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14. ABSTRACT

The United States currently has overwhelming military superiority as it enters the 21st Century. However, future adversaries of the United States will continue to focus on using limited conventional military means to deny or severely limit U.S. forces access to a littoral operating base using asymmetric anti-access and area-denial strategies. The Joint Force needs access and freedom of action in the littorals in order to accomplish strategic and operational objectives. Maritime forces can assist in providing operational protection for complex joint operations through concepts like Sea Shield that encompasses the newest technologies, distributed sensors, and a fully networked architecture. To work effectively, it will be vitally important that the Joint Force Maritime Component Commander's (JFMCC) planning and execution is fully integrated and synchronized with the Joint Task Force. An agile and collaborative JFMCC command and control structure and process can facilitate this integration and synchronization. Ultimately, the JFMCC will contribute to the operational protection of the joint maritime force in the littorals by setting and prioritizing objectives, integrating forces, and synchronizing actions.

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THE JOINT FORCE MARITIME COMPONENT COMMANDER AND OPERATIONAL PROTECTION FOR MARITIME FORCES IN THE LITTORALS

by

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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.

Signature: _____

16 May 2006

ABSTRACT

The United States currently has overwhelming military superiority as it enters the 21st Century. However, future adversaries of the United States will continue to focus on using limited conventional military means to deny or severely limit U.S. forces access to a littoral operating base using asymmetric anti-access and area-denial strategies. The Joint Force needs access and freedom of action in the littorals in order to accomplish strategic and operational objectives. Maritime forces can assist in providing operational protection for complex joint operations through concepts like Sea Shield that encompasses the newest technologies, distributed sensors, and a fully networked architecture. To work effectively, it will be vitally important that the Joint Force Maritime Component Commander's (JFMCC) planning and execution is fully integrated and synchronized with the Joint Task Force. An agile and collaborative JFMCC command and control structure and process can facilitate this integration and synchronization. Ultimately, the JFMCC will contribute to the operational protection of the joint maritime force in the littorals by setting and prioritizing objectives, integrating forces, and synchronizing actions.

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INTRODUCTION

The United States currently has overwhelming military superiority and enjoys global hegemony as it enters the 21st Century. A peer military competitor is not foreseeable in the near future. However, future adversaries of the United States will continue to focus on using limited conventional military means to deny or severely limit U.S. forces access to a littoral operating base by using asymmetric anti-access and area-denial strategies. Specific threats include quiet diesel submarines, mines, missile-carrying patrol boats, and anti-ship cruise and ballistic missiles.

Although the United States will not soon face a global conventional war like those of the 20th Century, its military forces continue to emphasize expeditionary operations in order to counter international insurgencies and regional rogue states. The Joint Force needs access and freedom of action in the littorals in order to accomplish strategic and operational objectives. Maritime forces can assist in providing operational protection for complex joint operations through concepts like Sea Shield that encompasses the newest technologies, distributed sensors, and a fully networked architecture. To work effectively, operational protection in the littorals will require a robust, responsive, and flexible command and control structure, especially at-sea.

It will be vitally important that the Joint Force Maritime Component Commander's (JFMCC) planning and execution be fully integrated and synchronized with the Joint Task Force. An agile and collaborative JFMCC command and control structure and process can facilitate this integration and synchronization. Ultimately, the JFMCC will contribute to the operational protection of the joint maritime force in the

littorals by setting and prioritizing objectives, integrating forces, and synchronizing actions.

ANALYSIS

Nature of the Threat

"Military capability is not measured in terms of what a military possesses, but rather what it can effectively bring to bear to accomplish political objectives/behavior modification."[1]

-Joint Operational Environment

Current and near term future adversaries of the United States do not possess the forces and expertise to challenge U.S. maritime forces on the high seas. Furthermore, the fact that U.S. military superiority is significantly ahead of the next peer coupled with the great costs of building a conventional military virtually eliminates any incentive for most future opponents to challenge the United States on the traditional battlefield.[2] Therefore, enemies will continue to focus on using limited military means to deny or severely limit U.S. forces access to a littoral operating base. Considering that a majority of large cities and population concentrations worldwide are along coastlines, U.S. naval forces will continue to find themselves drawn into the littorals whether they prefer to be there or not. In addition to finite and confined maneuvering space and proximity to the adversary's threat rings, the littorals are characterized by a sound-attenuating acoustic environment, irregular and/or steep coastal terrain, and numerous merchant shipping and civil air contacts that will clutter and further complicate the operational picture for U.S. commanders.

Opponents of U.S. military intervention will rely on less expensive, though not necessarily less capable, military means to counter the ability of U.S. maritime forces to operate off their coasts with impunity. Mines, torpedoes, anti-ship cruise and ballistic

missiles will continue to be weapons of choice for these smaller (both in budget and order of battle) navies and militaries. The United States should expect these adversaries to mass their capabilities (e.g., swarm tactics) in an attempt to overwhelm U.S. defensive postures and responses.[3] Additionally, the future threat will become more adept and focused on disrupting U.S. operations not only by interdicting sea and air lines of communication, but also by attacking at air and sea ports of debarkation and embarkation, whether those locations reside in U.S.-friendly third nations or at sea in the form of sea basing.[4] A planning scenario in the *Joint Operational Environment* document describes a future adversary with demonstrated Weapons of Mass Effect and anti-access capabilities. By using a robust and well-networked information network, this adversary will attempt to exploit weaknesses in U.S. protection schemes and attack with conventional and unconventional means.[5]

The defensive strategy of future U.S. adversaries described in the preceeding paragraph has been recently encapsulated in many articles, reports, and doctrinal writings by using the terms anti-access and area-denial.[6] The difference between the two is subtle, but distinct. As defined in a recent report concerning the same subject, the object of anti-access strategies is to "prevent U.S. force entry into a theater of operations," while area denial strategies "aim to prevent their freedom of action in the more narrow confines of the area under an enemy's direct control."[7] Simply put, anti-access and area-denial relate to the theater-strategic and operational levels of warfare, respectively.

In his essay, "Taking the Longview: Littoral Warfare Challenges", Edward Hanlon attempts to explain the recent zeal shown by many western countries (including the United States) to transform their military forces from traditional heavy forces and

large blue water navies into smaller, lighter, and more versatile expeditionary forces. Notwithstanding ever decreasing defense budgets, Hanlon attributes these moves to counter what has been coined by some as "chaos in the littorals."[8] This chaos is the result of the demise of public order, the decline of the nation state, and the increasing power of non-state actors. Hanlon argues that the cost of permanent base, both politically and economically, have become too expensive and risky in a more uncertain world order.

From the adversary's perspective, Operation DESERT STORM exposed the futility of attempting to match U.S. military dominance with a "head on" conventional force.[9] In response, current and future enemies will look for an asymmetric response to U.S. military dominance in the form of defensive anti-access strategies.[10] The conventional components that make up the required capabilities of a successful anti-access strategy include missile, mines, submarines, speedboats, and a myriad of sensors.[11] For example, Iran's anti-access strategy currently involves Chinese-made anti-ship cruise missiles, Russian-made diesel submarines, indigenously produced mines, and patrol boats of various country designs.[12] In this area-denial environment, it will be incumbent on commanders to actively balance the risks associated with the requirements for adequate operational protection and the need to allocate assets for other essential missions (e.g., power projection). The decisions made by the Joint Force Commander (JFC) in dealing with the balance of forces for different operational functions will be more effective and efficient if he leverages the contributions of all U.S. forces to provide an integrated architecture for operational protection in the littorals.[13]

Naval Operating Concepts for Joint Operations

"Joint maritime forces, including the Coast Guard, will conduct highly distributed operations with a networked fleet that is more capable of projecting power in the 'brown and green waters' of coastal areas. They will be capable of projecting force and extending air and missile defenses from far greater ranges." [14]

-*Quadrennial Defense Review Report,* 2006

Since the attacks on September 11, 2001, the U.S. Navy has continued to refine and outline its vision for operating in the 21st Century and how to counter the latest regional threats in a new expeditionary era. In 2003, then Chief of Naval Operations Admiral Clark and Marine Corps Commandant General Hagee signed "*Naval Operating Concept for Joint Operations (NOC).*" This document fused the service visions encapsulated in the Navy's *Sea Power 21* and the Marine Corps' *Marine Corps Strategy 21* and describes how the Navy and Marine Corps "will train, organize, deploy, employ and sustain a more capable and ready force…as part of the Joint Force."[15] In short, the document attempts to align naval operations and capabilities with Joint Functional Concepts (e.g., protection, command and control) in order to better ensure naval force interoperability and integration in future joint operations.

The U.S. Navy has made considerable changes to the make-up of its expeditionary forces in response to new global challenges. Countering today's threats of transnational terrorists and rogue states requires naval forces that are widely dispersed on station to shape the security environment or seize the initiative, and if required, to project significant combat power.[16] Although the number of combatants in the U.S. Navy inventory has generally decreased since the end of the Cold War, the tempo of naval operations has increased. Facing this reality, the Navy decided to reduce the number of surface combatants and submarines in its Carrier Battle Groups and move those ships into the Amphibious Ready Groups. The resulting task groups have been renamed Carrier

Strike Groups (CSG) and Expeditionary Strike Groups (ESG), respectively. In addition, the Navy plans to form nine Strike or Missile Defense Surface Action Groups and is in the process of converting four nuclear OHIO-class submarines into Tomahawk missile-shooting boats (SSGNs).

While on paper the Navy has almost doubled the number of independent task groups, it has decreased the number of units per group and has accepted the increased risk of reduced operational protection against such threats as diesel submarines and anti-ship cruise missiles. In an article for *Proceedings* published in 2003, then VADM Mike Mullen wrote, "Tomorrow's carrier strike group will have fewer surface combatants and submarines, an acceptable risk when operating against transnational enemies that pose a limited at-sea threat to our operating forces."[17] This would imply that if encountering an enemy with even a limited naval force and basic anti-access and area-denial capabilities (e.g., Iran or North Korea), the CSG or ESG may be combined into a larger force of several groups to reduce risk. Certainly, the Littoral Combat Ship is envisioned to increase the robustness of the naval task force's protection capabilities, as are unmanned vehicles of all types. Not addressed, however, are the required command and control architecture and planning processes to effectively orchestrate this task force in fulfilling its mission, beginning with sufficiently protecting its own units and possibly those of joint forces. The question is: "can the Navy leverage joint assets to increase its operational protection in the littorals, and how can it do that?"

The applicability of the *NOC* with respect to this paper lies in the realm of Sea Shield and its contribution to what *Joint Vision 2020* termed "Full Dimensional Protection."[18] The United States should expect that future adversaries will attempt to

limit joint and multinational force capabilities by impeding access to operating bases, attacking or holding those bases at risk, and interdicting friendly lines of communication.[19] The threats include quiet diesel submarines, small and fast patrol boats, cruise missile shore-sites, and an array of sophisticated and relatively cheap mines. As alluded to earlier, besides restricted maneuvering space and often a 360-degree threat axis, the littoral physical environment can play havoc on sensors and weapons, usually resulting in very limited operational ranges, especially underwater. Sea Shield is envisioned to counter the threats in this challenging environment.

The concept of Sea Shield has three parts: it provides a layer of defense for the homeland, it gains and sustains access to the littorals, and it extends defensive capabilities for joint force protection inland. In the littorals, Sea Shield and the defensive umbrella it provides will extend from the sea, over the beaches and inland, and thus help protect joint forces and allies. The *NOC* states: "The ability of forward Naval Forces to extend a sea shield over the shore will significantly enhance the deployment options of the JFC while helping to build and maintain an uninterrupted deployment momentum for the Joint Force."[20] This implies that in addition to the traditional naval missions of Antisubmarine Warfare (ASW), Anti-Air Warfare (AAW), Anti-Surface Warfare (SUW), and Mine Warfare (MIW), the maritime component may have to provide theater air and missile defense farther inland than it normally would, when protecting only assets operating on the sea or close to the beaches. The ability of naval forces to effectively extend these defensive operations over the seam of sea and land environments will complement the air and land component in future joint and/or combined operations.

The Navy has decided that the best near-term approach to solving these problems is to network large numbers of sensors and weapons.[21] The Navy is attempting to merge new technological capabilities such as advanced airborne and shipboard radars, sonars, distributed sensor fields, and over-the-horizon weapons with new network systems to enable it to protect over a wider swath of the battle space.[22] FORCEnet, the naval version of network-centric warfare, will be a major enabler of these broad force protection capabilities.

Within the architecture of FORCnet, the effectiveness and responsiveness of naval command and control (C2) will be significantly increased by the fusion of data from multiple joint, combined, and interagency sources. An effective defense system against ballistic and cruise missile attack will require a common, integrated air picture. A highly responsive command and control system to minimize sensor-to-shooter times along with proper apportionment and placement of sensors and shooter is vital to the Sea Shield's success.[23] Of course, this assumes that the proper maritime command relationships have been established and the C2 staff architecture and doctrine have been revised to accommodate the advances of information technology and knowledge.

Joint Maritime Operations

"Whosoever can hold the sea has command of everything."[24]
-Themistocles (524-460 B.C.)

Future adversaries will continue to capitalize on global technology diffusion to procure improved anti-access and area-denial capabilities. In order to gain and maintain access to a non-permissive littoral environment, the Joint Force Commander's (JFC) planning efforts must include a thorough mission analysis based on a comprehensive assessment of the enemy's defensive capabilities. The commander will have to draw on

various friendly air, space, naval, and land forces and their capabilities in order to counter area-denial measures. The goal is to afford an acceptable level of risk to friendly forces so that the commander maintains freedom of action in and around the sea. In order to be effective against a cunning adversary with credible offensive/defensive capabilities, the protection of the force in the littorals will require a comprehensive sensor and platform network, extensive headquarters collaboration, and a responsive C2 structure. The concept of Sea Shield (operational force architecture) is especially useful here. These friendly forces and capabilities may include coalition forces, for example mine countermeasure and ASW assets from NATO allies. The key to incorporating, integrating, and synchronizing a complex array of forces will be a capable operational staff headquarters to conduct thorough planning, establish objectives, set priorities, assign tasks, and monitor execution. The concept of a Joint Maritime Component Command (operational war fighting process) is useful here.

Operational Protection .

It is useful at this point to define operational protection as it is considered in the context of this paper. The final revision of draft Joint Publication 3-0, *Joint Operations,* contains a new section on operational functions, to include protection. It states the purpose of the protection function is to preserve the joint force's fighting potential.[25] Among other ways to carry out protection, the publication lists active offensive and defensive measures that protect the joint force, its information, its bases, necessary infrastructure, and lines of communication (LOC) from an adversary's attack. The specified tasks relating to the protection function include collecting information for indications and warning, providing air, space, and missile defense, and securing LOCs.

Protection, or Force Protection as it sometimes appears, does not include the actions to defeat the adversary.[26] In this author's interpretation, maritime missions such as ASW, SUW, and MIW would fall under actions to defeat the adversary under this definition.

In his book Operational Warfare, Milan Vego defines operational protection more broadly and defines force protection as a subset of operational protection. Vego defines operational protection as pertaining to a "series of actions and measures conducted in peacetime, crisis, and war, and designed to preserve effectiveness and survivability of one's military and nonmilitary sources of power…"[27] In the maritime environment, operational protection would include sea-based air defense, ASW, defense of the coast and coastal waters, defensive mining and mine countermeasures.[28] It is this broader view of protection that will be considered in this paper. Perhaps the salient point here is that it does not really matter if the amphibious ship carrying the Marines is sunk by a speedboat with high explosives or by the torpedo of the enemy's submarine--the results are the same.

Furthermore, operational protection cannot be achieved without supporting and complimentary operational functions, notably movement and maneuver and fires. Simply stated, operational maneuver is about positioning forces to achieve the objectives. The impetus for maneuver may be to attack the enemy's center of gravity or critical vulnerability, or in a more defensive mindset, movement and maneuver may afford the force greater protection, even providing the opportunity to decline battle if the commander views the situation as currently unfavorable to his forces.[29] To employ fires is simply to use weapons against an enemy. Countering enemy air and missile threats and interdicting enemy capabilities (e.g., submarines, patrol boats) before they can be

used against friendly forces all fall under fires.[30] The requirement for the maritime commander, then, is to maximize the effective use of movement and maneuver and fires to help ensure the protection of his forces. In tomorrow's arenas of warfare in the littorals, this is no small task and will require comprehensive plans and integrated tasks across many warfare areas and operational functions of the joint force.

Joint Force Maritime Component Commander (JFMCC).

The Department of Defense's (DoD) *Command and Control Joint Functional Concept* was signed in 2004 and defines command and control simply as "the ability to recognize what needs to be done in a situation and to ensure that effective actions are taken."[31] Although focused for the near-future force of 2015, this document envisions and underscores the need for agility of the joint C2 structure across the range of military operations. This agility will be achieved through collaboration in a multilateral environment in which problems can be tackled together, with all actions known and synchronized with the entire force.[32] In order to be effective, command and control must also be faster than the enemy's ability to react to the new situation. In other words, U.S. and allied forces must be able to operate inside the enemy's decision making loop. This becomes especially critical in the littorals where time and space are compressed. In the context of operational protection in the littorals, the JFMCC will need an agile and collaborative command and control structure to operate effectively.

According to the *Quadrennial Defense Review Report (QDR)* of 2006, "The joint force of the future will have more robust and coherent joint command and control capabilities."[33] DoD will "transform designated Service operational headquarters to fully functional and scalable Joint Command and Control Joint Task Force-capable

Headquarters beginning in FY 2007."[34] While the preceding quote does not dictate the organizational make-up of the Joint Task Force (JTF), the trend seems to favor defaulting to functional components rather than service components under the JTF.

Joint Publication 3-32, Command and Control for Joint Maritime Operations, "provides fundamental principles and doctrine for the command and control of joint maritime operations throughout the range of military operations."[35] Although still in draft, this publication addresses the authorities and responsibilities of a Joint Force Maritime Component Commander (JFMCC) in the conduct of joint maritime operations. In addition to defining maritime power in the usual terms of command of the sea, sea control and power projection (both offense and defense), it explicitly mentions defense from the sea as a critical function to be gained or exploited.

As the JFC's maritime war fighter, the JFMCC may be called upon to coordinate and synchronize the actions of various entities, including other military services, government agencies, and multinational forces. Specific JFMCC responsibilities include the planning, coordination, allocation, tasking, and synchronization of maritime operations based on the JFC's objectives and decisions.[36] The JFMCC staff should integrate war fighting functions into planning, orders development, and execution that are aligned with the JTF's objectives and priorities and support other functional commanders, as directed.[37] Thus, unity of effort is better assured. However, it will be important for collaborative efforts and robust coordination not to degrade the force's ability to execute in a decentralized manner, allowing the seizure of the initiative, while remaining adaptable, and controlling the operational tempo.[38]

Of course, the JFC will have the option to conduct maritime operations through the traditional service component, subordinate task force, or he may elect to retain control of maritime duties through his own staff. Reasons for establishing a functional command include: "to integrate planning, reduce span of control, information flow, unity of effort, weapons system management, and control over the scheme of maneuver."[39] Specifically, the JFMCC's duties should include preparation and execution of the required operations plans and orders, coordination up, down, and across the chain of command within the JTF, and the development, selection, and execution of courses of action, and ordering, monitoring, and orchestration of the execution of those plans. A further consideration for the employment of a functional component is the estimated duration of the operation. Ultimately, however, it will be important for the joint force to not only remain flexible enough to fulfill planned objectives but also to overcome unforeseen obstacles or exploit emerging opportunities.[40]

Of particular interest to this paper is how the JFMCC executes or contributes to the operational function of force protection in the littorals. It is important to first define "littoral area" operations in joint terms and therefore know what the JFMCC may be responsible for. Joint doctrine defines the littoral area as both the "seaward area from the open ocean to the shore" and the "landward area inland from the shore that can be supported and defended directly from the sea."[41] In order to achieve protection over this potentially large expanse of sea and land, the JFMCC must balance and prioritize tasks and functions (e.g., maneuver and movement versus power projection fires) among his subordinate commanders.

In order to truly protect the force, the commander must have the ability to reduce or destroy the enemy's capability to damage the force. Of critical importance is the ability to destroy or substantially degrade the enemy's operational capabilities before he can bring those to bear on the JFMCC's maritime forces. The proliferation of advanced missile technology combined with WMD make theater missile defense an urgent priority for the joint force. Although the Joint Force Air Component Commander (JFACC) is normally the supported commander for the theater interdiction mission, the JFMCC can also be a supported commander for enemy threats in his area of operations. The targeting process therefore becomes an important element in protecting the force. The authority and structure of the JFMCC permit it to integrate with the joint targeting process and ensure that it is fulfilling JTF tasks and supporting sister functional command requirements in addition to the needs of the maritime force.[42]

RECOMMENDATIONS

"Change must extend beyond the forces in the field to include command and control headquarters."[43]

-General Pace, CJCS

Fleet Battle Experiment—Juliet (FBE-J) was conducted in the summer of 2002 and focused on the warfare areas of assured access and maritime command and control in a difficult littoral environment in the year 2007. FBE-J included live and simulated events. Historically, FBEs have been used to test and validate new naval operating concepts and doctrine, stimulate the development of new warfare ideas, and more recently, to better integrate naval concepts and doctrine with the joint environment.[44] In FBE-J, the draft joint doctrine for the JFMCC was field tested through a maritime operational planning process that mirrored the JFACC planning process. In this experiment, the JFMCC was sea-based on the command ship USS CORONADO.

Assured access activities included scenarios involving unmanned sensors and platforms, theater air and missile defense, ASW, ASUW, MIW, and Joint Fires. The Maritime Planning Process that was used by the JFMCC ingested objectives and tasking orders from the JFC and in turn produced integrated and synchronized Maritime Tasking Orders. After reconstruction and initial assessment of the experiment, the Maritime Planning Process was assessed as being viable, however, an implementation study was recommended to look at specific internal processes and JFMCC staff manning requirements.[45] From an operational planner perspective, it will important for the Navy to follow through on the preceding recommendations and properly staff the future JFMCCs, as well as provide the necessary planning, collaboration, and execution tools to function effectively and efficiently.

At the strategic level, DoD and the Joint Chiefs of Staff desire to transform service headquarters, such as the numbered Navy Fleet commands, into ones that can assume JTF command and associated responsibilities. The Naval War College recently held its inaugural JFMCC Flag Officer course and is conducting its second course in May 2006. In turn, the operational Navy must also look at transforming part of their Fleet headquarters into organizations that can fulfill the duties of a JFMCC. In addition to functioning as a JFMCC from its land-based headquarters, the Fleet JFMCCs should also be prepared to embark in command ships. Much like the concept of a Standing Joint Force Headquarters, the Navy should consider a similar Standing JFMCC Headquarters at each of its numbered Fleets, ready to deploy to assume the duties of the maritime component or augment the on-scene CSG or ESG staff in an advisory role during a crisis situation.

Functional component structure is not required for all operations and a traditional service component command and control structure and relationship with the JTF may be best. Even if the JFC determines that his force structure will include functional components, the type, scope and duration of the operation should dictate to a certain degree the size and make-up of the required JFMCC staff. In smaller operations, it may be tempting to task the on-scene CSG (or Carrier Strike Force if more than one Strike Group) Commander as the JFMCC. In reality however, without significant staff augmentation, the CSG staff will not be able to properly carry out the joint doctrine roles and responsibilities of the maritime component in the future. The most recent instruction regarding the required operational capabilities of CSG staffs requires these staffs to be able to function as the JFACC, but not as the JFMCC. This document makes clear that JFACC Reserve Component augmentation is required to fully achieve this capability.[46] A formal JFMCC staff training should begin for CSG and even ESG staffs during their work-up cycles in order for these command elements to better integrate with the joint force and multinational forces when deployed.

CONCLUSION

"The basis for a commander exercising control should be better insight into what is required to win the day than is evidenced by the subordinate commander's actions."[47]

-Admiral Williard, U.S. Navy

In the preceding quotation, Admiral Williard very succinctly sums up the bottom line with higher headquarters staffs--that they should add real value to the fight. The realities of the current interconnected global environment and the changing nature of future adversaries and their strategies demand that the U.S. military optimize how it organizes and uses its capabilities across the joint force. With respect to maritime forces,

"The primary function of the JFMCC is to integrate, both vertically and horizontally, maritime planning and operations into the joint context to achieve the objectives of the JFC."[48] This simple but indispensable function will become more critical in complex area-denial scenarios of the future in order to ensure an adequate level of operational protection not only to the maritime force, but also to other assets of the joint force and multinational partners.

Maritime power is no longer limited to traditional naval operations and associated service-oriented activities, but will also include support to, or even from, other U.S. services, government agencies, and multinational formations. These various entities may find themselves operating in the "chaos of the littorals" and relying on the protection umbrella afforded to them by such concepts as Sea Shield. Emerging technologies, information sharing via networked systems, and new operating concepts will soon permit naval forces to effectively counter cruise and ballistic missile attacks.[49] But technology will not be enough unless the required command and control means are available.

According to joint doctrine, readiness, flexibility, self-sustainability, and mobility are the unique qualities of maritime forces. The Navy must continue to leverage these time-honored traits of the sea service with the joint force through continued effective command and control.

NOTES

[1] U.S. Joint Forces Command, *Joint Operational Environment*, Living Draft (Norfolk, VA, August 2005), 63.

[2] U.S. Department of Defense, *Capstone Concept for Joint Operations*, Version 2.0 (Washington, DC, August 2005), 7.

[3] U.S. Joint Forces Command, *Joint Operational Environment*, Living Draft (Norfolk, VA, August 2005), 53.

[4] Ibid., 56.

[5] Ibid., 93-94.

[6] These two terms have not yet worked themselves into the joint dictionary of military terms, JP 1-02.

[7] Andrew Krepinevich, Barry Watts, and Robert Work, *Meeting the Anti-Access and Area-Denial Challenge* (Washington, DC: Center for Strategic and Budgetary Assessments, 2003), 5.

[8] Edward J. Hanlon, "Taking the Long View: Littoral Warfare Challenges," In The Role of Naval Forces in 21st Century Operations, ed. Richard H. Shultz and Robert L. Pfaltzgraff (Washington, DC: Brassey's, 2000), 155.

[9] Ibid., 158.

[10] Ibid.

[11] Ibid., 159.

[12] Ibid.

[13] U.S. Department of Defense, *Joint Vision 2020*, (Washington, DC, June 2000), 33.

[14] U.S. Department of Defense, *Quadrennial Defense Review Report*, (Washington, DC, 06 February 2006), 47.

[15] U.S. Department of the Navy, *Naval Operating Concept for Joint Operations*, (Washington, DC, 2003), cover page.

[16] Mike Mullen, VADM, U.S. Navy, "Sea Power 21 Series: Part VI—Global Concept of Operations," *Proceedings*, Vol. 129, Iss. 4 (April 2003): 67.

[17] Ibid., 68.

[18] U.S. Department of Defense, *Joint Vision 2020*, (Washington, DC, June 2000), 32. "Full Dimensional Protection is the ability of the joint force to protect its personnel and other assets required to decisively execute assigned tasks. Full dimensional protection is achieved through tailored selection and application of multilayered active and passive measures, within the domains of air, land, sea, space, and information across the range of military operations with an acceptable level of risk."

[19] Mike Bucchi, VADM, U.S. Navy and Mike Mullen, VADM, U.S. Navy, "Sea Shield: Projecting Global Defensive Assurance," *Proceedings*, Vol. 128, Iss. 11 (November 2002): 57.

[20] U.S. Department of the Navy, *Naval Operating Concept for Joint Operations*, (Washington, DC, 2003), 10.

[21] Mike Bucchi, VADM, U.S. Navy and Mike Mullen, VADM, U.S. Navy, "Sea Shield: Projecting Global Defensive Assurance," *Proceedings*, Vol. 128, Iss. 11 (November 2002): 59.

[22] Ibid., 57.

[23] Ibid. Windows for successful engagements in the realm of missile defense are usually small and highly limited.

[24] U.S. Department of Defense, *Joint Operations*, Joint Publication 3-0, Final Revision Coordination (Washington, DC, 23 December 2005), I-1.

[25] Ibid., III-30.

[26] Ibid., III-32.

[27] Milan Vego, Operational Warfare (Naval War College, Newport, RI: Naval War College, 2000), 277.

[28] Ibid., 277-278.

[29] U.S. Department of Defense, *Joint Operations*, Joint Publication 3-0, Final Revision Coordination (Washington, DC, 23 December 2005), III-30.

[30] Ibid., III-19.

[31] U.S. Department of Defense, *Joint Command and Control Joint Functional Concept*, (Washington, DC, February 2004), vi.

[32] Ibid., vii.

[33] U.S. Department of Defense, *Quadrennial Defense Review Report*, (Washington, DC, 06 February 2006), 59.

[34] Ibid., 60.

[35] U.S. Department of Defense, *Command and Control for Joint Operations*, Joint Publication 3-32, Final Draft Coordination (Washington, DC, 27 September 2005), i.

[36] Ibid., II-3.

[37] U.S. Navy Warfare Development Command, *Joint Force Maritime Component Commander (JFMCC) Planning and Execution*, Naval Warfare Development Command TACMEMO 3-32-03 (Newport, RI, 18 June 2004), 2-2.

[38] U.S. Department of Defense, *Joint Command and Control Joint Functional Concept*, (Washington, DC, February 2004), vii.

[39] U.S. Department of Defense, *Command and Control for Joint Operations*, Joint Publication 3-32, Final Draft Coordination (Washington, DC, 27 September 2005), v.

[40] Ibid., I-3.

[41] U.S. Department of Defense, *Joint Operations*, Joint Publication 3-0, Final Revision Coordination (Washington, DC, 23 December 2005), V-9.

[42] U.S. Department of Defense, *Command and Control for Joint Operations*, Joint Publication 3-32, Final Draft Coordination (Washington, DC, 27 September 2005), vii.

[43] U.S. Department of Defense, *Joint Command and Control Joint Functional Concept* (Washington, DC, February 2004), A-5.

[44] U.S. Naval Postgraduate School, *Fleet Battle Experiment Juliet Final Reconstruction and Analysis Report* (Monterey, CA, April 2003), 1.

[45] Ibid., 18.

[46] U.S. Department of the Navy, *Required Operational Capabilities (ROC) and Projected Operational Environment (POE) for Carrier Strike Group (CSG) Staffs*, Chief of Naval Operations Instruction 3501.298B (Washington, DC, 24 August 2005), 11.

[47] Robert F. Williard, VADM, U.S. Navy, "Rediscover the Art of Command and Control," *Proceedings*, Vol. 128, Iss. 10 (October 2002): 53.

[48] U.S. Navy Warfare Development Command, *Joint Force Maritime Component*

Commander (JFMCC) Planning and Execution, Naval Warfare Development Command TACMEMO 3-32-03 (Newport, RI, 18 June 2004), I-5.

[49] Mike Bucchi, VADM, U.S. Navy and Mike Mullen, VADM, U.S. Navy, "Sea Shield: Projecting Global Defensive Assurance," *Proceedings*, Vol. 128, Iss. 11 (November 2002): 57.

BIBLIOGRAPHY

Bucchi, Mike, VADM, U.S. Navy and Mike Mullen, VADM, U.S. Navy. "Sea Shield: Projecting Global Defensive Assurance." *Proceedings*, Vol. 128, Iss. 11 (November 2002): 56.

Hanlon, Edward J. "Taking the Long View: Littoral Warfare Challenges." In The Role of Naval Forces in 21st Century Operations, ed. Richard H. Shultz and Robert L. Pfaltzgraff, 155-162. Washington, DC: Brassey's, 2000.

Keister, Robin N., CDR, U.S. Navy. "Designing the Joint Force Maritime Component Commander Through Practical Applications Past, Present, and Future." Strategy Research Project. Carlisle Barracks, PA: U.S. Army War College, 15 April 2002.

Krepinevich, Andrew, Barry Watts, and Robert Work. *Meeting the Anti-Access and Area-Denial Challenge*. Washington, DC: Center for Strategic and Budgetary Assessments, 2003.

Mullen, Mike, VADM, U.S. Navy. "Sea Power 21 Series: Part VI—Global Concept of Operations." *Proceedings*, Vol. 129, Iss. 4 (April 2003): 66.

U.S. Department of Defense. *Capstone Concept for Joint Operations*. Version 2.0. Washington, DC, August 2005.

U.S. Department of Defense. *Command and Control for Joint Operations*. Joint Publication 3-32, Final Draft Coordination. Washington, DC, 27 September 2005.

U.S. Department of Defense. *Joint Command and Control Joint Functional Concept*. Washington, DC, February 2004.

U.S. Department of Defense. *Joint Operations*. Joint Publication 3-0, Final Revision Coordination. Washington, DC, 23 December 2005.

U.S. Department of Defense. *Joint Vision 2020*. Washington, DC, June 2000.

U.S. Department of Defense. *Protection Joint Functional Concept*. Washington, DC, 30 June 2004.

U.S. Department of Defense. *Quadrennial Defense Review Report*. Washington, DC, 06 February 2006.

U.S. Department of the Navy. *Naval Operating Concept for Joint Operations*. Washington, DC, 2003.

U.S. Department of the Navy. *Naval Operational Planning*. Naval Warfare Publication 5-01 (Rev. A). Norfolk, VA, May 1998.

U.S. Department of the Navy. *Naval Transformation Roadmap*. Washington, DC, 2003.

U.S. Department of the Navy. *Required Operational Capabilities (ROC) and Projected Operational Environment (POE) for Carrier Strike Group (CSG) Staffs*. Chief of Naval Operations Instruction 3501.298B. Washington, DC, 24 August 2005.

U.S. Joint Forces Command. *Joint Operational Environment*. Living Draft. Norfolk, VA, August 2005.

U.S. Marine Corps. *Marine Corps Operating Concepts for a Changing Security Environment*. Quantico, VA, March 2006.

U.S. Naval Postgraduate School. *Fleet Battle Experiment Juliet Final Reconstruction and Analysis Report*. Monterey, CA, April 2003.

U.S. Navy Warfare Development Command. *Joint Force Maritime Component Commander (JFMCC) Planning and Execution*. Naval Warfare Development Command TACMEMO 3-32-03. Newport, RI, 18 June 2004.

U.S. Navy Warfare Development Command. *Multiple Carrier Strike Group (CSG) Operations Planning and Employment Guidance*. Naval Warfare Development Command TACMEMO 5-00.1-03. Newport, RI, 01 August 2005.

Vego, Milan. Operational Warfare. Naval War College, Newport, RI: by the author, 2000.

Williard, Robert F., VADM, U.S. Navy. "Rediscover the Art of Command and Control." *Proceedings*, Vol. 128, Iss. 10 (October 2002): 52.