



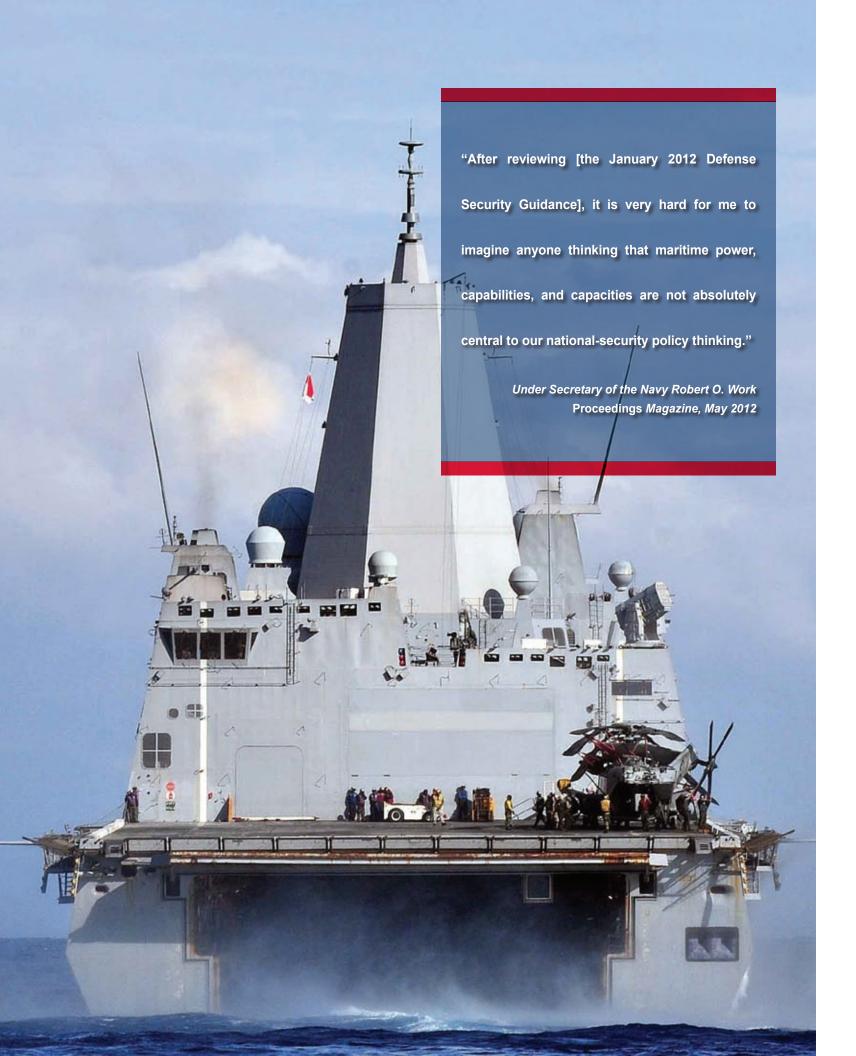
MARITIME and AMPHIBIOUS CAPABILITIES

America's maritime and amphibious capabilities are pivotal to the Nation's ability to deter and defeat adversaries, strengthen alliances, deny enemies sanctuary and project global influence. The Department of Defense's 2012 strategic guidance, *Sustaining U.S. Global Leadership: Priorities for 21st Century Defense*, articulates key missions for the U.S. military to include rebalancing U.S. military posture to the Asia-Pacific region, establishing power projection, providing a stabilizing presence in key regions and undertaking humanitarian assistance.

Evolving international security and domestic fiscal environments require the Nation's maritime forward-deployed, crisis-response forces to innovate fearlessely. Meanwhile, the growing threat posed by conventional, irregular and asymmetric threats to our national interests requires relentless adaptation in naval warfighting, littoral maneuver, and amphibious operations.

While today's force is highly capable, new challenges are proliferating from nations employing increasingly capable anti-access/area-denial (A2/AD) strategies. New concepts and approaches — such as the Single Naval Battle, an integrated naval expeditionary system, and broadened combined-arms special-operations integration — are potent counters to these emerging A2/AD threats. Future fights will likely be short-warning "come as you are" challenges posed by irregular adversaries.

The Marine Corps/Navy Team will be prepared to maneuver swiftly from the sea to apply influence and power at a time and place of its choosing. The future force will be a "middleweight" expeditionary Marine Corps employing reinvigorated amphibious capabilities together with a Navy capable of maintaining forward presence, penetrating enemy anti-access defenses and ensuring maneuver at and from the sea.



A New MARITIME OPPORTUNITY

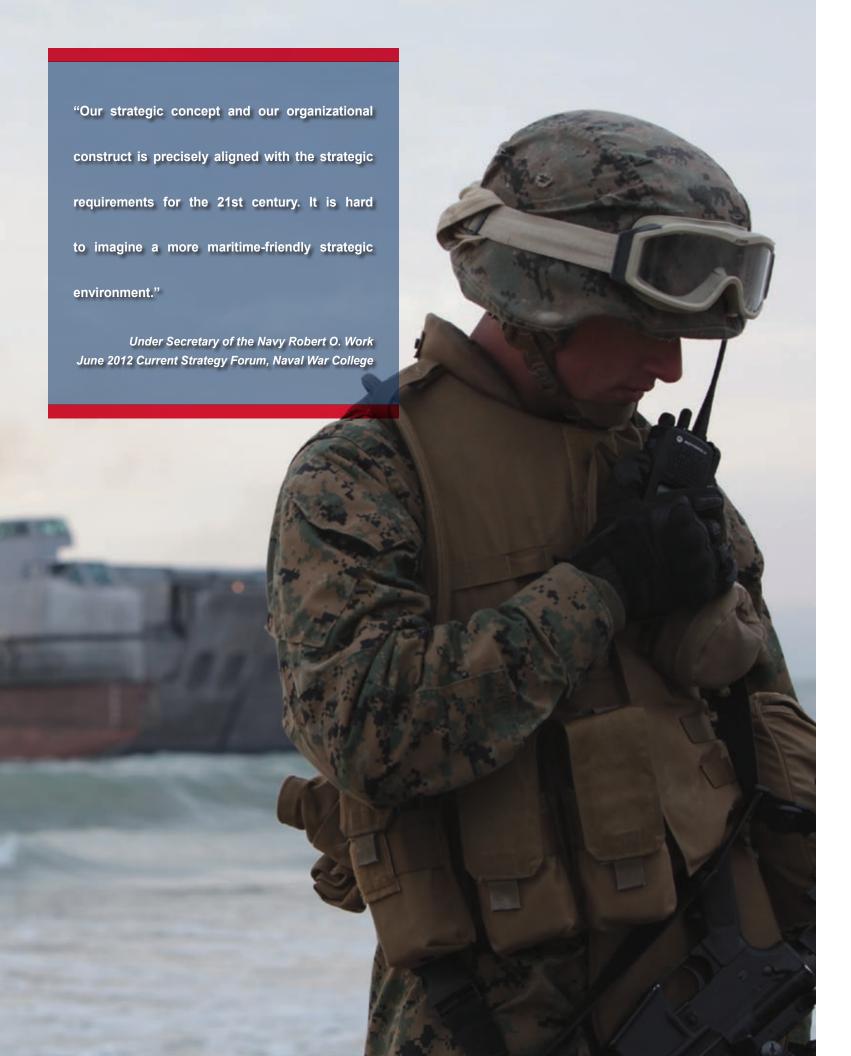
U.S. amphibious forces play central roles in safeguarding America's global interests in peace, stability and security. The increasing importance of the littorals and the growing complexity of maritime operations demand ceaseless innovation and new capabilities to ensure success. Forward engagement and partnership building, unparalleled power projection, assured littoral access, rapid response to crisis and an ability to sustain expeditionary operations from the sea are essential capabilities for the emerging national security environment.

If naval relevance is measured by its impact on human affairs, the Nation's naval forces are standing at the threshold of a "maritime moment" of opportunity. In a compelling historical parallel to the outburst of naval innovation that occurred between 1922-1940, the Marine Corps and Navy have the opportunity to take the lead in the dawn of a new "Naval Century" and a "Golden Age" of U.S. seapower.

The Marine Corps and Navy amphibious forces are ready to strengthen their partnership with all of the Nation's joint forces; more closely align its capabilities with U.S. Special Operations Forces and ensure the dominance of the Marine Air-Ground Task Force (MAGTF) in the littorals.

The 2012 Strategic Guidance for the 21st Century calls for innovative, low-cost and small-footprint means for crisis response, forward engagement and direct and indirect approaches to combat. The utility of naval amphibious capabilities to a wide range of missions and tasks makes them essential tools for national decision makers and joint commanders at all levels. Maritime-response capabilities provide a range of rapid intervention options that can be tailored to the demands of each contingency. When crises erupt, the persistent offshore presence of naval forces in critical world regions enables them to respond quickly while "buying" valuable time for leaders to evaluate options. While built for war, these same naval forces respond to humanitarian disasters, conduct noncombatant evacuations and set the conditions for enduring peace and security in the maritime commons.

Rebalancing to the Asia-Pacific region "places a renewed emphasis on air and naval forces," according to the Defense Department's January 2012 *Defense Budget Priorities and Choices* document that detailed changes in Pentagon spending during the next decade. The Marine Corps/Navy amphibious forces stand on the threshold of an era that will place high demands on America's maritime capabilities, particularly as the military rebalances to the Asia Pacific region.



Rethinking MARITIME OPERATIONS

Today's maritime forces must be more efficient while retooling the essence of naval warfighting and maritime power projection.

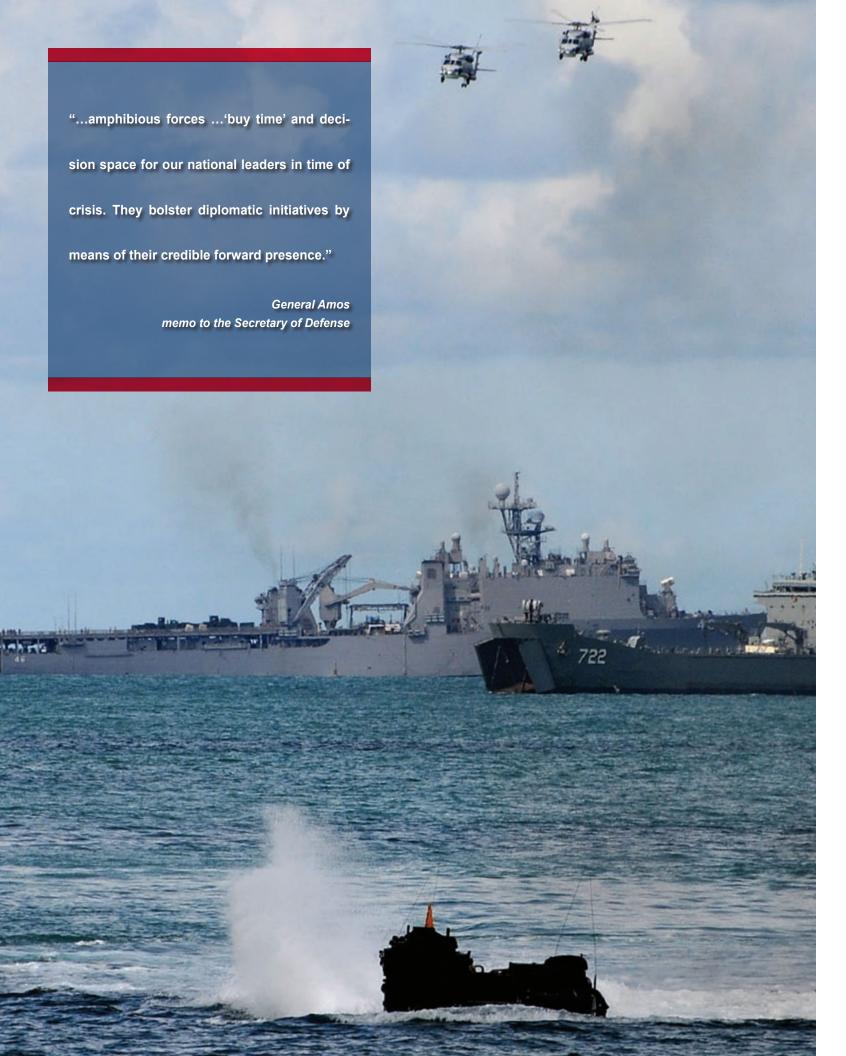
Exploiting opportunity in adversity is a hallmark of Marines. In the lean decades after World War I, the Corps, led by a small coterie of visionary leaders — most notably amphibious warfare pioneer Pete Ellis — rigorously experimented with the then-novel concept of amphibious operations. These experiments became the dominant form of operations throughout the Pacific theater during World War II. In the interwar years, the Marines developed the roots of modern counterinsurgency doctrine, epitomized by the still-referenced Small Wars Manual, first published in 1935. This embrace of new technologies and new concepts continued during the Cold War, with Marines in the forefront of efforts to develop helicopters and air assault, tiltrotor aircraft for long-range operations and advanced amphibious vehicles. Seizing opportunity in times of adversity has historically resulted in vastly improved amphibious effectiveness and efficiency.

Recent combat operations have yielded tremendous innovation in the conduct of irregular warfare (IW), counter-piracy, theater security shaping and interagency processes. These lessons must now be reshaped for a security
environment characterized by the resurgence of regional
power-politics, the expansion of modern military capabilities, challenges to U.S. battlefield dominance in space
and information capabilities, social movements that drive
global instability and the potential for continued weapons of mass destruction (WMD) proliferation. This maritime opportunity moment is created by a "perfect storm"
of simultaneous strategic and economic challenges that

opens a window for the innovation and evolution of 21st-Century warfighting.

This "perfect storm" is characterized by:

- Renewed emphasis on protecting the global commons and ensuring littoral access
- Strategic rebalancing to the Asia and Pacific regions
- Significant reductions in defense investments
- A reinvigorated partnership between the Marine Corps and the Navy
- Increasing importance on forward-deployed, small-footprint methods
- New aviation platforms that dramatically enhance MAGTF maneuverability and reach
- Increasing demand for amphibious force and other theater security training from allies and stakeholders in the Pacific region
- Increased capabilities of the joint force prompting change to MAGTF operating concepts
- State adversaries armed with integrated A2/AD capabilities
- Expanded cyber and informational threat environments
- Proliferation of modern precision weaponry and Command, Control, Intelligence, Surveillance and Reconnaissance systems (C2ISR) to non-state adversaries
- A generation of Marines who are culturally attuned to operational environments and have experience integrating their operations with the joint force, the interagency community and partner military forces
- Relief from a decade of combat commitments to Iraq and Afghanistan



Evolving THREATS AND CHALLENGES

Expanded A2/AD strategies will greatly complicate the calculus of how to gain and sustain access in joint campaigns. But the most likely use of American forces will continue to be in small-scale contingencies, requiring the Nation's maritime crisis-response forces to be forward deployed in a state of high readiness.

As global power shifts horizontally to new states and regions, there are concurrent vertical shifts in power to non-state (social, economic, religious, criminal, ethnic) entities that challenge the very ideas of sovereignty, threats and security. While planning for conventional warfare remains a prudent responsibility of the naval force, planning for the unexpected and unconventional is a necessity.

Instability and crisis will be a persistent feature. Increasing global interconnectedness, shared awareness, information technology and ubiquitous social media are predominant factors driving global change. Emerging democratic movements are welcome evidence of the global appeal of the power of liberty, but remove long-standing restraints on diverse national and sub-national forces. Failing governments will continue to struggle to control sovereign spaces, giving sanctuary to those who threaten neighboring states or the global commons.

Impact: A core function of the naval force is the ability to respond to crisis through forwarddeployed and rapidly concentrated forces. Protecting citizens and interests during local and regional instability will continue to place heavy demands on the naval force. Force capacity planning should include this significant aspect of steady state employment. Understanding threat and local conditions are important to determining "relevant" combat power in crisis response. Forward-deployed maritime forces shape this operational environment through security assistance, combined training, and other low-cost, small-footprint activities. Removing potential sanctuaries for potential destabilizing entities is essential.

Regional challengers could necessitate larger-scale interventions. Economic competition will drive rising powers to compete for influence, resources and operational advantage. Some regimes will continue to undertake external provocations to achieve domestic political advantage. Potentially, these provocations include seeking to limit U.S. freedom of action in international waters or the global commons. Proxy conflicts through non-state actors are also likely to aggravate regional power struggles. Regional contingencies that impact the stability of the global system could occur near any of the major littoral chokepoints worldwide.

Impact: The interconnected global system creates vulnerabilities and unintended effects from even the smallest regional disruptions. Efforts to ensure access to contested global commons will require the ability to gain local superiority in air, maritime and land domains and electromagnetic and missile environments. Active security cooperation with regional allies will be an effective offset to emerging competitors. The ability to engage new allies through forces that do not require a large footprint ashore will maximize this opportunity.

Non-state and hybrid actors increase the complexity. The proliferation of A2/AD technology (weapons, cyber or informational) to non-state/hybrid opponents will prove a disruptive challenge to U.S. strategic objectives. A web of social networks, religious sympathies, refugees and ethnic diasporas enable non-state actors to move assets across international borders, enabling them to operate — often unhindered and undetected — worldwide. Irregular warfare will be practiced not only in remote deserts or jungles but also in urban areas, with ready access to modern technology. Threat actors will use new information technology for communications, surveillance, intelligence gathering, remote control weapons, information operations and command and control (C2). The cumulative effect of these trends is that hybrid enemies will be less



predictable, more difficult to deter and less susceptible to traditional forms of warfare.

Impact: Irregular warfare is here to stay. Despite a national inclination to avoid entanglement in crises and contingencies, ground forces have historically been required to control situations in the human environment, even if their presence is transitory. Hybrid forces may be able to avoid many of the lethal effects of joint shaping by blending in with civilian populations, especially in urban environments. Although hybrid enemies have the ability to disrupt U.S. operations, their own human and information networks are vulnerable to exploitation. U.S. forces will not be able to control the information environment, so they must be able to operate within it, at a pace that out-cycles the enemy.

Anti-access and area denial capabilities will expand. The relatively few states with modern, integrated systems will pose the most lethal long-range anti-access threat. A larger number of threats will employ shorter-range, area-denial capabilities to impede access, cause U.S. casualties, intimidate allies or gain a better bargaining position. States and non-states alike have demonstrated a willingness to accept casualties in an area denial campaign that establishes them as a credible counter to U.S. power. While military technology is the most obvious form of A2/AD, unconventional methodologies will likely emerge including civilian "flash mobs," human shields, blocked infrastructure, diplomatic restraints, economic penalties or the threat of lost commerce or increased oil prices. Presenting a thicket of A2/AD obstacles — cyber attacks, proxy organizations, attacks on re-arming sites, diplomatic maneuvering or ally intimidation — forces the United States to think of power projection in new ways. "Mutually assured economic disruption" will be a powerful anti-access tool in the new and connected global society.

Impact: The joint force will conduct counter-A2/AD operations to enable the objectives of a campaign, not as an endstate in and of itself. The naval force must consider multiple A2/AD threat constructs in order to be ready to react, especially as forward basing is diminished and U.S. conventional dominance is no longer a guarantee. A multi-domain force operating from the sea has the ability to advance sea control through raids ashore against hidden targets, can disrupt integrated air defenses through naval surface fires, and can use fleet aviation to create condi-

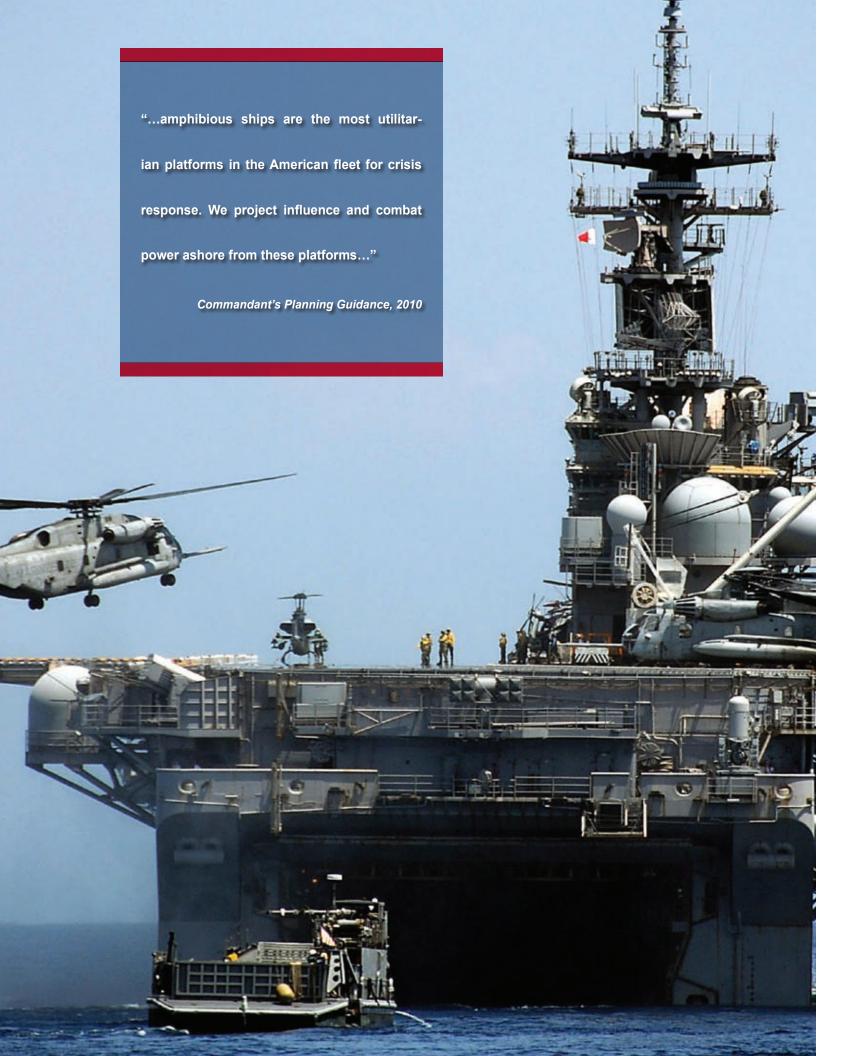
tions for placing forces ashore if required by the objectives of the campaign. Littoral maneuver, as a methodology to bypass fixed defenses and exploit enemy seams, must overcome the potentially widening gap between ship and shore. The naval force must outmaneuver the enemy in the intellectual environment, not present an overmatch in firepower alone.

Terrorism and the proliferation of WMD. The vertical diffusion of power to non-state entities potentially creates some with capabilities formerly reserved by states. The most coveted of these is the possession and capability to employ WMD. The presence of this threat in non-state portfolios risks circumvention of many of the careful restraints practiced by states, making retaliatory response difficult. The proliferation of WMD among terrorists has steep consequences.

Impact: The utility of forces that can operate without a large footprint ashore and can sustain themselves from the sea puts them at lower force-protection risk. Thus, the naval force must better align complementary capabilities to those of special operations forces through greater collaboration, integration and realistic training between all Naval forces and Special Operations Forces before and during deployments. Forward deployed amphibious forces may be first-responders to terrorist attacks or play a role in intercepting or containing the spread of WMD.

A "battle of signatures." Avoiding detection is key to winning. Units and platforms generate electronic, visual, audible, thermal, and informational signatures that must be managed. The increasing technical sophistication of enemies is a threat to our buildup of forces in or near a theater of operations. The proliferation of precision battlefield weapons makes the consequences of being discovered hazardous, whether at the tactical or operational level. Many states have significant over-the-horizon, precision-strike systems, and the proliferation of shorterrange precision weapons on the tactical battlefield is even more widespread. In this environment, a detected signature creates a target.

Impact: In the "battle of signatures," deception, camouflage, mobility, dispersion, emission control and other signature-management capabilities will increase in importance. Where detection is likely, survivability from the effects of first-strike weapons is a primary consideration.



Single Naval Battle:

AN INTEGRATED MARITIME PERSPECTIVE

Single Naval Battle maximizes the power of naval forces to meet the evolving warfighting needs of U.S. Combatant Commanders in the maritime domain. Single Naval Battle envisions sea control, littoral maneuver and power projection as cohesive and singular operation. This perspective strengthens naval forces and boosts their operational value by eliminating seams in the application of naval capabilities. Through this perspective lens to planning and execution provides broader naval context, serves to identify critical dependencies, optimize forces, ensure compatibility, and increase partnerships.

The same approach can be applied for missions beginning with the setting operational conditions, building relationships and training of credible security partners through forward-deployed engagement and ranging to major operations and forcible entry. Maximizing naval effectiveness within the joint force, Single Naval Battle offers an integrated domain-spanning littoral capability to enable the joint campaign.

The naval force does not displace the multi-domain advantages of the joint force, but offers a joint commander an integrated littoral capability to enable his campaign. Future operational environments will demand forces capable of operating in the littorals with a more discerning, scalable and practiced application of power.

A Single Naval Battle perspective seeks to correct the trend that has resulted in "stove-piped" naval capabilities. Organizations and warfare areas have been driving operational concepts, doctrine and plans that function in isolation of one another. This "stove-piped" paradigm favors capability "silos" and choices between power projection and sea control; or amphibious warfare or strike warfare. Integrating naval combined arms from earliest campaign inception, linking all naval capabilities together through purpose, timing and location, a force embracing Single Naval Battle seeks to achieve maximize limited capacity in multiple environments.

The Single Naval Battle does not overlap the Air-Sea Battle (ASB) concept. In fact, ASB is an excellent example of

the power of a unified campaign approach embracing Single Naval Battle. Countering A2/AD threats generally take place at the start of a joint campaign. A Single Naval Battle approach thus places ASB in context for the rest of the naval force. A 21st-Century naval force will not conduct shaping and condition-setting missions in isolation. Rather, it will integrate supporting elements across the force with overall campaign objectives in mind, addressing comprehensively critical questions: How does countering A2/AD capabilities impact force aggregation and crisis response timelines? How can the multi-domain capabilities of the naval force be leveraged to asymmetrically dismantle A2/AD capabilities? How can the naval force use the amphibious component to enable sea control?

The effects of sea control are relevant when measured by their impact on the population ashore. Sea control sets conditions for power projection, while power projection enables or shapes the objectives of sea control. In some cases, limited-objective power projection (e.g., strikes, raids, lodgments) might enable the fight for area access. In addition, during phase zero, amphibious forces working with host nation forces may delay or prevent escalation. Placing elements of U.S. naval forces on allied soil or in allied ports could complicate an enemy's escalation calculus. The naval counter-A2/AD campaign might include placing a small force ashore to deny key terrain to the enemy, influence populations, close chokepoints, seize and defend forward missile-defense sites or establish expeditionary airfields. Amphibious forces might facilitate sea control by operating on the landward side of a littoral shoreline, seeking out hidden A2/AD capabilities and denying enemy sanctuary.

Single Naval Battle has direct implications for shared naval force development across DOTMLPF. Likewise, it will likely have a significant impact on the way the Navy and Marine Corps man regional headquarters to include the JFMCC maritime operations center and how we educate the naval force. At senior levels, the approach creates a demand for the development of operationally focused littoral warfighters from both Services.

"...your United States Navy and Marine Corps Team remains the most economical, agile and ready force immediately available to deter aggression and respond to crises."

Commandant's Posture Statement, March 2012



The Future of AMPHIBIOUS OPERATIONS & NAVAL WARFIGHTING

The increasing complexity of littoral warfare and the diversity of maritime missions preclude "just add water" approaches to amphibious operations. The future naval force must apply a spectrum of complex principles in force development, training, exercises and application.

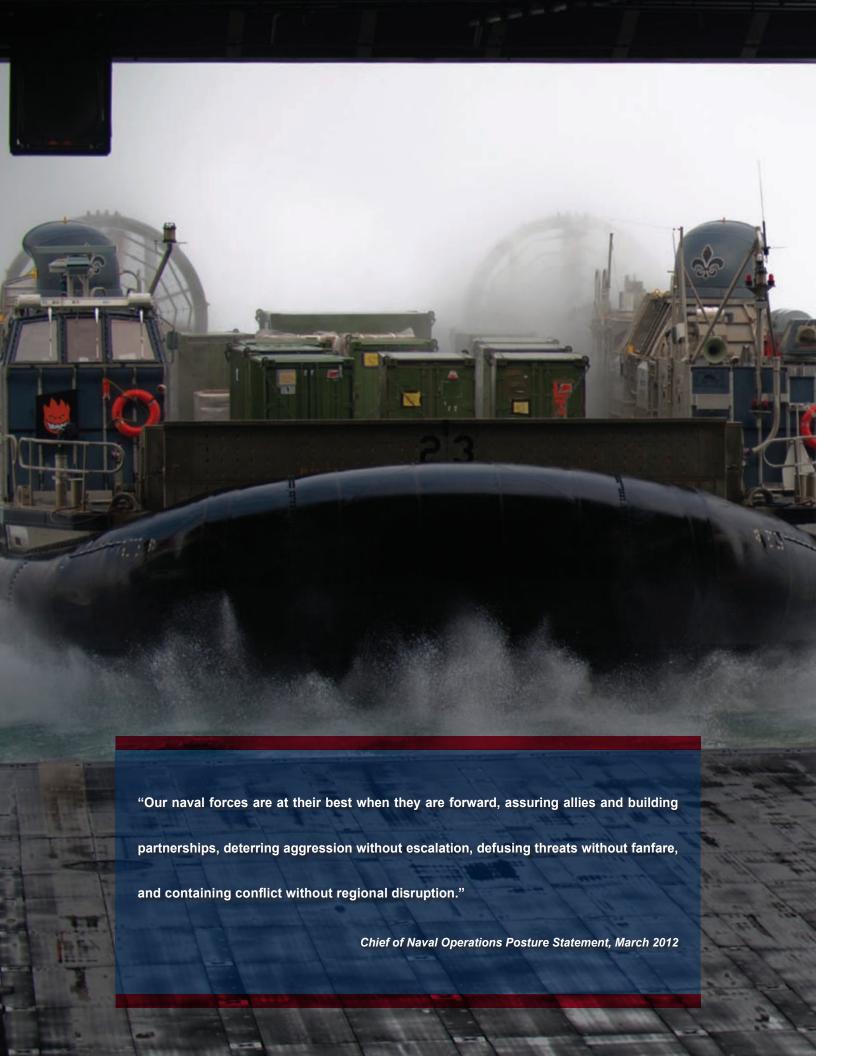
Exercising the art of combined arms will take on added significance as tech-savvy enemies and battlefield complexity increases. Naval forces must stimulate enemy systems, observe responses and strike with precision — baiting an enemy with false targets, littoral maneuver deception and disorienting enemy formations through multi-domain combined arms effects. The inherent advantages of the naval force in air, maritime and land domains are complemented by cyber capabilities, information operations, electronic warfare, littoral maneuver, rapid mobility, deception and stealth. Precision firepower and massed capabilities remain essential. Complex future operational environments call for the greater integration of a range of interagency capabilities into an expanded concept of combined arms.

Battlespace shaping through littoral maneuver provides our sea-based force with the ability to control the timing and tempo of an engagement as well as the geometry of the battlespace. It creates options for the force to apply strength against weakness, and to present a threat through the depth of the enemy's battlespace. Naval forces will choose when to give battle and will exploit an advantage in one domain to create opportunity in another. Littoral maneuver can be employed to defeat A2/AD threats, create conditions for sea control and enable subsequent naval operations. Littoral maneuver is fundamental to modern amphibious operating concepts and relies heavily on multi-mission air and surface platforms.

Against a wide variety of opponents, naval forces have the inherent ability to pose threats over wide areas at a tempo that confuses most enemies. Using deception and surprise in multiple domains is a force-multiplying capability that strains the situational awareness of an enemy and creates capability gaps in integrated systems. Naval forces can use these effects to minimize collateral damage, counter information campaigns and reduce operational risk.

With increased global connectivity, anticipating, deterring and preventing conflict through operational preparation of the environment (OPE) becomes more possible and also imperative.

Relevant combat power metrics based on expected threats and conditions are more useful than generalized combat power metrics when assessing the efficacy of combat systems and their associated schemes of maneuver. Often, smaller units or a transitory presence ashore can create effects on an enemy once thought possible only through larger formations. For instance, firepower and mass will be less critical in selected scenarios than mobility or precision. ISR and command and control will enable small teams to achieve the effects of larger formations. The composition of an assault echelon and the ratios of various modes of littoral maneuver must be dynamically determined through analysis of the threat and conditions.

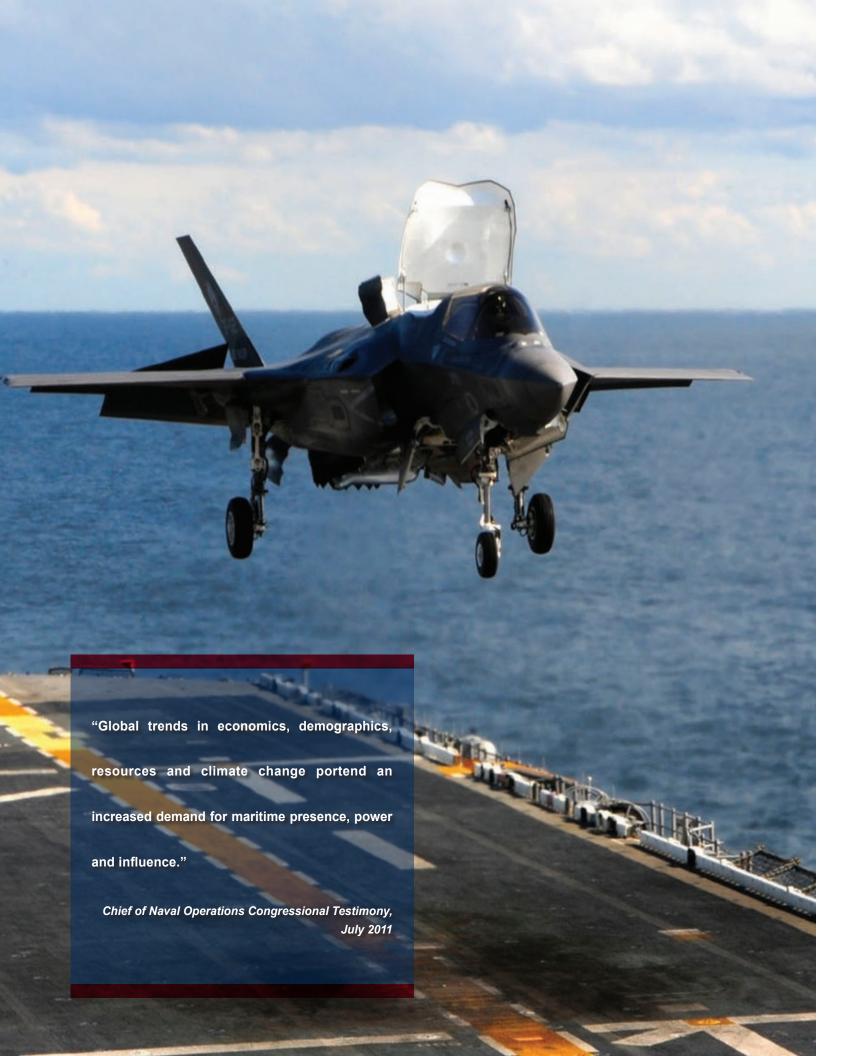


With increased global connectivity, anticipating, deterring and preventing conflict through operational preparation of the environment (OPE) becomes more possible and also imperative. The U.S. joint force must focus on denying enemies sanctuary, enabling partner nation capabilities, strengthening regional alliances and creating solid relationships that will endure through crisis. A practiced interagency campaign of OPE activities leverages all elements of engagement toward a unified and satisfactory end-state.

In addition, the scalability and efficiency of the Naval Expeditionary System (NES) combines the diverse components of the expeditionary force into predictable, practiced, packages that can be rapidly applied. A mature NES synchronizes the training, readiness and deployment of naval expeditionary forces. Its components would be determined by warfighting demand, steady-state missions and training requirements. The NES is mature for the frequently deployed mid-scale expeditionary forces such as amphibious ready groups (ARGs) and Marine expeditionary units (MEUs). Expanding this concept to the components of the expeditionary strike group (ESG) and Marine expeditionary brigade would be a natural progression. Where rapid aggregation of larger forces is required,

the NES would provide building blocks that have trained to the same standards, understand C2 relationships, have interoperable equipment and operate with common battlefield understanding. NES provides the common tactics, techniques, and procedures for intelligence, C2, fires, maneuver, logistics, and force protection. While this approach appears prescriptive, it is, in fact, the enabling element of task-organized arrangements in combat. Forces must be trained and exercised at each level to allow for orderly aggregation into a capable contingency or crisis-response force.

The Navy and Marine Corps have long recognized that the most effective way to build a force is through the flexible task organization of combined-arms teams. Modern missions and response times suggest the utility of standing combined arms forces that require only tailoring onthe-margins when a specific mission is assigned. Standing MAGTFs, strike groups or larger naval formations, complemented by a range of specialized mission modules, would allow mission tailoring around a well-trained and highly cohesive base. This principle of adaptive force packaging ensures necessary proficiency and unit cohesion and serves to enable rapid force generation and deployment.



Seizing the MARITIME OPPORTUNITY

The Marines cannot succeed without the Navy. The Navy cannot succeed without the Marines. The Nation cannot make do without either. The moment of maritime opportunity in 2012 includes game-changing potential for increasing the efficiency and effectiveness of the naval force. Those impacts readily extend to the joint force and the interagency. Innovation will focus on better naval partnering, matured warfighting concepts, relevant training, seamless integration of effects and intelligent organizational design.

Approaching the maritime domain as a single battlespace offers opportunities for naval warfighting effectiveness through a Single Naval Battle approach that integrates all elements of sea control and naval power projection into a cohesive whole. Within this approach, consideration must be made for force aggregation and C2 relationships. A joint force maritime component commander would likely manage battlespace at sea and ashore for periods of time during the early stages of a joint operation.

The U.S. joint force cannot assume domain dominance. Fighting for localized combat dominance in time and space lies at the heart of countering the A2/AD threat. This can be achieved through deception, tempo, littoral maneuver, mass, multi-domain effects and the planned presentation of asymmetric capabilities against less nimble opponents.

The challenges presented by the A2/AD threat increase as U.S. forces close to the littorals. The adversary will adapt to the shaping efforts of the joint force by utilizing a lattice approach to operations. This will center on the ability to be able to conduct an asymmetric campaign

that will allow them to do both an integrated combined arms attack, as well as the ability to conduct individual attacks using mission type orders vice utilizing a centralized command and control network. The adversary will further complicate the targeting challenge by being able to operate in a multitude of terrains (e.g. urban, jungle, mountain, coastal, etc.). Meeting the challenge will require an understanding of the adversary's patterns of operations in order to raise their signature and force them to react. This can be accomplished through deception and littoral maneuver. Complicating the adversary's ability to target and attacking across multiple and independent lines of operations across all domains will reduce the effects of this complex threat.

Crisis response is a "come as you are" endeavor. Threats present themselves on unexpected timelines, necessitating rapid crisis response using resources already forward deployed. This will require careful consideration of all elements of the force posture. Amphibious ship loading, for example, will dictate the composition and sustainability of the response force. Crisis response will require the rapid aggregation of Marine Corps and Navy units under a relevant and effective command and control structure, one that must be conceptualized and rehearsed together. Forward-deployed forces embarked on amphibious ships serve as mobile bases afloat, and avoid the operational and political impediments of fixed bases ashore. This force presence can move rapidly among crisis flashpoints and can respond to situations without destabilizing intrusion ashore. But getting there quickly is not enough. Sustainment is the true measure of an "expeditionary" force!

"The Navy and Marine Corps are fundamental
to every element of that strategy.... The Navy
and Marine Corps must lead a resurgence
of America's enduring maritime presence
and power."

Secretary of Defense Leon E. Panetta, Speech to U.S. Naval Academy Class of 2012



Meanwhile, operational preparation through information operations, cyber capabilities, social networks, and standing relationships becomes a significant enabler. Sustained engagement through bi or multi lateral training and regular exercises by forward-deployed forces builds shared values, enhances partnership, denies sanctuaries to threats, and prevents crisis and conflict.

The U.S. joint force must be prepared to integrate a range of interagency effects as part of a combined-arms approach to warfighting and campaigning. The complementary capabilities between special-operations and amphibious forces provide a mechanism for environment shaping, and a sliding scalability in crisis prevention. Together, this joint capability provides immediate responsiveness to global challenges in counterterrorism, counter proliferation, or larger contingencies. The proliferation of precision battlefield weapons creates a "battle of signatures" that must be reduced, obscured or disguised as an essential element of force protection and maneuver advantage. Naval forces prevail in the battle of signatures through disciplined use of the electromagnetic spectrum, emissions control, light discipline, camouflage, deception and obscurants. At the same time, irregular warfare against urban opponents will be practiced on a new technological level. Without the ability to control the information environment, Marines will have to operate within it at a tempo that outstrips the enemy.

Access ashore for the ground element of a multi-domain force may be required to execute missions in the human domain. Lasting effects in this environment often match desired joint campaign objectives, necessitating a littoral access component of the multi-domain joint force.

Future operations require a new way of thinking about achieving landing site superiority, akin to air or sea superiority. With an estimated 85 percent of an amphibious Marine Expeditionary Brigade's (MEB) vehicles and equipment coming ashore via ship-to-shore connectors, the key issue for getting the MEB ashore is achieving landing site superiority. Landing site superiority can be gained by multiple means, including vertical envelopment, boatinsertion, and swimming amphibian vehicles. While do-

main dominance is not assured, conditions can be set to gain localized superiority in time and space. Modern operating concepts already provide innovative alternatives for avoiding linear frontal assaults across defended beaches and are the established norm for amphibious operations. Conditions can be set for closing non-assault craft through littoral maneuver, bypassing enemy strengths, vertical envelopment, offset and deception.

Operating terrain in the Asia-Pacific Theater will differ from our experience in Iraq and Afghanistan, presenting increased opportunities for tactical maneuver inshore and on littoral waterways. A balanced set of maneuver options for gaining entry and operating ashore is necessary to accomplish the full range of crisis-response and contingency employments. Aircraft, small-craft, tracked-amphibians, wheeled vehicles, tanks and internally transportable vehicles will support the naval force's maneuver options.

Threats present themselves on unexpected timelines, necessitating rapid crisis response using resources already forward deployed.

The modern amphibious force can employ a variety of mobility options to conduct littoral maneuver at distances to hundreds of miles. The standoff range for amphibious operations is the result of a careful calculus that includes battlespace geometry, risk, threat, and conditions. Innovation in power projection creates new opportunities for operating at increased standoff or in setting localized superiority to allow for closer approaches. Future littoral maneuver and low footprint operating concepts trade mass for precision effects. They depend fundamentally on persistent situational awareness of enemy disposition, noncombatant activities, and potential threat actions.

The capability for continuous knowledge of the battlespace must leverage an ISR Enterprise that serves forces both afloat and ashore.

Enemy employment of guided rockets, artillery, missiles and mortars (G-RAMM), whether at sea or ashore, relies on a battle network of observation, tracking and targeting. This network contains vulnerabilities potentially exploited in the fight for localized dominance.

The modern Aviation Combat Element (ACE) provides significant capability gains that have not yet been fully incorporated into operating concepts. The MV-22B *Osprey* tilt-rotor aircraft, AH-1Z Cobra attack helicopter and UH-1Y *Huey* helicopters, and the F-35B Joint Strike Fighter all provide significant MAGTF enhancements. These provide unprecedented capability for littoral maneuver and fire support through the depth of the operating area.

The seabase provides a ready platform to link the naturally complementary capabilities of the MAGTF and special operations forces. The idea of afloat prepositioned resources as relevant only to major theater war masks its greater potential. The naval force must develop innovative new concepts for employing intra-theater sea lift/seabase platforms in littoral operations to enable unprecedented operational distances. Concepts such as Operational Maneuver from the Sea (OMFTS), Ship-to-Objective Maneuver (STOM), and Distributed Operations (DO) are well aligned to the 21st-Century security environment, but require continued innovation in organization, equipment and execution.

Safeguarding the FUTURE

As America's maritime and amphibious capabilities are enhanced through inter-cooperation and innovation they become more important than ever to the Nation. With the inherent flexibility and scaleability of this synchronied Navy-Marine Corps team, its ability to deter and defeat adversaries, strengthen alliances, deny enemies sanctuary and project global influence is extended to new levels.

The United States is returning to its historical maritime roots, yet it is faced with challenges that are historical in their own right. One thing is certain: the U.S. Marine Corps and Navy will play critical roles in safeguarding our Nation's future in an ambiguous but increasingly dangerous world.

