



Marines disembarking from *USS Nassau* during Desert Shield.

U.S. Navy (Ken Mark O'Connell)

# Thunder and Lightning:

## Joint Littoral Warfare

By CARL E. MUNDY, JR.

### Summary

Coastal or littoral areas serve not only as protective barriers but also as a way of projecting power. The United States should exploit this advantage. Since 70 percent of the world's population lives within 200 miles of the sea, most future contingencies are likely to involve littoral warfare. Land basing abroad is becoming less feasible for various political and fiscal reasons, so power will have to be projected in whole or part from the sea, through undulating tides, and to points inland. While these operations will be joint, naval forces are central to them and should capitalize on their innate ambiguity and ability to resize and reposition themselves in ways that send signals to adversaries. The fundamental areas of such operations are forward presence, crisis response, and stabilization and enabling.

The defining strategic advantage available to a maritime nation is the ability to wage war globally, choosing when and when not to engage in continental struggles. American diplomacy has faithfully reflected this enormous leverage: we have enjoyed the luxury of waxing and waning between isolationism and interventionism based on domestic and international forces and the mood of the country. Despite this tendency, since the War of 1812, we have successfully maintained as a fundamental tenet of national defense that enemies should be fought on the far side of the oceans. The sea is thus not



LVTP-7 assault amphibian vehicles.

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only an insulator, but also a conductor for those who control it.

Controlling the seas was a primary strategic task during the Cold War. The expression of this doctrine was maritime strategy, a Mahanian derivative directed against the Soviet navy and its support structure, and designed to protect the sealanes and to embody the naval contribution of our warfighting strategy. This strategy was relevant for decades, but the demise of the Soviet navy as a serious threat has eliminated our only strategic blue-water adversary and irrevocably shifted the focus of joint planning.

Maintaining the ability to defend our interests—to exercise a credible military component of our national strategy away from our shores—continues to be a primary security objective as we emerge from the Cold War. To promote global stability, it is in America's interest to encourage the enlargement of democracies and free-market economies. Protecting interests and ensuring strategic access to vital areas in the future requires the continued effectiveness of forward-operating forces, and when necessary, an ability to project power from the continental United States.

While the Armed Forces have operated in overseas littoral areas since the late 18<sup>th</sup> century, littoral operations cannot be simply naval campaigns, as they have frequently

been in the past. The nature of littoral warfare with all its complexity implies not only naval forces, but also air and land power. This occurs across the continuum of engagement, from presence and deterrence, through major regional conflicts. Operations in coastal regions where land, sea, air, and space converge demand closely integrating the capabilities of all services in what must be inherently joint littoral operations, with a naval foundation.

#### The Bottom-Up Review

As a follow-on to the base force strategy and force structuring, the Bottom-Up Review was a second step in assessing the post-Cold War security environment. The review process identified four potential threats to national security that require attention:

- ▼ nuclear weapons in the hands of former Soviet republics, rogue states, or terrorists
- ▼ regional conflicts of varying intensity but geographically limited
- ▼ dangers to democracy and reform, particularly within former Warsaw Pact states
- ▼ economic dangers, resulting from a failure to sustain a strong, sound economy.

The Bottom-Up Review had no mandate to define strategy in perpetuity. Instead, it was a logical step broad enough to contain competing imperatives that may have to be addressed as the security situation changes. Events in 1989 launched a political revolution, but it does not follow that we should make revolutionary changes in military strategy and force structure. In fact, until the smoke clears, a conservative approach to strategy and forces is wise. That is why the review is evolutionary, not revolutionary. It may not go far enough for some critics, but it remains a prudent and thoughtful initial response.

The Bottom-Up Review, just like the Chairman's 1993 roles and functions analysis, was not a zero sum effort. No service or agency *lost*, and no service *gained* at the expense of others. The review was a logical follow-on to the roles and functions report. It looked at capabilities and sought to maximize complementary service strengths, but within certain fiscal restraints. Whether perfect or not, it was an honest attempt at a new strategic process, one based on a new world, with new and unclear imperatives. The operational requirement that emerged was based

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on a perceived need to fight and win two nearly simultaneous major regional conflicts. This requirement reflected the relentlessly regional outlook of the Bottom-Up Review.

#### The Littoral Environment

Our strategic focus has expanded to include the world's littoral, encompassing the coastlines of some 122 nations. The littoral poses its greatest challenges to operations because forces must straddle a dynamic environment mastering abrupt transitions from blue-water and shifting tides to dry land. Forces established ashore must generate combat power from an initially very low level, and thus are uniquely dependant on sea, air, and space forces for support. The dynamics of littoral combat vary dramatically, from the concerns of a carrier battlegroup commander or submarine commander negotiating shallow water to

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insert a special operations team to those of an Air Force commander leading a strike package. Initially the air dimension appears to be consistent until critically varied landing, rearming, and refueling requirements are considered.

Demographically, the littoral environment stands out as the area with the highest probability for employing the Armed Forces. Some 70 percent of the world population lives within 200 miles of a coastline. Four out of five world capitals are within 300 miles of the coast. When crisis swirls around an American embassy chances are great that it occurs within operational reach of our littoral forces. Operations illustrating this point were conducted during a long crisis in southwest Asia in 1990–91. Simultaneously we conducted operations elsewhere like Sharp Edge in Liberia, Eastern Exit in Somalia, Provide Comfort in Turkey and Northern Iraq, Sea Angel in Bangladesh, and Fiery Vigil in the Philippines. Each operation tapped the unique capabilities of one or all of the services, and each was based wholly or in part from the sea. This multidimensional aspect will remain a characteristic of future littoral operations.

From strategic, operational, and tactical perspectives the challenge facing the Armed Forces in littoral warfare is great. Operations

in the often compressed battlespace of littoral regions hinder a multilayered defense, especially to landward. The broad array of military threats, air and surface traffic congestion, and natural forces complicate littoral force employment, especially in command and control. It is a tough medium in which to work, but it is clearly a double-sided shield which protects our naval forces initially, but through which joint forces must be prepared to penetrate in order to reach their objectives.

The operational challenge in littoral areas has intensified with its militarization, particularly over the last two decades. Many nations are expanding their littoral forces. This has been driven by various factors, both internal and external. While this growth is manifested primarily by naval expansion, it also encompasses the acquisition of land and sea mines, ballistic and cruise missiles, and advanced aircraft. Moreover, their employment is likely to be in congested littoral areas, with crowded shipping lanes and civilian air corridors, combined with problems of uncharted shallows. Militarization not only challenges the projection of power to littoral areas but potentially threatens the peaceful use of regional seas.

#### A Paradigm for Operations

Forces operating in the littoral can be best examined in three operational areas. The first is forward presence—in effect, what is done daily in much of the world. The next is crisis response, and the last is stabilization and enabling. These operational regimes roughly equate to an intensity ladder, moving up the continuum of engagement.

*Forward Presence.* Forces provided for forward presence perform four valuable services for warfighting CINCs. They project American influence through simple physical presence, often within the medium of joint training and other forms of constructive engagement. In this way they deter potential adversaries by maintaining credible combat power. In certain areas, forward land-deployed forces are best suited for this role. The decades-long presence of Army heavy forces in Western Europe is a signal example.

But in many areas of the world—particularly in the littoral—forward operating naval

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forces are best suited for such tasks. Political, geographic, operational, and even fiscal constraints may preclude land-basing. If land-basing fails conventional deterrence relies on the capability to enter forcibly and defeat or reverse an enemy's conventional attacks. Deterrence, born of credible forward presence in peacetime and a timely response in crisis and war, is in the eye of the beholder; for this reason its viability must be constantly demonstrated.

Naval forces also possess the invaluable element of ambiguity by virtue of the medium in which they operate. They can be postured, moved, shifted, and used—cheaply—to send complex, subtle diplo-



Marines in Somalia during Provide Relief.

matic signals, and offer planners a choice between visible and invisible presence. In either case, however, they retain the benefits of both logistic self-sufficiency and immunity from political constraints which are unique to naval forces. There is a fine line between deterrence and provocation, and a large logistic footprint on the ground in an area like the Middle East could cross that line and inhibit future U.S. regional access and influence. Consequently, Naval Expeditionary Forces—largely carriers and Marines—will continue to provide the bulk of our forward operating forces in these sensitive areas.

*Crisis response.* Deployment options must gain an employment advantage in time and space. Strategic agility without operational capability is useless. Clausewitz warns of postponing action in time and space to a point where further waiting brings disadvantage. If the force present in the littoral area is not equal to the action contemplated and has to wait for reinforcement past the optimum time for action, the benefit of strategic agility is lost, and the force in place could reach its “culminating point” upon engagement.

In the littoral areas, the movement from presence to crisis response will be *enabled* by naval forces. This is one of the advantages of naval forces, preparing theaters for the entry of heavier forces. The overt entry of heavy combat forces into a theater can be unnecessarily escalatory, but naval forces can control escalation by the ambiguity of their operational patterns. They do not require forward basing or overflight rights, and they can loiter in international waters near the crisis region. Operations can be initiated from this sea base at the time, place, and manner of one's choosing. Because of this, they control the invaluable and irretrievable element of time.

Naval forces allow a joint force commander to limit the footprint of forces ashore and operate from a sea-base with command and control facilities, air control agencies, medical support, food and water production, and overall sustainment for land-based forces. This sea-basing may be critical in situations where a large presence ashore could jeopardize world opinion or unit security. It is ideal for the limited support infrastructure called for in many humanitarian relief situations.

One requisite for all forward-operating forces, particularly naval expeditionary forces, is an ability to conduct preliminary operations and serve as lead elements for the follow-on forces. To support these objectives, forces must be capable of various operations ranging from humanitarian assistance to amphibious assaults. They may resolve a crisis or manage it and provide a nucleus around which a joint task force can be formed.

*Stabilization and Enabling.* While possibly constricted the littoral battlespace still provides broad maneuver opportunities to strike

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an enemy, using surveillance and intelligence to determine critical vulnerabilities and centers of gravity. Securing access ashore (initial *stabilization*) demands the maintenance of potent forcible entry capabilities. These capabilities must be multidimensional, capable of more than one means of tactical entry. This flexibility is fundamental to effectiveness in initial-entry crisis response.

Depending on the situation, forcible entry may be achieved by an amphibious operation, perhaps combined with airborne

is more *green* than *blue* in character as it moves inland, and the green too shifts from Marine forest green to Army green in much the same way.

The goal of the Marine Corps is to provide a joint force commander with the capability to maneuver within his theater over and from the sea in a similar manner to what he does over land. We want maneuver to be seamless at water's edge. Salt water should be an avenue of approach, and the beach a permissive boundary for joint force maneuver instead of a limiting graphic. If he is successful, a joint force commander's "map" has no seam at the high water mark, and a potential enemy must see water as a key avenue of approach to be defended.

The ability to maneuver against an enemy's center of gravity depends heavily on the ability to project a highly mobile and sustainable landing force ashore. The assault echelon, the leading element of the landing force, may be tactically launched from amphibious ships as far as 25 miles out at sea. The assault may incorporate airborne and air assault forces when practicable.

While maritime-based forces may be the most useful in immature, austere theaters, it is obvious that these forces will be unable to affect decisions ashore above a certain level of combat activity or in major continental engagements. If we need to introduce heavy *decisive* combat forces ashore into a theater for an extensive land campaign, the Army will be the force of choice, along with the Air Force. It is in the difficult, dangerous process of getting large, equipment-intensive forces into a theater—*enabling* their entry—that the Navy-Marine Corps team is of the greatest use. In time naval forces will generally shift to a supporting role if a major land campaign is conducted.

Positioning ships, especially the Army's, do not offer a forcible entry capability. They are sequential and not simultaneous reinforcing tools. Accordingly, Army ships do not needlessly duplicate naval forward presence and crisis response forces. They are complementary.

*Maritime Prepositioning Ships.* Marine operating forces include specifically identified air contingency forces, additional amphibious forces, and Maritime Prepositioning Forces (MPF) that have been adapted to strategic mobility and possess 30–60 days of



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operations. The Marine Corps contribution to a joint effort in the littoral is outlined in "Operational Maneuver From the Sea," which is the Marine Corps concept for projecting sustainable seapower ashore. Not only does it envision improvements in amphibious warfare, but it incorporates the principles of maneuver warfare for operating around, over, and if necessary against a defended shore.

Maneuver becomes part of the continuum through which naval expeditionary forces move to a littoral area, a continuum that remains unbroken at the high water line—unlike past amphibious operations which tended to be in difficulty beyond the establishment of the beachhead. Maneuver is a single, seamless operation extending from a secure base at sea over a hostile shore with the objective of dominating an enemy's center of gravity. All facets of seapower are synchronized in support of this effort which



U.S. Marine Corps

Marine preparing to engage.

sustainment. This second level of response allows a joint force commander to tailor assets for the crisis at hand by selectively augmenting and reinforcing naval expeditionary task groups already on the scene. Naval forces on the first and second levels of response can quickly achieve a unity of effort. They have a common ethos, subscribe to familiar doctrine

and operating procedures, and train to maximize cohesion. To truly understand joint operations is to appreciate that joint forces are best built sequentially: they are “building blocks” rather than a “mix-master” of “oars in the water.”

*Positioning Afloat Program.* The Army Prepositioning Afloat (APA) program—which became operational on an interim basis this year and will be completed in 1997—offers

another option for improving the surge of combat forces to theater. Similar to the Maritime Prepositioning Force, APA places a

heavy brigade and the fundamental elements of a theater infrastructure aboard 16 ships, and is expected to be located within about seven days from Korea and Southwest Asia.

Like MPF, APA is capable of moving ships to a secure port and combining embarked equipment with personnel flown to a nearby protected airfield. Rapid build-up of combat power in theater will be further enhanced by the surge movement of elements of two heavy divisions aboard 11 Large, Medium Speed, Roll-on/Roll-off (LMSR) ships.

Strategically, the Marine Corps and the Army prepositioning programs work in tandem. MPF allows Naval Expeditionary Forces to serve as an enabling tool in order to respond to various lesser regional crises such as those in Bangladesh, the Chukk Islands, and Somalia. On the other hand, APA would primarily support CINCs conducting heavy, sustained land warfare in regions like Korea or

Southwest Asia. Operationally, these prepositioning forces can reinforce each other. In the event of a major regional conflict of the magnitude of Desert Storm both forces are likely to rapidly build up combat power in theater. The amphibious force, rapidly reinforced with MPF, may secure a lodgement for follow-on forces and buy time for mobilization.

Moreover, APA and other enhancements may sustain land warfare in theater, while MPF reinforces amphibious maneuver against an enemy’s coastal flank. APA and MPF complement the two services’ strategic and operational roles and ultimately provide joint force commanders and the National Command Authorities with greater flexibility. But joint force sequencing becomes even more critical with this expansion of afloat prepositioning forces. Increased demand for strategic airlift, and the stresses on limited arrival, assembly, and throughput facilities, make imperative the need for a comprehensive understanding of force building to avoid piece-mealing of capability.

The ability to wage littoral warfare is an overwhelming strategic advantage which must be continually refined. Although operations in littoral areas of the world retain a predominantly naval flair, they now depend more on the ability to outmaneuver opponents at sea, in the air, and ashore; in other words, to wage effective joint warfare. How this is done will depend upon the time and situation—but all forces must be employed in their optimum roles. An effective understanding of joint force sequencing is critical in delivering an effective joint capability. The benefits are great. As Thomas More Molyneux wrote in 1759 at the height of the Seven Years’ War:

*A military, naval, littoral war when wisely prepared and discreetly conducted is a terrible sort of war. Happy for that people who are sovereign of the sea to put into execution! For it comes like thunder and lightning to some unprepared part of the world.*

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