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<u>SURFACE ENGAGEMENT GROUPS: BRIDGING THE DISCONNECT BETWEEN</u> <u>TODAY'S FLEET AND TOMORROW'S MARITIME MISSION</u>

by

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LCDR, USN

A paper submitted to the Faculty of the Naval War College in partial satisfaction of the requirements of the Department of Joint Military Operations.

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.

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October 10, 2006

Abstract

The United States Navy possesses the most capable and most powerful naval force in history. Today's Navy is a relic of the Cold War era, in which the force was built to fight and win a large blue-water naval conflict. While the Navy remains postured and capable of fighting a large, high intensity conflict at sea, it only now is gaining credible capability in the long forgotten green and brown water operating areas. The CNO Guidance of 2006 directs the Navy in a new direction; Tomorrow's Navy will be widely dispersed into numerous regions, establish partnerships with international forces through the "1,000 Ship Navy", gain regional and cultural familiarity, and be able to shape the operating environment to deter and defeat asymmetric and non-traditional threats. The Navy operates on the Carrier and Expeditionary Strike Group constructs. Strike Groups alone cannot sustain increased forward presence on the scale directed by the CNO. The Navy must reform its deployment and employment methods to match its fleet with its mission. By downsizing strike groups to their absolute essence and regrouping the remaining force into regionally focused Surface Engagement Groups, the Navy will be able to achieve the commander's intent in the 2006 CNO's Guidance.

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INTRODUCTION

As the United States conducts the Global War on Terror (GWOT), the United States Navy finds itself at a strategic crossroads. The current Navy is indisputably the most capable, powerful and imposing fleet to ever have sailed the high seas. When the U.S. Navy is compared to the collective "rest of world" navy, it enjoys significant capability overmatch.¹ Despite this superiority, U.S. Naval Forces continue to vastly expand the limit on operations they have already mastered such as power projection and strike warfare. The Navy is literally expanding its maritime dominance into new waters by establishing a formidable littoral green water capability and renewing its dedication to the long lost and forgotten brown water mission and the perpetually discounted mine warfare mission (MIW). With the exception of the DDG-51 class destroyer, the Littoral Combat Ship (LCS), and an arsenal of "smart" precision weapons, however, today's fleet is virtually a mirror image of the Cold War Navy that was crafted for an epic "20th Century Battle of Jutland" that never transpired. Today's Navy successfully answers every call to duty, whether it the mission is tsunami relief in Indonesia, earthquake response in Pakistan, Hurricane Katrina relief in the Gulf Coast, or sustained major combat operations in Operation Iraqi Freedom (OIF) and Operation Enduring Freedom (OEF). The wide variety of missions that the Navy responds to is a true testament to the flexibility and adaptability of fleet platforms and the Sailors themselves.

The future world environment and challenges placed upon the Navy may be different than those of today. The nature and duration of the GWOT, OEF and OIF in the mid and long term future are uncertain. The People's Republic of China (PRC) may become a peer or near-peer competitor. The PRC may develop hegemonic ambitions outside their immediate

region. Competition for access to natural resources may spawn a regional or global armed conflict. The GWOT may expand into the failed states of sub-Saharan Africa. The armistice with North Korea (DPRK) may not remain steady state. The anti-United States sentiment being stoked by Hugo Chavez and others in South America may spread such that the United States must account for a new threat within the American continents themselves. Furthermore, as the globalism phenomenon continues to gain momentum, certain communities and nations will be left behind and could decay into failed or failing states. Failed and failing states remain one of the free world's primary challenges, as they serve as breeding grounds for violent Islamo-fascist extremism, lawless piracy, famine and genocide.ⁱⁱ The operational environment for tomorrow's Navy is undeniably uncertain. The ultimate question of concern that must be addressed, however, is: Will today's fleet be capable of continued adaptation to successfully accomplish both tomorrow's anticipated and unforeseen missions? Perhaps to an extent, but the Navy must adapt several changes now to be completely sure.

The CNO is now making course corrections to ensure that the Navy will be best positioned to execute national strategies and protect the United States and her interests in the short, mid, and long-term futures. His direction is formalized in broad terms in the different forms of CNO Guidance (CNOG), consisting primarily of Sea Power 21, the Navy Strategic Plan, the National Strategy for Maritime Security, and the Naval Operating Concept (NOC).ⁱⁱⁱ This direction, however, only provides the conceptual "ends" thus far. Legacy fleet composition, the "means", defined by current force endstrength, the Programs Objective Memorandum (POM), and the 30 Year Shipbuilding Program. The NOC contains the most

recent and specific published guidance, and outlines thirteen specific mission sets, nine guiding principles, and nine methods for conducting naval operations.^{iv}

Today's Navy fulfills the missions outlined in the NOC to an extent, but not to the far-reaching global expanse that is required in the future. For instance, under the "Forward Presence" mission, today's Navy accomplishes this primarily by fulfilling finite GNFPP presence requirements with Carrier Strike Groups (CSGs) and Expeditionary Strike Groups (ESGs) in strategic hot spots and by maintaining a permanent Forward Deployed Naval Force (FDNF) embodied by Seventh Fleet. Strike groups do not sustain presence outside the areas required by the Global Naval Force Presence Policy (GNFPP). At best, strike groups occasionally transit through an area of interest, but will not loiter there. Not only will tomorrow's Navy be expected to maintain persistent naval presence in numerous new operating areas, as specified by the Navy Strategic Plan, the Navy is also responsible for maritime Homeland Defense, and consequently must gain and maintain Maritime Domain Awareness (MDA) and be able to quickly respond to threats anywhere in the world. Because the Navy's present day operational doctrine and employment scheme is based on the composite strike group, very few assets remain to operate in other areas.

The nature of the forces must also be considered for appropriate employment in the new areas. Utilizing a whole CSG, ESG, or even a single highly capable Aegis warship to conduct lower intensity maritime operations such as Counter-Narco Terrorist (CNT) operations may result in a large mismatch between the capabilities of assigned forces relative to the capabilities required to complete the mission. Misapplication of forces in this manner also precludes the use of these forces in more appropriate missions. The Navy simply cannot afford a fleet with such mission overmatch, and must have the ability to appropriately scale

its forces to meet a particular mission. The success of tomorrow's Navy hinges on today's leaders divining and implementing new "ways."

Within the next year, the two more formal documents within the CNOG are expected to be published. These documents, the Navy Operating Concept and the National Strategy for Maritime Security, will specify the "ways" and bridge today's Navy with tomorrow's missions. Three recommended changes for implementation into the Navy Operating Concept will adapt today's fleet to its emerging missions. First, pare down the CSG to a CVN and two Aegis ships. Second, downsize the ESG to strictly L-class amphibious ships. Third, use the remaining balance of the surface combatant force into regionally focused "Surface Engagement Groups" (SEG). The resulting and widely distributed naval network will be enhanced with emerging technologies in Global Maritime Domain Awareness (GMDA), network centric warfare, the Littoral Combat Ship (LCS), and the concept of a coalition "1,000 Ship Navy." By adapting these recommendations, the Navy will have operationally sound "ways" for fulfilling the CNO's guidance.

REFORMATION OF THE STRIKE GROUPS

Current, notional composition of a CSG is a CVN, a CG, three DDGs, an SSN, an AOE and occasionally a FFG. The strike group's training work-up cycle is synchronized so the air wing and all platforms collectively reach peak operational readiness at JTFEX, immediately prior to deploying as a composite unit. After the strike group deploys and transits as an entity, it routinely disaggregates into individual units to perform various separate missions. For example, when deployed to the CENTCOM AOR the CVN and CG will MODLOC in a CVOA in the Northern Arabian Gulf while the surface combatants

perform Maritime Interdiction Operations (MIO), Leadership Interdiction Operations (LIO), Engagement Operations and Iraqi Oil Terminal defense. The geographically separated surface combatants operate as far away from the CVN as the Horn of Africa and even the Red Sea. The SSN only operates with the CSG during exercises or during concerted USW operations; otherwise it typically sails independently and completes other tasking. Fleet commanders are already in the practice of performing disaggregate operations today, only they do so under the paradigm of large strike groups deploying per the GNFPP.

Under the new, proposed deployment scheme, CSG composition reduces from its normal order of battle to only a CVN with two Aegis ships, notionally a CG and a DDG. Restructuring the strike group makes the preponderance of the surface combatant fleet available for operations in SEGs, which will be explained later. The essence of a traditional carrier battle group is retained in a three ship CSG. The time tested and proven Composite Warfare Commander (CWC) concept remains completely intact. The warfare commanders all reside on the CVN and the CG, and inclusion of a second Aegis ship allows for shifting to an alternate warfare commander, a plane guard platform, and maintenance or casualties on the CG's SPY radar system. The new CSG will still exercise with other units, complete JTFEX, and deploy to regions of the greatest strategic significance per the GNFPP. The new and smaller CSG can aggregate with other naval forces including ESGs, entire SEGs, individual combatants or even combined naval forces, as required to perform higher intensity Major Combat Operations as directed by the Regional Combatant Commander. The forces that aggregate with the group may not have previously operated or performed exercises with it. This new naval force, when assembled, could resemble the CSGs of yore, but ultimately will be task organized and free form. Naval support to deliberate OPLANs remains unaffected

since the same number of ships, submarines, CVNs and ESGs will be forward deployed in theater or ready for deployment per the Fleet Response Plan (FRP).

Similarly, the surface combatants and SSN will be removed from ESGs such that ESGs deploy as task forces appearing similar to those formerly known as Amphibious Ready Groups (ARGs). Previously as ARGs, and now as ESGs, the amphibious ships routinely perform split-group operations, like CSGs, to the extent that the three amphibious ships even operate independently of each other. ESGs will deploy as three ships consisting of an amphibious assault ship with a LPD and LSD. Retaining the ESG construct is essential to ensuring the USMC's highly effective and capable MEU(SOC) organization is not affected. The ESG provides the Joint Force Commander an outstanding tool for quick expeditionary response, a flexible Sea Basing option, and a scalable force for engaging our friends and allies ashore in support of the Regional Combatant Commanders' Theater Security Cooperation (TSC) plans. When required, the ESG will marry up with other forces to perform higher intensity naval operations. ESGs will continue to deploy to regions of the greatest strategic significance per the GNFPP.

DEVELOPMENT OF THE SURFACE ENGAGEMENT GROUP

The balance of the surface combatant fleet, which will include and be heavily dependent upon the LCS, will be divided into regionally focused Surface Engagement Groups. SEGs are named such because they will "engage" friends and allies, foster development of the "1,000 Ship Navy", and be instrumental in Phase 0 Shaping Operations. They will conduct routine engagements with partner naval forces in expanded regions of strategic interest and guarantee freedom of the seas. New regions of interest are specifically

identified in the Navy Strategic Plan and are regions of geo-political instability, emerging economic markets, or are GWOT critical. The areas include: South East Asia, the Sea of Japan, the Arabian Gulf, the Horn of Africa (including the Red Sea and Gulf of Oman), the Mediterranean, the Gulf of Guinea and Swahili Coast, as well as the Pacific and Atlantic coasts of South America.^v

Since different regions face different challenges and are not necessarily of equal strategic significance, the composition of the SEGs will be different for each region. Each SEG will maintain two to four ships on station depending on the region. Because of the special nature of Seventh Fleet and the criticality of demands placed upon it in deliberate OPLANs, its current composition and employment will not change. A SEG will be sourced from a squadron of surface combatants such that one quarter of the squadron is deployed and on station, one quarter is preparing to deploy, one quarter is returning from deployment, and one quarter is in stood down for maintenance. Figure 1 outlines recommended SEG presence. Figure 2 demonstrates that today's fleet is capable of supporting the force requirements of the SEG construct outlined in Figure 1. As LCS becomes part of the fleet, and the number of fleet platforms increases, naval planners will have not only a greater number of surface platforms to employ, but also have a force that is capable of changing its mission focus. The flexibility for tailoring a SEG to its region will be unprecedented. The senior commanding officer within the SEG will serve as the on-scene SEG commander. The SEG commander will be under operational control of the regional JFMCC. When a SEG aggregates with a strike group, the SEG will effectively dissolves and becomes part of the CWC construct.



Current Combatant Endstrength and SEG/CSG Support Requirements



SEG operational readiness will be maintained per the Fleet Response Plan (FRP) with respect to deployment and surge readiness. There will always be a small group of ships deployed to a region, with an equivalent number of ships ready to immediately surge and a second group of ships that can provide supplementary surge shortly thereafter. The ability to surge is made possible by the Navy's new cultural standard of continuous readiness, mandated by the FRP, but enabled by SHIPTRAIN. SHIPTRAIN overhauled the training and certification process of individual ships such that a much larger portion of the fleet is maintained operationally ready to surge at any one time. Before SHIPTRAIN, ships' readiness would fall dramatically after returning from deployment and completing extended maintenance. SEG on-station time will be further maximized by utilization of Sea Swap on the multi-crewed LCS. Sea Swap may also be a viable option on DDGs pending final analysis of the effectiveness and efficiency trials of this program. SEGs will be said to maintain "1.0 presence" in their respective regions per an undated GNFPP.

The SEG is the functional "ways" for bridging today's fleet with meeting the CNO's intent for global, persistent presence with forces that maintain regional specialty.^{vi} As SEGs complete rotational deployments, they will achieve regional familiarity. The same ships, commanding officers and crews will grow relationships with their counterparts within the

"1,000 Ship Navy", increase unique cultural and situational awareness of the area, and ultimately add fidelity to regional MDA. Because SEGs will deploy to areas that currently have little or no naval presence and because strike groups do not routinely deploy to these areas, SEGs will be a special tool that the Regional Combatant Commander can use to shape the operating environment. From the perspective of network centric warfare, SEGs can be said to "extend the network" to an unprecedented breadth. The expanded Common Operating Picture (COP) and regional familiarity will push the first line of defense further out should shaping operations fail and a conflict escalates.

The resulting distribution of disperse and disaggregate forces is the ideal model for matching the precisely required force to a specific mission and quick response. In the event of an escalating crisis, especially in a geographically remote region, the likelihood that Navy assets are nearby is much greater. Depending on the nature of the situation, surrounding Naval forces can aggregate to the appropriate level of response whether it be simply to isolate the situation, influence or control the situation, deter further escalation or defeat the enemy. SEGs are the ideal solution for shaping the maritime environment, expanding the Joint Force Commander's COP, and responding to all levels of maritime conflict.

EMBRACING ANTICIPATED TECHNOLOGICAL & ORGANIZATIONAL ADVANCES

Simply downsizing strike groups and deploying disperse SEGs to new regions does not meet the CNOG unless it is networked, sustainable and ultimately can maintain freedom of the seas and a national defense-in-depth. Three factors that will enhance the Navy's ability to guarantee freedom of the seas and defense-in-depth include development of the "1,000 Ship Navy", improved network centric warfare, and the LCS. The leaders of

prominent foreign navies favorably support the "1,000 Ship Navy" concept.^{vii} Traditionally, foreign navies do not integrate well with CSG operations, and are usually assigned seemingly periphery tasking during combined operations. Integrating operations on a smaller scale will empower coalition forces to assume a greater role in maritime security. Activation of real-world combined task forces further prove the effectiveness of the combined force. Since the beginning of OEF, CTF-150 has superbly performed maritime security operations (MSO) in the Arabian Sea, Red Sea, Gulf of Oman and Horn of Africa. Not only has this combined task force successfully integrated ships from numerous coalition navies, commanders from partner navies have regularly led it.^{viii}

Sea Power 21's FORCENET is in continuous development. Distributed tactical battle networks are in place including Combined Engagement Concept (CEC) capable strike groups and the Joint Tactical Information Distribution System (JTIDS). CEC enables naval platforms to execute fires based on sensors located on other platforms. JTIDS is the first joint tactical data system, and is the standard throughout the majority of the fleet. Network centric warfare perpetually continues to become more streamlined and efficient.

Dissolution of the strike groups will yield greater global, persistent presence, but the full benefit of these operations will not be appreciated unless reliable MDA is attained. MDA is the most critical factor that concerns the JFC, besides the speed with which credible military force can aggregate. Without actionable intelligence gleaned from MDA, the JFC will never know where to employ fleet assets no matter how capable or powerful they are. The JFC will not have visibility on potential threats, their geographic whereabouts or their intentions. Distributed SEGs will vastly expand the range of organic Navy sensors and

provide the JFC better situational awareness. SEGs are the true complement to expanding MDA into GMDA.

SEG RESPONSE TO AN AREA DENIAL SITUATION

In a presentation of the CNO's proposed future maritime strategy to all Navy flag officers, the preponderance of the briefing accentuated globalization and global economics, not fleet operations. This same flag officer presentation listed "collapse of (the) global economy" as the number one "greatest danger and threat." The Navy is essential to keeping the growing global economy stable. The ease with which the Navy has historically maintained freedom of the seas is taken for granted. If an adversary challenges freedom of the seas and prevents area access along major commercial sea lines of communication (SLOC), the resulting disruption to the U.S. and global economy could be devastating. For this example consider that a terrorist organization, intent on crippling the economies of the free world, mines the Strait of Malacca. A tanker strikes a mine in the strait. The resulting oil spill causes a major environmental disaster and the Strait of Malacca chokepoint is essentially impassable. Commercial traffic flow, including oil from the Middle East, is impacted but promptly adjusts its SLOC south of Sumatra. The consequent commercial delays result only in moderate economic impact. Pirates in the area, however, anticipate this adjustment in the SLOC and capitalize on the opportunity by taking control of two merchant ships. Indonesian fishermen spot the piracy incidents and report them to the Indonesian navy. As partners in the "1,000 Ship Navy", the Indonesian navy shares this intelligence with the U.S. Navy and regional partners. Unless freedom of the seas is quickly restored, the

interrupted flow of oil and commercial goods to South East Asia, China, Japan and the United States threatens to collapse the American economy.

Under the new naval strategy, a SEG consisting of three U.S. Navy ships are operating nearby and able to respond nearly immediately. LCS 1, fitted with a MIW module, had been making a port visit in Singapore. After executing an emergency personnel recall, she was quickly underway and on-station in the Strait of Malacca. Minesweeping and mine clearing operations were in effect within 12 hours of the initial incident. LCS 2, outfitted with a SUW module, had meanwhile been performing naval exercises with the Thai navy in the Gulf of Thailand before it received tasking to proceed at best speed to the new southern SLOC to re-take control of the two pirated merchant ships. Within three days, LCS 2 transited from the far edge of its operating region to the new SLOC. LCS 2 joined a special Navy Special Warfare team dispatched from CONUS, used her organic MH-60s and accurate MDA to localize the two pirated ships and sequentially recovered each of the two vessels. The third SEG ship, a DDG, had been anchored near Dili, East Timor to deliver Project Handclasp humanitarian goods when it received tasking to sortie. Within 24 hours, the DDG commenced patrolling the southern SLOC, preserving area access, and deterring further piracy events.

In addition to the U.S. response, regional partners in the "1,000 Ship Navy" promptly delivered forces on scene. After reporting the piracy incident, the Indonesian navy deployed minesweepers into the strait to re-establish a safe route through the strait and stationed corvettes and frigates into the southern SLOC and Indonesian waters to deter further piracy. The Royal Malaysian Navy contributed forces to the effort similar to those provided by the Indonesian navy.



Area Denial SEG Response Example

If this event required additional U.S. assets, the Regional Combatant Commander had several available options to augment the SEG. COMPACOM could have shifted ships from the FDNF to the south, even a CSG or ESG if necessary. Under the FRP, a SEG, CSG or ESG could also quickly surge from CONUS. COMPACOM could even execute both of these surge options listed above if the scope of the situation warranted massive maritime response. Today's COMPACOM has surge options available, but the options are only based on surging strike groups. Aggregation of individual combatants or surging small groups of combatants is not a readily available option today.

SEG RESPONSE IN SUPPORT OF A MAJOR COMBAT OPERATION

Under the new fleet construct, Naval reaction to a fictional event in the DPRK would appear very similar to anticipated Naval response today. Suppose the DPRK performed a ballistic missile test indicating it could credibly attack the mainland United States. This test was followed shortly thereafter with a documented nuclear detonation of a warhead that perceivably could be loaded onto their ballistic missile. The DPRK government asserted the claim that the United States must immediately remove all forces from the Korean Theater of Operations (KTO) or suffer the consequences of a nuclear attack.

The forces of Seventh Fleet, including the KITTY HAWK CSG and the ESSEX ESG immediately sortie and respond per established deliberate planning. Missile defense and Intelligence, Surveillance and Reconnaissance assets quickly report on station. Within the United States, joint forces mobilization occurs per deliberate planning. The surge ready CSG and ESG deploy from the west coast within days. Surge ready SEG assets in Hawaii, the Pacific Northwest and San Diego join with the surging CSGs and ESGs as they transit to the western Pacific. The final Naval force that reports on station in the KTO in support of the KITTY HAWK CSG and ESSEX ESG appears identical to the naval force that would respond in an equivalent scenario today. Since more forces are postured forward in the SEG construct as compared to today's fleet, more assets could conceivably arrive on station faster than today's fleet. Consequently, the naval force construct using SEGs is just as responsive if not more than the traditional CSG/ESG based fleet in performing the range of maritime operations.

COUNTER-ARGUMENT: READINESS IMPACT

Critics of the SEG concept will cite that the complex synergy and coordination that develops from strike group workups and is proofed at JTFEX will never be realized if strike groups are downsized. The free form strike group that results from aggregating mix-andmatch forces will be less proficient at carrying out sophisticated, integrated missions. Indeed, a special bond and confidence does develop between the strike group commander, the warfare commanders, the air wing, and watch teams within the strike group during workups in the months preceding a deployment.

The training exercises used for preparing and certifying today's strike groups will remain in place for the new naval force. Rather than using the same specific escort ships for every strike group exercise, though, participating forces can be selected from units locally available. FRP and SHIPTRAIN already ensure that the bulk of surface assets are operationally ready and certified to perform integrated strike group exercises. As individual units exercise with different strike groups and become accustomed to adapting from group to group, the ease and proficiency of units integrating with new strike groups will become greater. In short time, free form force aggregation will become the recognized operational norm.

The bulk of workup training consists of developing tailored OPTASKS and proofing them during exercises. For every Navy-wide OPTASK there is a tailored, strike groupspecific OPTASK, and the difference from group to group does not vary significantly. The adjustment for a ship to merge with a CSG and adapt to its group-specific OPTASK will not require a great adjustment, if any at all, to proficiently perform integrated operations. The integrating ship will already have trained to a very similar OPTASK at a minimum. The

NOC contains guidance to standardize tactics, training, and procedures (TTP) across the entire force, ranging from procedures pertaining to supply to intelligence to fires and other kinetic operations.^{ix} Once free form force aggregation is normalized, procedural standardization will further streamline the ease of integrating units and mitigate any "lost" synergy within the strike group.

COUNTER-ARGUMENT: LOGISTIC SUPPORT

Dispersed fleet operations and employment of the LCS will provide new and unique challenges to the Combat Logistical Fleet (CLF). LCS is not yet operational. The decision for which of the two LCS platform types will be pursued for production is still years away, so modeling precise logistical support for LCS cannot yet be determined. Nonetheless, early criticism of both designs notes that the LCS will require special and frequent logistical support, especially re-fueling.^x LCS does not have a significant organic repair or onboard supply capabilities. Consequently, as systems break and require repair, the likelihood of ship's force being unable to quickly effect repair without external repair facilities or direct logistical support diminishes.

During normal strike group operations, surface combatants normally re-fuel every five days or so depending on the tempo of operations. Higher tempo operations require more frequent re-fueling. Strike groups normally deploy with a dedicated AOE that not only provides logistical support to the surface combatants within the group, but also to the embarked air wing on the CVN. Strike groups do not constrain their operations based on CLF support. The LCS, designed for sustained high-speed operations, is expected to operate independently, without direct oiler support. At slower 18-20 knot cruising speeds, LCS will

require re-fueling approximately weekly, but if operated at higher speeds the LCS will require re-fueling at much more frequent intervals.^{xi}

The concept of operations (CONOPS) for employing and operating LCS is not yet formalized. Once the CONOPS is published, the CLF community may not be able to fully support LCS. Shortfalls in CLF ability to support SEGs and LCS may impact the LCS CONOPS and possibly SEG employment. Logistical support to LCS and SEGs requires further analysis.

COUNTER-ARGUMENT: LCS SELF-DEFENSE

Capability-wise, the single-mission LCS is unique compared to the legacy fleet of multi-mission ships. CGs and DDGs provide an umbrella of air-defense protection for themselves and other ships in company. Discounting the air wing, CVNs and amphibious ships are outfitted with modest ship self-defense systems. LCS has less air-defense capability compared to the rest of the fleet. Critics may argue that the LCS will be a ripe, defenseless target as it operates independently in the littoral seas. These critics will cite Hezbollah's recent, successful C-802 attack on the Israeli corvette HANIT. This attack demonstrated that even small ships outfitted with "potent" multi-layered air defense systems are still vulnerable in the littorals.^{xii} Using the HANIT incident to highlight LCS vulnerability is a red-herring argument though. Had Israeli intelligence known that Hezbollah had C-802's in its inventory, HANIT most likely would not have been operating where it was or would have steamed at a higher state or readiness. LCS was never designed to operate in contested littoral waters and thus will not be outfitted with advanced self-defense systems. Rather, LCS is designed to operate unmanned systems in a defended environment while it

stands off, away from the threat.^{xiii} Should LCS be required to operate in a higher threat area, it can simply aggregate with another ship in its SEG that has the required defensive systems whether it be against air, surface or subsurface threats.

CONCLUSION

Today's U.S. Navy is more capable than the rest of the world's navies combined. Its fleet consists primarily of high-end capital ships grouped into even more powerful CSGs and ESGs. Maintaining such a large and capable fleet is fiscally untenable. Either the composition or employment method of the fleet must change in order to meet the new demands for conducting widespread and disperse operations. Changing fleet composition takes many years, and with the exception of the LCS, the current 30 Year Shipbuilding Plan re-capitalizes today's legacy fleet of capital ships with comparable large, expensive, multimission platforms including DDG-1000 and CG(X). Consequently, naval forces must be employed in innovative new ways to fulfill the latest CNOG. Reduction of CSG and ESG composition and development of regional SEGs will result in a Navy that can fulfill the missions designated in higher guidance. Distributing the fleet in this manner will result in shorter response times to crises, a scalable naval presence, greater GMDA, and a better ability to shape the operating environment before incidents elevate to conflict.

ⁱⁱ John D. Negroponte, Statement by the Director of National Intelligence to the Senate Select Committee on Intelligence, 2 Feb 2002; Thomas P.M. Barnett, "The Pentagon's New Map," <u>Esquire</u>, March 2003, 174-179, 227-228.

ⁱⁱⁱ John Morgan, VADM, <u>Navy's Maritime Strategy All Flag Officer Symposium</u>, 20 June 2006, 5-6.

^{iv} Michael G. Mullen, ADM, Michael W. Hagee, GEN, <u>Naval Operating Concept 2006</u>, 11-15, 18-24, 26, 28-31.

^v Michael G. Mullen, ADM, <u>Navy Strategic Plan in support of Program Objective</u> <u>Memorandum 08</u>, 2006, 19-20.

^{vi} Christopher J. Castelli, "Naval Leaders Aim to Distribute Forces More Widely Around Globe," <u>Inside the Navy</u>, 11 Sept 2006, 1.

^{vii} Russell E. Shalders et al., "The Commanders Respond, "<u>Proceedings</u>, March 2006, 34-51 ^{viii} David Hamilton, "Pakistan Navy Completes Term as Commander, Task Force150,"

Commander, U.S. Naval Forces Central Command Press Release, 22 Aug 2006.

^{ix} Mullen and Hagee, Naval Operating Concept, 29.

^x Robert O. Work, <u>Naval Transformation and the Littoral Combat Ship</u>, (Center for Strategic and Budgetary Assessments, 2004), 146-151.

^{xi} Ibid, 148-150.

^{xii} Norman Polmar, "Hezbollah Attack: Lessons for the LCS?", <u>Proceedings</u>, Sept 2006, 88-89.

^{xiii} Work, <u>Naval Transformation and the Littoral Combat Ship</u>, 144-145.

ⁱ Robert O. Work, <u>Winning the Race: A Naval Fleet Platform Architecture for Enduring</u> <u>Maritime Supremacy</u>, (Center for Strategic and Budgetary Assessments, 2005), 11-29.

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