In the wake of the terrorist attacks against the United States on September 11th, there is a pervasive sense that we must use all means available to eliminate the occurrence of future attacks on the American continent, on our people and on our way of life. The renewed focus on homeland security following the recent attacks mandated a reassessment of the critical vulnerabilities along America’s international coastlines. While many potential threats to America exist via our shores, the immense quantity of international commercial traffic into the United States provides a seemingly easily exploitable and tempting weakness that requires a review and analysis of the efficacy of our maritime homeland security (HLS-M) operational plans. Current global maritime security operations provide the framework with which we can examine our HLS-M structure, specifically our command and control (C2) organization and maneuver force planning, to ensure adequate protection against present and future asymmetric threats.
MARITIME HOMELAND SECURITY: ENSURING A FLEXIBLE RAPID RESPONSE

by

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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: _____________________________

04 February 2002
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Abstract of

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In the wake of the terrorist attacks against the United States on September 11th, there is a pervasive sense that we must use all means available to eliminate the occurrence of future attacks on the American continent, on our people and on our way of life. The renewed focus on homeland security following the recent attacks mandated a reassessment of the critical vulnerabilities along America’s international coastlines. While many potential threats to America exist via our shores, the immense quantity of international commercial traffic into the United States provides a seemingly easily exploitable and tempting weakness that requires a review and analysis of the efficacy of our maritime homeland security (HLS-M) operational plans. Current global maritime security operations provide the framework with which we can examine our HLS-M structure, specifically our command and control (C2) organization and maneuver force planning, to ensure adequate protection against present and future asymmetric threats.
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Traditional U.S. homeland security operational planning and force structure was based on the classic U.S. /Soviet Union force-on-force engagement scenario. The threat of a major world power with a blue water navy attacking our coast was the main focus in determining and developing the capabilities needed to secure our ocean borders. This has yielded several conditions. First, because we could identify a single potential conventional threat, like the Soviet Fleet, and because we felt that the Soviets were unlikely to initiate an attack on the U.S. homeland via the sea, our planners dedicated very few resources toward equipping, maintaining, and training naval forces for the mission. Second, the latter perception of essentially a “non-threat” convinced planners to commit most of the existing defensive potential of the HLS-M force to the Naval Reserve. Lastly, the lack of a near-term perceived direct threat left most of the focus for any military operations along the American coast to the U.S. Coast Guard. A net assessment concludes that the United States has a vast coastline that is porous and penetrable to numerous potential foes.

 Threats and Challenges
Port Security is surely one of the major foci in the reassessment of our maritime homeland security. The interrelationship between maritime trade and national security mandate a close examination of the potential for an attack via our waterways and shore terminals. In the aftermath of September 11th, it may seem rational to demand that an absolute solution is required...that we must “seal” our borders. The reality is that we must carefully balance our economic and national security policy and procedures so that the global market machine that fuels our lifestyle is not choked off. Commerce Department figures value the U. S. maritime contribution to Gross Domestic Product at more than $1 trillion. Commercial shipping accounts for nearly 95 percent of that total. The Coast Guard, in advertising their mission, claims to protect “more than 361 ports and 95,000 miles of coastline, America’s longest border.” While clearly not every seaport and mile of coastline is exploitable to a potential foe, a vulnerability does exist. Some 7,500 ships make more than 51,000 port calls in the United States each year. U. S. Customs and the Immigration and Naturalization Services (INS) officials share the responsibility of handling the 6.5 million passengers and their baggage passing through our sea terminals alone. The potential effects of targeting and disabling an American port or harbor could be devastating to our economy.

There has been much attention given to the threat of terrorist attack utilizing a commercial shipping container – the basic unit of transport for much of the solid goods transported via the sea. The size of a shipping container approximates the trailer of a typical semi-truck in volume and holds about 60,000 pounds of cargo. The Customs Service physically inspects about two percent of the 15-20 million containers entering U.S. ports each year. A Customs team of five averages three hours to inspect a single container (…task saturation has set in long ago). The shipping container may be the camouflage of choice for the persistent asymmetric terrorist and his weapon. Indeed, “America’s Most Wanted” may be testing the waters of international shipping as in October, 2001, a suspected Al Qaeda operative was discovered

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holed up in a 40-foot shipping container which had been outfitted with a toilet, heater and bed, ready for a trip from Italy to Toronto.\textsuperscript{4} It has recently been revealed by U.S. and Norwegian intelligence sources that the long suspected theory that bin Laden has a fleet of merchant vessels supplying his terror network in fact consists of more than 20 ships.\textsuperscript{5}

The challenge is not to seal off our borders. That could be accomplished, given the President’s or Defense Secretary’s direction, dedication of adequate resources, public support, and the assumption of risks in other areas of national security. The far more significant challenge is “ensuring that legitimate cargo is not unnecessarily delayed as we and other nations introduce enhanced security measures against some very real and potent threats.”\textsuperscript{6}

The LNG Incident

There have been volumes published since September 11\textsuperscript{th} regarding the vulnerabilities of U.S. ports. While plainly speculative in many cases, a little publicized recent incident highlights the immediate concern over potential attacks involving commercial merchant vessels and emphasizes the spontaneity of the reaction. Less than two weeks after the attacks on New York and Washington, D.C., Boston’s Senior Coast Guard officer, Captain of the Port Brian Salerno, denied entry of a Liquified Natural Gas (LNG) tanker into Boston Harbor. The tanker was scheduled to deliver 33 million gallons of the highly flammable gas. While this may appear to be a very risky evolution, Boston Harbor welcomed 46 LNG tanker deliveries last year and distributors have been shipping LNG into Boston for the past 30 years without a

\textsuperscript{6} Loy, 4.
In this case, the Coast Guard was not so much concerned with the ship or the shipper, as it was with the prospect that an attack might be launched against the tanker as it made its path through the narrow channel very close to downtown Boston buildings and bridges. The Captain of the Port felt that the potential for catastrophe needed to be addressed before the Coast Guard could permit the evolution to continue. The ban on LNG tanker travel was lifted by his resolution nearly three weeks later. While the resolution was influenced by a Lloyds of London report paid for by the shipper, the Department of Energy also provided analysis. The initial data compiled suggests that an attack on a LNG ship could create a very hot fire that could endanger material within approximately 200 yards. The Coast Guard has implemented several initiatives which will mitigate the risk of catastrophic effects, including shutting down the Boston Harbor’s Tobin Bridge, a major north-south thoroughfare through the city, during the LNG tanker transits.

The above example implies a threat external to the vessel, which exploits the normal cargo configuration of the tanker for mass effects. This case becomes definable, then, as a commerce vessel that requires protection to ensure its safe transit—a seemingly achievable task. What, then, becomes of the unidentifiable or uncooperative vessel? Do we as a military force have the ability to thwart a sea-borne threat approaching one of our ports? Let us examine ongoing naval operations in the United States Central Command (CENTCOM) Area of Responsibility.

**Maneuver**

The United States Navy has a long history of defending the world’s sea lanes. Whether it was the Barbary Pirates in the Mediterranean Sea or escorting Kuwaiti Tankers through the Persian Gulf during the Iran-Iraq War, the Navy has been postured to ensure the safe movement of commerce across the oceans. Since 1991, one of the primary maritime tasks of CENTCOM has been enforcing the naval aspect of the United Nations economic sanctions against Iraq. Varying in descriptor over the past decade, Maritime

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Interception Operations (MIO) have been conducted continuously by CENTCOM and its supporting forces since Desert Storm to ensure Iraqi compliance with U. N. resolutions. What began as fairly routine, low-risk missions has developed into a complex multi-national joint operation conducted around the clock throughout the Arabian Gulf, Gulf of Oman, and North Arabian Sea. It has evolved from a relatively small number of U.S. Navy combatants and Coast Guard law enforcement boarding teams monitoring cooperative merchantmen and their shipments, to a sophisticated sequence of tactical actions which utilize Joint Special Forces, armed helicopter cover, air insertion of boarding teams, carrier battle group direction, U.S. national assets and an armada of multi-national platforms. As a result of the cooperation of neighboring states, sanctions violators have become more bold and determined to deliver their contraband, be it oil or other goods. The operations now are almost universally opposed by non-compliant merchant crews who go to great lengths to prevent their vessels from being detected and boarded. Likewise, they daringly resist personal physical apprehension and attempt to prevent allied boarding teams from taking control of their vessel. The Navy/Coast Guard team, supported by joint assets, is very accomplished in this mission.

The Information Puzzle

The task of protecting the American coast may seem daunting, but there is much more to the task than forcibly seizing ships at sea and inspecting their cargo. While these actions could certainly mitigate risk to U.S. ports, it would also slow global commerce to a trickle--an unacceptable option. Given a group of unknown non-military ships approaching the United States, there must be a means by which the Commander can determine who is “the good guy” and who is “the bad,” and then focus his energy on only the bad guy, not the whole lot. This idea is articulated by Admiral James Loy, Commandant of the Coast Guard, who labels his concept of Maritime Domain Awareness (MDA) as being critical to mitigating the risk of an attack on U.S. seaports. MDA would prevent the saturation of resources that would come with

\[\text{Ibid, 1.}\]
attempting to seal the entire coast through interdiction of each approaching vessel. Admiral Loy’s MDA concept allows the “fusion of ship, cargo, passengers, and crew databases from multiple sources” to give all of the key players in the security business a “more complete advance picture of who and what” is heading towards America.\textsuperscript{10} One of the common weaknesses identified in the United State’s current approach to maritime homeland security is a lack of interagency joint and combined database fusion. The MDA concept will allow this information cooperation and ensure that the maneuver forces are not burdened by the overwhelming task of monitoring the legitimate vessel while unknowingly permitting the skulking criminal to slither past our defense.

MDA really is a piece of the command and control puzzle. The database it will create is intelligence which by itself means little, but given the appropriate level of analysis and information sharing between key agents, it can certainly lead to a more accurate perception of the participants engaged in the maritime transportation arena at any given time. Data collection will require the use of current capabilities in the defense, government, and commercial industries, but to fully capitalize on the potential, new technologies and employment of current off-the-shelf systems will need to be developed and implemented.

The military certainly has the significant means to monitor transoceanic traffic. The collection effort for commercial traffic currently is conducted as a part of routine operations. Maritime Patrol Aircraft (MPA), Seahawk helicopters and surface combatants regularly conduct various collection efforts on all contacts within their operating area. Integrated Undersea Surveillance Systems, attack submarines and satellites similarly collect significant data. Signals intelligence is available to the intelligence centers as well. Operational units forward their data to joint intelligence centers who regularly issue maritime traffic monitoring messages to ensure contacts of interest continue to be assessed as they continue their journey. Part of the problem today is that while significant effort is being put forth in overseas operating areas, little

\textsuperscript{9} Ibid, 1.
priority is being given to collection efforts in U.S. coastal waters. Whereas we may have a robust effort ongoing from Singapore to the Straight of Magellan, the fleet operators stateside are missing an opportunity to add depth to the data. Why does this happen?

Day-to-day stateside fleet operations remain as routine as they get. With the exception of some increased air traffic control requirements for aviators and reconfigured alert responsibilities for the surface fleet, daily missions continue (as they should) to focus on training and readiness. Ships and aircraft are sailing and flying in and out of major fleet concentration areas (FCA) daily with no formal requirement to collect data on shipping. The potential value from assigning “collection of opportunity” missions to routine fleet operations out of CONUS bases is tremendous.

Admittedly, not all of the United States coast is within reach of the fleet’s stateside operators, but given the coincidental locations of the FCAs, a fair chunk of the America’s sea coast is covered daily on routine sorties, whether they be by sea or air. The U.S. Atlantic coast is flanked by significant MPA assets out of Maine, the world’s largest navy base in Norfolk, Virginia, and a large base of navy helicopters, P-3s and surface combatants in Florida. On the West Coast, FCAs generate a high volume of potential collection out of the Pacific Northwest with P-3, submarine and surface operations. Point Mugu Naval Air Station, north of Los Angeles, is home to the Pacific Fleet E-2 Hawkeye community. On the southwest corner of the U.S. border, San Diego is home to the largest concentration of ships and submarines and helicopters in the world. Certainly this effort could augment the total MDA effort until additional resources are procured to bolster the capability. What is preventing this action? Mere speculation identifies two possibilities: post-September 11th task or idea saturation or political rice bowling. Once the task of data collection is mastered and “the daily intel brief” is generated, dissemination becomes the next major hurdle.

<http://www.homelandsecurity.org/journal/Articles/Ross_Loy_USCG.htm> [December 31, 2001]
There are currently three separate operational command and control structures that claim a piece of the HLS-M puzzle, the Maritime Defense Zone (MDZ), the Joint Interagency Task Force (JIATF) East and West, and the newly emerging Joint Forces Command (JFCOM) homeland security “directorate.” The first, the traditional MDZ, is alive and well. The MDZ organization “may be activated by declaration of war or at the direction of the President.” The MDZ relies on resources that are drawn primarily from Naval Coastal Warfare (NCW) forces. The MDZ can be augmented by Coast Guard and, depending on the magnitude of the threat, by frontline blue water naval forces. The NCW mission is primarily that of inshore/coastal area protection. The core competencies include harbor defense/port security, harbor approach defense, and inshore surveillance. Among the operational characteristics of NCW is denial of entry of hostile or unknown persons or vessels into designated ports and harbor facilities. Of particular importance is the published doctrine specifying the limitations NCW forces will see in a medium to high threat environment. Doctrinally, NCW is optimized for employment in a “reasonably” secure environment (threat Level I). NCW forces may operate in medium (Level II) threat areas (in the presence of unconventional warfare forces and guerrillas), but not in a high (Level III) threat area.

The Coast Guard Area Commanders (COMLANTAREA and COMPACAREA) are designated by law as the MDZ Commanders. According to doctrine, the MDZ Commander normally is subordinate to the Navy Fleet Commander in Chief. NCW, through the MDZ organization, can give the Joint Force Commander (JFC) flexibility in the inshore area and complements existing Coast Guard harbor operations. Ultimately, with the MDZ Commander’s primary reliance on NCW, which are essentially entirely reserve commands, the Commander is faced with a structure that is inflexible and unable to provide a quick response to specific HLS-M threats. The only means by which the MDZ structure can provide the

12 Ibid, 1-1.
13 Ibid, 1-3.
maneuver forces required to provide the JFC the quick response is through employment of in-place, active
duty Coast Guard units. This option, which currently lacks the firepower and force structure, does not yield
the required flexibility that other existing command and control structures might provide.

The JIATF organization was adapted from existing task forces and has been in operation since
1994. It is composed of two separate commands, JIATF East and JIATF West. JIATF East is a component
of the U.S. Southern Command. JIATF East's primary mission is to plan and execute interagency detection,
monitoring, and sorting of air and maritime drug smuggling activities within the US Southern Command's
Area of Responsibility (AOR). Targets of interest are handed off to U.S. law enforcement agencies or
international partners for interdiction and seizure to disrupt drug trafficking. JIATF West has a parallel
mission in the PACOM AOR. JIATF East operations arguably have yielded the most successful
coordinated multiple government agency effort in history. JIATF East merges the efforts of the Federal
Bureau of Investigation, Defense Intelligence Agency, Drug Enforcement Agency, U.S. Army, Navy, Air
Force and Coast Guard, and allied militaries and police forces. The primary targets of JIATF missions are
maritime, ranging from cigarette boats to freighters, and from jet-skis to mini-submarines. The relevance
and applicability of the JIATF organization in the HLS-M arena cannot be discounted.

The U.S. JFCOM Homeland Security Directorate is actively engaged in formulating campaign
plans for HLS. They have established a broad mission of conducting multi-spectrum operations “to deter,
prevent, and, if necessary, defeat aggression aimed at [the] United States”16 The Directorate has in place
a command structure that is well organized to address the entire span of staff issues. It is weighted toward
traditional staff functions, such as intelligence, operations and plans, but also includes interagency and
information management branches. While a separate branch, an embedded interagency focus reaches
across the staff functions and is emphasized in the tasks and purposes of the operations and plans branches
as well. This is clearly based on the recognized criticality of coordination between numerous dissimilar

15 US Southern Command World Wide Web Internet Site/Public Affairs/Director, Joint Interagency Task Force East Biography,
agencies. Its most significant limitation may be that it is too small a part of a huge organization, whose attention may be not on the warfighting effort as much as its other high visibility missions.

Recommendations

Command and Control

1. Restructure the Unified Command Plan to reestablish the Atlantic Command (USCINCLANTCOM or LANTCOM), which would assume all current JFCOM geographic combatant responsibilities including North American Treaty Organization (NATO) command roles. JFCOM would become a functional CINC, and retain all non-warfighting missions (e.g. transformation and joint training, integration, and experimentation). LANTCOM would be the lead command for HLS.

2. Establish a standing Joint Force Homeland Security (JF-HLS). The Joint Force Commander would be Commander of the Atlantic Fleet (CINCLANTFLT) and would establish separate East and Coast HLS-M Task Forces (TF HLS-ML and TF HLS-MP) that would be commanded by the respective Atlantic and Pacific Area Coast Guard Commanders (LANTAREA and PACAREA). The HLS-M task forces would report directly to the Joint Forces Maritime Component Commander, who would be the Commandant of the Coast Guard. (Other Component Commanders may be formed within the JF-HLS as appropriate, but are outside the context of this discussion.)

3. The TF-HLS Commander would have direct liaison authority with all Navy Fleet and Numbered Fleet Commanders, Air Combat Command, U.S. Army Forces Command, Marine Corps geographic force commanders, and Commandant of the Coast Guard for forces and assets required for the HLS-M mission.

4. Deployment Orders for forces LANTCOM and PACOM forces would be generated by LANTCOM following coordination with the JF component Commanders.

5. Operational Control (OPCON) would be retained by the JFC, but may be delegated to the JFMCC as required. Tactical Control (TACON) of the assigned force would be given to the TF commander.

6. A Joint Force Information Component Commander (JFICC) would serve to synthesize all data and ISR efforts of the JFC. He would be much more than a “super” J-2. He would serve as the integrator of all contributing agencies. Liaison Officers would be provided from each of the major federal and international agencies. The JFICC would have a direct line to the JFC. The essential task for the JFICC would be to incorporate MDA as the basis for identification and prosecution of contacts (vessels, aircraft, and individuals) that serve as a threat within the Joint Operating Area (JOA).

Maneuver

1. The TF HLS-M would create a maritime QUICK DRAW alert force. This alert force would provide the combat power based on conventional USN/USCG Maritime Interception Operations tactics, techniques, and procedures required to challenge, interdict, and neutralize all identified and/or designated threats within the JOA.

2. The QUICK DRAW force would be composed of sea, air, and land forces that would be assigned rotational duty to the QUICK DRAW force. The force would be deployed to areas in order to provide the TF Commander with the flexibility and reach to interdict and neutralize all
designated threats within a standardized timeframe. These forces would be drawn immediately from the active forces of the United States, but would require augmentation from the reserve force for NCW and other specialized capabilities. The force structure requirements would need review and recommendations for programmed resources would come from LANTCOM for future planning purposes. The QUICK DRA W forces would remain activated for the duration of the operation through the post hostilities phase.

3. The depth of a typical QUICK DRAW alert force providing coverage for the southwest region, to include the Port of Los Angeles, would include Maritime Patrol Aircraft (P-3) forward deployed to Naval Air Station North Island in San Diego, Armed SH-60B Seahawk helicopters for extended offensive sea control, HH-60H helicopters to support Naval Special Warfare non-compliant insertion, a Naval Reserve Frigate for local sea control, USCG Coastal Patrol boats for insertion of law enforcement teams, U.S. Customs EP-3 and aircraft for airborne early warning.

4. Air and surface surveillance would rely on current U.S. Navy surface combatants and aircraft operating in the JOA. NORAD capabilities should be available for use as well. Other assets would be required in the near term to meet real-time HLS-M threat coverage and maintain current National Military Strategy objectives.

5. The operational scheme for the QUICK DRA W force would be maintained at a basic level to allow rapid response and desired effect(s). As an example, the case of a suspect commercial container ship will be highlighted. The TF Commander would rely on MDA tipper information for QUICK DRA W force employment. Once alerted, the TF Commander would designate the appropriate weapons status, assign a QUICK DRA W force platform to locate the contact of interest (COI), track the vessel, and assess the risk to own forces. Additional QUICK DRA W forces would be launched as determined by the TF Commander. Interagency MDA would have alerted potential targets along the COI’s lines of approach, so that protection (e.g. security
zones, law enforcement personnel available for apprehension) could be in place at the arrival port. QUICK DRAW forces would attempt to communicate with the COI. Determination of intentions must be made, and tactical courses of action decided upon based upon the MDA process and the information gained from the QUICK DRAW force assessment. The capabilities embedded within the force range from an unopposed boarding by a MIO team, to a non-compliant covert ship take-down, to destroying the vessel with air or surface launched missiles.

This range of options requires a solid and responsive command and control structure. The HLS-M TF provides just that. The linkage for successful maritime homeland security is Maritime Domain Awareness. It is appropriate that this concept founded by the Commandant of the Coast Guard is the driver in the success of the operation. It cannot, however, be achieved through Coast Guard, Naval Coastal Warfare or even Department of Defense action alone. Interagency and interservice cooperation must be at the base of all planning, training, information and intelligence operations as well as execution. While a nominal QUICK DRAW force may be in place immediately, an adequate force will depend upon appropriate resourcing programmed in future years defense plans.

Conclusion

The United States is graced with a magnificent coastline and impressive harbors. We have incredible maritime port facilities and are the world’s leader in maritime trade. The impact of terrorism reaching America must serve to mobilize our effort to reshape the way we protect our maritime borders. The potential threats to the United States via our coast and port facilities and the immense quantity of international commercial traffic into the United States, mandates that we examine the effectiveness of our maritime homeland security (HLS-M) operational plans. The military instrument of national policy must be prepared to use all means available to eliminate the occurrence of future attacks on the American continent, including those from the sea. Current global maritime security operations provide the
framework with which we can create a more effective command and control organization, and responsive maneuver force, to ensure adequate protection against present and future asymmetric maritime threats to the United States homeland.


