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LODGMENT: A THING OF THE PAST?

by

Tracy L. Mork
LtCol USMC

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: Tracy L. Mork

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Faculty Advisor
Capt Paul A. Romanski
Arleigh Burke Military Chair
of Surface Warfare

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A Joint Force Commander requires a plan that ensures that every component of the Joint and/or Combined Task Force can make it to the fight and be sustained while engaged with the enemy. The Naval Service operational concepts, beginning with *Operational Maneuver From the Sea*, rely far too heavily on maritime maneuver and in so doing, overlook a traditional requirement of forcible entry operations, that is, to provide secure lodgment for throughput of follow-on forces and materiel. While small MAGTFs tasked with limited missions may well benefit from seabasing, Joint Task Forces and larger MAGTFs that rely on the introduction of a Fly-in Echelon and prepositioned equipment and supplies must have access to shore-based lodgment areas. The limitations of seabasing become immediately apparent to the commander concerned with force projection of CONUS-based forces and sustainment of the JTF at the operational level of war.

Mobile Offshore Bases, envisioned by some as a tactical platform used to extend the reach of naval aviation and by others as a floating steel island providing all of the functions of a lodgment area, are insufficient to the United States' political or miitary needs in lengthy or large-scale engagements involving US forces, coalition forces, US government agencies and NGO/PVOs. Lodgment areas with expeditionary airfields, port facitilites and beaches capable of supporting JLOTS operations will continue to meet best the needs of a JFC in the littoral region for missions ranging from Operations Other Than War to Sustained Operations Ashore.

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Introduction

A good deal of winning any war depends on how quickly and decisively one takes the initiative. The United States has amassed an excellent historical record of moving large forces and attendant materiel to far-flung hot spots on short notice. From Guadalcanal to DESERT SHIELD/DESERT STORM to Somalia, the US military has achieved success in power projection overseas. Through the years, in many different kinds of operations and in battlespaces ranging from urban areas to jungle islands,we have come to realize that a forcible entry operation of any scale has five progressive phases: preparation and deployment, assault, stabilization of the lodgment, introduction of follow-on forces and transition operations. Proper phasing often has been the key to smooth transitions, and not necessarily interruptive or disruptive. However, recent US Marine Corps concept documents discuss avoiding phases altogether in an effort to maximize tempo and overtake the enemy's decision making process. But the fact remains, the functions of each phase must be accomplished regardless of how the commander telescopes the time/objective relationships. In this regard, there are two dangers that innovative military thinkers must consider. One is that we risk making an idol out of change, accepting all new technologies or concepts as implicitly better than something we already have or do. The other danger, a corollary to the first, is that we may abandon useful concepts which have been developed painstakingly over time. This paper therefore will examine the enduring and important place of lodgment in our operational thinking and the shortcomings of seabasing as an absolute alternative.

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Lodgment: An Activity as Well as an Area

The lodgment phase has been criticized as an old-fashioned relic and a stumbling block to synergistic execution of joint warfighting. The Naval Service proposes to replace lodgment with seabasing of forces and sustainment capability. The argument goes that if we didn't have to waste our time wresting a beach, port or airfield from the enemy, we could attack decisively, influence the enemy Center of Gravity (COG) directly and win early. Unfortunately, it is difficult to be decisive when the force is out of fuel, ammunition or water or when follow-on forces don't have the marshaling or maneuver space to exploit the tactical success of the enabling force. Streamlined logistics systems and reduced logistics demand will mitigate some of our military's massive sustainment requirements, but significant challenges will remain. While seabasing may be useful as the first echelon of sustainment or serve to support limited, small-scale missions such as forward presence, show of force, Noncombatant Evacuation Operations (NEO) or raids, it is insufficient to political and military needs in lengthy or large-scale engagements involving US joint forces, coalition forces, US government agencies and Nongovernmental Organizations (NGO)/Private Volunteer Organizations (PVO), as demonstrated in many wargame scenarios.[1] Land-based lodgment areas with airfields and port facilities will continue to meet best the needs of a Joint Force Commander (JFC) for introducing follow-on forces and then decisively engaging the enemy in the littoral region for missions ranging from Operations Other Than War (OOTW) to Sustained Operations Ashore (SOA).

Service and joint doctrine continue to identify forcible entry as a Marine Corps Core Capability. As such, the onus is on the Marine Corps, and to a lesser extent the Navy, to

[1] Douglas E. Mason and Jason F. Phillips, "OMFTS: A Perspective," Marine Corps Gazette, August 1997, 60.

organize, train and equip to meet the requirements of forcible entry operations. Recent concept documents developed by the Naval Service however, have focused on new operational thinking that may not meet the Joint Force Commander's requirements for introducing follow-on forces, a key function of the lodgment. *Operational Maneuver From the Sea* (OMFTS), the capstone Marine Corps operational concept, is said to be applicable across the full range of military operations, from major theater war to small-scale contingencies.

"In OMFTS, naval forces focus on an operational objective, using the sea as maneuver space to generate overwhelming tempo and momentum against critical enemy vulnerabilities. OMFTS offers the promise of extraordinary leaps in operational flexibility by introducing the notion of enhanced capabilities for seabased logistics, fires, and command and control. Seabasing facilitates maneuver-style operations by eliminating the requirement for an 'operational pause' as the landing force builds combat power ashore, and by freeing the Marine air-ground task force (MAGTF) commander from the constraints of a traditional beachhead." [2]

What the JFC loses in OMFTS is both the lodgment phase and the lodgment area that, when seized and held, ensures the continuous flow of forces and provides the space for subsequent operations.

The lodgment area creates a dilemma for the JFC. A large marshaling area and sustainment base is an enticing target for the most limited of enemies. Terrorist attacks against US forces such as those that occurred at the Marine barracks in Lebanon and Khobar Towers in Saudi Arabia were relatively unsophisticated but appallingly successful. Significant fighting forces are being drawn increasingly into defense of what were once considered rear areas, but which in today's non-linear battlefield end up being a geographically dispersed network of sustainment modules. These vary in size and

[2] LtGen John E. Rhodes, "Every Marine an Innovator," Marine Corps Gazette, January 1998, 41.

capabilities from an air element's expeditionary Fuel and Ammunition Replenishment Point (FARP) to a Mobile Combat Service Support Detachment (Mobile CSSD) following in trace of a rapidly advancing ground force to an Expeditionary Airfield (EAF) serving as a regional Air Port of Debarkation (APOD) to a Logistics Over the Shore (LOTS) operation conducted over a beachhead. At each of these points, vital logistics support is funneled into the area of operations and appropriate security is required. The dilemma for the JFC is that he knows he needs a responsive sustainment capability but he cannot risk assigning too many of his forces to protect that capability. The reassurance of having large quantities of ammunition, for example, is overshadowed by the tremendous job of protecting it. The danger to military logistics in the future is not the volume of supplies positioned in the area of operations but the duration of an operation. Eventually, the enemy will find a way to exploit US vulnerabilities.

Forcible entry operations typically terminate in one of three ways: mission accomplishment, mission accomplishment and transition to OOTW or lodgment established for subsequent operations ashore. Marine Corps application of force has a building block approach with corresponding levels of sustainment. The following table shows a general correlation between these Marine Air-Ground Task Force (MAGTF) increments, Marine Corps concepts of employment, sustainment levels and illustrative examples:

MAGTF	Personnel Level	OMFTS Concept	Sustainment Level	Example
ARG/MEU	2000 Marines/sailors	STOM	15 days/seabasing	NEO
MEF(Forward)	17,300 Marines/sailors	OEO	30 days/sea echelon	Somalia
MEF or multiple MEFs	46,000 Marines/sailors	SOA	60 days/lodgment area	Inchon

STOM: Ship-to-Objective Maneuver
OEO: Other Expeditionary Operations, similar to OOTW
SOA: Sustained Operations Ashore

Seabasing

A MEU-sized MAGTF is normally deployed aboard the ships of an Amphibious Ready Group (ARG) for a period of about six months. The geographic CINC sees this, and rightly so, as a relatively self-contained unit, trained in a number of missions and easily directed to the site of an emerging crisis. While this MAGTF may be augmented by theater-level intelligence or command and control assets, it generally has the forces it needs to accomplish many forward presence missions. Very little equipment augmentation is possible or necessary. The means of force projection include air (helicopters and Harriers), surface (assault amphibian vehicles and Landing Craft Air Cushion (LCACs)) and assorted motor transport gear. Posturing the force over the horizon is possible and enhances the element of surprise in tactical engagements. The force is easy to maneuver, easy to concentrate, easy to deploy. It is limited however, in the punch it packs as well as how long it can operate on its sustainment package. Seabasing the force with a limited organic logistics capability meets many tactical requirements but ultimately, the force and its capabilities are limited by the size and range of the container in which it operates, the ARG.

Sea Echelon

A MEF(Forward) is an incrementally larger MAGTF with significantly wider mission capabilities. Echelonment or sea echelon describe the very fluid relationship between forces ashore, supporting vessels and the available sustainment capability. Sea echelon is the transitioning of strictly sea-based forces to land-based forces with some resources afloat. The force increases in size and lethality as elements of the MAGTF arrive in the area of

operations and begin to engage the enemy. At the MEF (Forward) center is an Marine Prepositioned Ship squadron (four or five ships) with an associated Fly-in Echelon (FIE). MPS squadrons, strategically positioned around the globe, ensure that combat equipment and consumables can get to the scene of a crisis quickly. Ports in which MPS operations are conducted must be relatively secure and stable, giving the JFC a reasonable expectation of success but not necessarily complete freedom from enemy interference.

No longer limited to the capacity of amphibious shipping in an ARG, the MEF (Forward) builds to significant size and power by transitioning power ashore. This force package includes 30 days of sustainment and the ships themselves provide workshop space in which to conduct limited maintenance on MEF equipment. The ships of the squadron can remain on station as a pier-side logistics center or stand offshore. Control of the port facility as well as the associated airport is critical to the MEF (Forward) because these facilities provide the means for the forces to arrive, depart and receive sustainment. Air facilities must be able to accommodate current generation Air Mobility Command (AMC) aircraft (C141, B747, C5) as well as USMC fixed wing aircraft organic to the MAGTF, although the new C17 and MV22 will allow MPF operations in less mature theaters. These transportation nodes also become the gateways for other Services, government agencies, NGO/PVOs and coalition partners to make their contributions. In most OOTW missions, such as humanitarian assistance, disaster relief, peacekeeping and refugee resettlement, host nation support becomes increasingly important to the sustainment effort.

Lodgment Area

The MEF-sized MAGTF of about 46,000 Marines and sailors can operate for 60 days or more with organic equipment and supplies but it requires significant theater-level sustainment with respect to the big three: fuel, ammunition and water. Because of the size of the force and the attendant logistics requirements, a lodgment ashore is a suitable sustainment concept, one that provides the marshaling space for forces as well as areas for stockpiles of consumable supplies, personnel support and equipment maintenance facilities. Service concepts detail the utilization of the MEF in Sustained Operations Ashore:

"As an operational maneuver element, the MAGTF can be used as an enabling force to pave the way for decisive operations by other elements, as a decisive force to unhinge the enemy's operational Center of Gravity, or as an exploitation force to take advantage of opportunity on the battlefield." [3]

The Naval Service sees sustained operations as including joint major operations and campaigns, in which MAGTFs fight, not as naval forces but as land forces with varying degrees of naval support. Both the MEF and the MEF (Forward) require significant joint force integration in providing fire support, comprehensive command and control, the means of power projection and force sustainment.

"Successful implementation of the new concepts will expand the area of the secure initial lodgment from the typical 30 to 50 square miles under the old concept to 2,500 to 3,000 square miles. An area as large as 5,000 to 10,000 square miles would be dominated by the fleet-based surface and air fire support of the landing force, up to 75 to 100 miles inland. The time required to establish a lodgment of this size will be greatly reduced." [4]

There simply is not enough amphibious shipping available to transport all the forces and materiel of these large MAGTFs. Additionally, the current ships of the Amphibious Task

[3] ibid., 42.

[4] _____, "Commentary on OMFTS," Marine Corps Gazette, July 1996, 15.

Force (ATF) cannot perform required functions such as staging, reconstitution, major repairs and sea state 3 cargo handling operations.

The Services' prepositioned equipment programs, MPF and the Army Prepositioned Afloat (APA), are successful in meeting the requirements for speedy projection ashore of forces. Another success story is

" . . . Logistics Over the Shore (LOTS) operations which is the process of discharging cargo from vessels anchored off-shore or in-the-stream, transporting it to the shore and/or pier, and marshaling it for movement inland. LOTS operations are conducted over unimproved shorelines, through fixed-ports not accessible to deep draft shipping, and through fixed-ports that are inadequate without using LOTS capabilities. Both the Army and Navy may conduct LOTS operations, and the scope of the LOTS operations will depend on geographic, tactical and time considerations." [5]

Improvements in hardware such as pontoon causeways, causeway ferries and container transfer systems will accelerate the rate at which supplies and equipment can be introduced and distributed to arriving units or those already in-theater. In the future, LOTS operations may be enhanced by the addition of a Deployable Waterfront Facility and Landing Ship Quay/Causeways which are expeditionary port systems that can " . . . moor and provide cargo handling to cargo ships without the need to lighter cargo to the beach."[6] This equipment is similar to the Flexiport facility used by the British in the Falkland Islands. Portable port concepts enhance the JFC's lodgment area by providing a modern platform for intermodal connections without sacrificing the benefits of an expeditionary posture.

[5] Joint Chiefs of Staff, Joint Logistics Over the Shore (JLOTS), (Joint Publication 4-01.6 Final Coordination Draft) (Washington, D.C.: 3 November 1997)
[6] Theodore G. Vaughters, "Joint Logistics Over the Shore Operations," Naval Engineers Journal, May 1994, 262.

Mobile Offshore Base

To compensate for decreasing forward-basing, a new concept being advanced by some is the Mobile Offshore Base (MOB). The MOB is envisioned as a series of interlocking platform pieces which can be towed or self-propelled to an area of operations and moored fifty to one hundred nautical miles offshore. There are a number of ideas about how the MOB could support US forces.

ADM Owens, in a chapter from his book, High Seas: The Naval Passage to an Uncharted World, has a limited mission in mind for mobile sea bases. He sees them as an inexpensive alternative to aircraft carriers, as strategic platforms used to generate tactical aircraft sorties. Other theorists see the MOB as a multi-function platform, capable of landing and launching strategic lift aircraft, receiving cargo and equipment from various military and commercial shipping assets and providing an intermediate theater staging area for sustainment.

The principal advantages of a MOB are a reduced footprint ashore and, due to the distance offshore, enhanced force protection. Aside from impeding enemy targeting, future seabasing has some other appealing advantages. It may improve strategic agility by allowing the JFC to locate the MOB in a position that best contributes to operational success rather than being restricted to the small percentage of littoral space that supports military operations. With the freedom of the open ocean, the JFC has unrestricted transit to and from the MOB and, unlike a forward land base, a MOB doesn't require overflight rights to be granted or diplomatic clearances to be given. The MOB can be an unobtrusive presence, established "out of sight, out of mind." And, like all naval forces in the forward presence

mission, it is possible to expand the sea base or withdraw it, as appropriate. Essentially, the MOB's distance from the fight is its key advantage.

Distance, however, can be a mixed blessing. Remaining offshore a significant distance slows the introduction of forces into the area of operations in several respects. In-stream offloading requires more involved discharge procedures and the use of lighterage. Trucks, tanks and refuelers can be rolled off of the ship into the hands of Marines from the FIE during in-stream offloads but then equipment and crews must be transported from the ship to the shore which is a process necessarily limited by the shuttle means available.

Time may be another limiting factor in the employment of MOB. It will take a significant amount of time to move the MOB to the area of operations. Estimates for the rate of movement range from six to 14 knots per hour. MOB components could be prepositioned to decrease transit time although there would still be significant delay in establishing the MOB in theater. Assembling the platform and building up the MOB infrastructure will take time. The benefits of flexibility are therefore offset in some respects by the time required to transport, install and develop the MOB. In addition, throughput operations are also constrained in the more austere circumstances of a sea platform. To give the reader a sense of the time required,

"... offloading an armored division from eight fast-sealift ships in a superport such as Ad Damman, Saudi Arabia, could be accomplished in less than two days. This same operation would require more than two weeks in Mogadishu or more than a month, depending on the weather, if we used a Joint Logistics Over the Shore beachhead operation." [7]

Once the equipment is transitioned ashore, refueling and providing maintenance for a highly mobile and mechanized force is a tremendous task that is exacerbated by transit time.

[7] Gen Ronald R. Fogleman, "Balanced Surface, Airlift and Sealift," Defense 94, 37.

LCACs fitted with fuel bladders and dispensing systems may meet the refueling requirements to some degree but reduce the mobility assets available to the ground forces as they maneuver in the littoral region. Additionally, the LCAC (or AAAV or MV22) consumes fuel as it provides support. The JFC has to assess how much of his resources he wants to use in establishing and maintaining the offshore base.

The sea is not a threat-free environment. In actuality, the MOB as a potential target moves some miles seaward and continues to be vulnerable to a new set of threat systems. Supplementing the MOB, ships in the ATF and the Combat Logistics Force (CLF) must stay on station for much longer periods, billeting forces, holding equipment for selective offload or backload, providing fuel and fresh water. Diesel submarines, a well-placed SCUD missile, cigarette boats, mines and enemy SOF can still reach a MOB force and render parts of it combat ineffective. These threats to the MOB cannot be eliminated with a quick, decisive stroke but must be attrited over time. On the sea-based platform, what the Marine Corps (and ostensibly the entire JTF) essentially has done is transfer the force protection responsibilities for its rear area entirely to the Navy. During the Gulf War, the United States abrogated protection of CLF seabased logistics to allied naval forces because, at that time, we didn't have the surface ships required for the force protection mission. It is very unlikely that we will have more ships in the future for this aspect of the operation. Make no mistake; the "elephant ranch" of slow-moving, heavily burdened sustainment vessels constitutes a high payoff target. During the Falkland Islands conflict, " . . . (T)wenty-five percent of British vessels attacked were logistics or support vessels; all but two of the Argentine ships sunk were logistics vessels and the Argentine submarine Santa Fe was on a logistics mission when

it was sunk."[8] With an entirely sea-based JTF, the Navy has vastly expanded force protection responsibilities.

The weather becomes another enemy to the MOB. Rough seas and no-fly days could isolate the ground force from its sustainment or prevent the scheduled build up of forces. During the Falkland Islands conflict, the Brits found that discharge of cargo was limited to about six hours per day because of Argentine air strikes against the logistics fleet, rough seas and the Antarctic winter darkness. As a result, the resupply rate for ammunition was woefully inadequate.

To keep the MOB a manageable size and still meet the tremendous support requirements of the JFC is a challenge. Recommendations to establish a fleet of amphibious CL-130s aside, it is unlikely that AMC air is capable of utilizing a sea-based platform for the number and frequency of sorties associated with a large-scale operation. Tailored forces armed with modern technology still need significant equipment laydown, space for containerized cargo, personnel support facilities like medical treatment centers and chem/bio decontamination facilities. Theoretically, all Services, coalition partners and civilian contractors would have to operate from the MOB because it exists in lieu of a land-based lodgment for reasons of security, in an effort to minimize the footprint ashore or because of insufficient infrastructure ashore. Next to AMC, the Military Sealift Command (MSC) will be the primary user of the MOB. More and more, that means civilian and international businesses will use the MOB. USTRANSCOM estimates that 40 percent of the transportation provided to US forces comes from commercial transportation corporations. "Logistics will become increasingly joint in operation, customer-focused in performance and

[8] Bruce P. Schoch, "Logistics of the Falklands," Army Logistician, May-June 1986, 7.

international in orientation. Military logistics will expand its inclusion of civilian personnel and products."[9] The MOB, seen by some as a small, easily transported and installed temporary oasis for naval forces, has of necessity expanded to meet the space requirements and functions of the joint lodgment. More vulnerable to weather and sea conditions, isolated from any HNS and still open to hostile action, the MOB begins to create more problems than it solves.

While overseas military presence continues to be central to our National Security Strategy and National Military Strategy, joint military actions rarely reach the operational level of war these days. Application of military power has the potential to leap from tactical engagements to strategic implications in a single bound in such recent actions as VIGILANT SENTINEL, the USN/USMC show of force activities on the Iraq/Kuwait border and SUSTAIN LIBERTY, the 10th Mountain Division's security mission in the Panama Canal Zone. Under these conditions, it is understandable that the Services are focusing on concepts designed to meet the requirements of the crisis d'jour rather than the future large-scale conflict. The danger, unfortunately, is that when the big one comes along, we will deftly apply tactics like Napoleon, securing victories which have no decisive influence on the operational or strategic COG of our opponents.

Conclusion

New concepts being developed today by the Services become the basis for establishing new capabilities in the future. OMFTS represents the position of the Naval Service and its prospective role in the national defense. Future iterations must show how

[9] Stephen P. Ferris and David M. Keithly, "21st Century Logistics: Joint Ties That Bind," Parameters, Autumn 1997, 49.

Naval Service capabilities complement those of other Services and how they facilitate the accomplishment of the objectives and strategic purpose of the JFC. "The key to warfighting success is the synchronized employment of land, air, sea, special operations and space forces which provide the joint force a wide range of operational and tactical options. The goal is to increase the total effectiveness of the joint force." [10]

We must guard against interpreting the battlespace in terms that are Service-specific and which may preclude joint force integration and choose instead to develop complementary doctrine and organizational structures. Seabasing significant forces does not provide the advantages that its proponents advertise. A MOB positioned fifty to one hundred nautical miles out to sea exacerbates time/distance problems for most operations. The platform is at once too small to accommodate the volume and pace of throughput required for JTF success and too large to escape detection. The time required to move the MOB to the area of operations, assemble it and anchor it into place precludes operational surprise. The vulnerabilities inherent in a large rear area facility transcend specific location; ground lodgment areas and static seabased platforms are equally exploitable. The Naval Service must reevaluate its motivation for abandoning both the lodgment phase and area. As a sustainment concept for small forces conducting limited missions or as the first echelon of an operation in which additional significant forces are being projected ashore, seabasing has some utility but for most applications of military power, ports, airfields and LOTS will remain the primary conduits for the movement of forces and materiel. Lodgment remains central to the success of the JTF.

[10] Joint Chiefs of Staff, Joint Force Capabilities, (Joint Pub 3-33) (Washington, D.C.: 30 January 1998).

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