of sea control doctrine for fleet and strike group operations, particularly for the increasingly complex and varied data links and command and control systems being fielded while reaching out to the Air Force and Army to involve them appropriately.

Fleet Centers of Excellence and Operational Organization: The Navy's most glaring organizational issue that should be addressed is a re-organization of the centers of excellence to broaden their roles and missions to cross platform types. Naval Mine and Anti-submarine Warfare Command (NMAWC) already does this. But NSAWC has too much to offer to serve only the aviation community. NSWC, or some entity, should pick up the pieces from the disestablishment of the Surface Warfare Development Group to drive a renaissance in sea control. It is only slightly tongue-in-cheek to say that perhaps the Navy will soon open an Air-Sea Battle office to figure out how to coordinate the efforts of the Navy's warfare communities to foster greater integration

and innovation among the surface, aviation, and submarine communities. There are also organizational challenges in the Navy's fleet operational structure.

The current composition of deployed Carrier Strike Groups is inadequate. A smaller fleet is one factor bearing on this problem. Another is the increased number of missions for the surface combatant fleet, which has fewer ships than it had ten years ago. For example, the requirement for ballistic missile defense is driving down the number of surface combatant escorts assigned to strike groups. Consequently, strike groups deploy with fewer assets for sea control. Also the Navy has been increasingly disaggregating deployed strike groups to provide platforms to Navy and Joint Force operational commanders to accomplish a longer list of presence requirements. Without substantive analysis of the risk imposed by a reduced number of surface combatant escorts, organic to the CSG, some of these presence requirements might be better described as "desire-ments." Succinctly stated, "desire-ments" are transformed into requirements through a process of bureaucratic metaphysics that assigns a higher priority to various partnership and presence tasks than the operational requirement to provide necessary defense-in-depth of an aircraft carrier – a national strategic asset. Over the course of the past two decades, the U.S. Navy has become too comfortable in "assuming away" risk to the force - primarily to the aircraft carriers, but also to the naval force in general. The assumptions underpinning Navy risk assessments, though based on rational and historical analysis, have become overly influenced by "wishful thinking" that often downplays the threat posed by potential adversaries. These assessments have been overly weighted towards perceptions of intentions with inadequate weight given to capabilities. Fewer ships and increased missions have resulted in CSG

compositions that appear robust on paper but, are actually deployed with few surface combatant escorts. Upon deployment, escorts are thinned out even further, or disaggregated, to fulfill missions in deployed areas of responsibility (AORs) rather than provide persistent defense-in-depth and sea control in support of High Value Units. Operational commanders regard the opportunities for presence as outweighing the risk posed by potential adversaries. As a result of the mission demands on a decreasing number of surface combatants the Navy has stepped back from the concept of expeditionary strike groups in which surface combatant escorts provided defense-in-depth to bid deck Amphibious Assault Ships. The abandonment of this concept was tacit acknowledgment that with dwindling resources amphibious forces must operate without robust defensive capability.

Has the time come for Navy leaders to rethink these decisions? Are decisions to reduce carrier strike group escort numbers and to operate carriers with fewer escorts based on facts, or outdated assumptions – or "wishful thinking?" "Are our assumptions valid?" is a critical question that must be asked and honestly and substantively answered. Or, are we simply shaving just a bit more off of defense-in-depth during each budget crunch or request for forces? Does the habit of operating carriers with only one escort weaken our Navy institutionally by desensitizing the fleet to the challenges of the rapidly evolving operational environment?

Cultural Barriers: One of the greatest challenges the Navy faces in returning its focus "back to the sea" one of culture. Four aspects of modern Navy culture appear to be significant barriers to addressing the challenges of 21st Century sea control. The first is the Navy's warfare community barriers. Too few of our officers have had the

opportunity to work alongside their peers in other communities to share their personal views of the naval profession. It takes many hours over many days and weeks for professionals to arrive at a shared understanding and mutual concern about their profession. We have too few shared experiences to establish strong cultural bonds.

The second are structural barriers. Senior Navy leaders should confront the inequity between communities as a "chose your rate, choose your fate" issue. Enormous pay differences break down cohesion; they are corrosive. Retention bonuses are necessary. But, can we afford the financial cost and disregard the corrosive effect when bonuses and special pays continue for those no longer performing those duties and with only lateral career options in their future. When does retention pay become an entitlement? At some point, inequality becomes a problem for the institution.

The third is the tension both between effectiveness and efficiency and between war fighting and the "enterprise" mentality. We should not "throw the baby out with the bath-water" when it comes to how we think through and apply resources to achieve performance objectives. Establishing metrics and driving organizational change and improvement through their use can strengthen the organization. However, overemphasis on these metrics has resulted in two traps. First, standards have become muddled. Frequently, in the drive to make things more intuitive, figures turn into colors and middle-of-the-road assessments proliferate. Then there is the problem of insatiability. More and more metrics are established, but no one accounts for the resulting increase in workload. Soon the young petty officers and division officers are consumed with data entry and review. While they are focused on "count beans," they

fail to interact with their people and learn their warfighting stock and trade. This phenomena has an insidious effect on war fighting competency.

Finally, the fourth aspect of modern Navy culture that poses a barrier to addressing the challenges of 21st Century sea control requirements is the institutionalization of the euphemisms of "enterprise speak" – euphemistic perspectives risk eroding the war fighting core of our profession. The impact of "enterprise speak" is evident when officers consider a particular tactical problem resident in a war plan and note that the enterprise has assessed the likelihood of that contingency occurring as being low. So, the enterprise solution is not to dedicate resources to address the tactical problem. The essential problem with "enterprise speak" is that it is euphemistic. When language based on euphemism drives thinking – and language shapes understanding – it calls into question the value the institution places candor, plain talk, personal responsibility and command judgment.

Conclusion

Sea control endures as the keystone of our national security. Without it, we lose our ability to respond flexibly to a crisis at the time and place of our choosing. If we cannot protect the sea lines of communication, there is not enough airlift in the world to enable land and air power to project power ashore, to act decisively, and to coerce an enemy to do our will. In the two decades since the end of the Cold War, the U.S. Navy has placed much greater emphasis on power projection than on sea control. The time has come to return sea control to its rightful preeminent place within our Navy. The U.S. Navy must craft a new maritime strategy that reflects the new, evolving national strategy that focuses on the Asia-Pacific region as our future priority while sustaining

the Navy's ability to address persistent challenges in the Middle East persist. The operational and tactical environments have changed dramatically over the last two decades. Increasing and more capable forms of anti-access and area denial capabilities are being developed and deployed by potential adversaries. To defeat these rising challenges to national security, a renewed strategic resourcing commitment to sea control is urgently needed. New material solutions are needed to give our Sailors the best available tools of war. Changes to doctrine, organization and training are required to develop the Navy's capabilities to meet the operational and tactical challenges of the present and future operational and tactical environments. The cultural barriers between our surface, aviation and submarine communities must be addressed if we are to achieve the unity of effort needed to swiftly set this new course and navigate our Navy "back to the sea."

Endnotes

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[15] http://www.navsea.navy.mil/nswc/HQ/Mission%20and%20Vision.aspx The mission of NSWC is posted on this site as follows: "The Naval Surface Warfare Center (NSWC) cohesively and seamlessly operates the Navy's full spectrum research, development, test and evaluation, engineering, and fleet support centers for offensive and defensive systems associated with surface warfare and related areas of joint, homeland and national defense systems from the sea." (accessed 12 January, 2012)

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