

# [Changing concepts of amphibious operations management essay](https://assignbuster.com/changing-concepts-of-amphibious-operations-management-essay/)

“ Amphibious flexibility is the greatest strategic asset that a sea power possesses.”

-B. H. Liddell Hart

Deterrence or Defence, 1960

## INTRODUCTION

Amphibious operations are operations launched from the sea onto the land by naval and landing forces. It uses naval firepower, logistics and strategy to project military power ashore. In the present day, amphibious warfare is the most complex of all military manoeuvres. The undertaking requires an intricate coordination of numerous military specialties, including air power, naval gunfire, naval transport, logistical planning, specialised equipment, land warfare, tactics, and extensive training in the nuances of this manoeuvre for all personnel involved[1].

The National Defence Strategy 2008 (NDS) of the United States projects that over the next twenty years,, population, resources, and environmental changes combined with social and geopolitical changes would create instability and uncertainty[2]. The situation calls for a change in military capabilities and capacities commensurate to the requirement along with institutional agility and flexibility to plan early and respond effectively along with other services and international partners.

The World’s population will, by 2025, would increase by more than 30 percent and be more heavily concentrated within the littorals. More than 60 percent of the Earth’s population will live in urban areas in 2025[3]. This portends a world dominated by complex urban littorals, where competition exists for vital resources and at the same time a youthful population becomes increasingly disenfranchised. Concurrently, there will continue to be a blurring of what was previously thought to be distinct forms of war or conflict.

Mass communications will highlight the drama of human suffering, and disadvantaged populations will be ever more painfully aware and less tolerant of their conditions. Extremist ideologies will become increasingly attractive to those in despair and bereft of opportunity. Criminal elements will also exploit this social instability[4].

Diminishing overseas access is another challenge anticipated in the future operating environment. Countries may be hesitant to grant access for a variety of reasons. Diminished access will complicate the maintenance of forward presence, necessitating new approaches to responding quickly to developments around the world[5].

All of these challenges illustrate the importance of being able to operate in littoral regions, this demand signals the applicability of amphibious forces for missions across the range of military operations. The range of operations extends from military engagement, security cooperation, and deterrence activities to crisis response and limited contingency operations, and if necessary, major operations and campaigns[6].

## AIM

The aim of this paper is to examine new concepts in Amphibious Operations taking place in the world to respond to the new world order and asymmetric threats in the 21st century.

## PRESENT DAY AMPHIBIOUS OPERATIONS

Amphibious operations employ a landing force embarked in ships or craft to accomplish a number of assigned missions. These missions may be conducted in permissive, uncertain, or hostile environments across the range of military operations. A landing force is composed of Army forces task-organized to conduct amphibious operations, while an amphibious task force is composed of Navy forces task-organized for the same purpose. An amphibious force is a landing force and an amphibious task force put together[7].

Recent history, the strategic environment, and maritime strategy all imply that individual naval platforms, forward deployed and globally distributed, must be capable of more diverse, smaller-scale amphibious missions while retaining the ability to re-aggregate for larger-scale events. The following types of amphibious operations, are in vogue presently[8]:-

Amphibious Engagement and Crisis Response. A type of amphibious operation which contributes to conflict prevention or crisis mitigation. These may include operations such as security cooperation, foreign humanitarian assistance, civil support, non combatant evacuations, peace operations, recovery operations, or disaster relief.

Amphibious Raid. A type of amphibious operation involving a swift incursion into or a temporary occupation of an objective, followed by a planned withdrawal.

Amphibious Assault. A type of amphibious operation that involves the establishment of a landing force on a hostile or potentially hostile shore.

Amphibious Withdrawal. A type of amphibious operation involving the extraction of forces by sea in ships or craft from a hostile or potentially hostile shore.

Amphibious Demonstration. A type of amphibious operation conducted for the purpose of deceiving the enemy by a show of force with the expectation of deluding the enemy into a course of action unfavorable to him.

## MODERN CONCEPTS IN AMPHIBIOUS OPERATIONS

## Operational Manoeuvre from The Sea (OMFTS)

OMFTS is not merely a way of introducing an expeditionary force onto foreign soil but also of projecting expeditionary power directly against a centre of gravity or critical vulnerability[9]. OMFTS was developed by the US in response to the change in the global threat from the cold war to the chaos in the littorals. OMFTS enhances the naval expeditionary force by providing a task-organized, Sea Based, Operational Manoeuvre Element (OME) that can respond across the spectrum of conflict. Because expeditionary forces operate in international waters and are not restrained by global political pressures, the ability to respond quickly to a combatant commander’s requirement is key when a quick response is necessary[10].

Concepts that help provide flexibility, protection and decisive impact to OMFTS are operational depth, mission depth, tempo, reach back, enabling force and exploitation force[11]. Operational Maneuver from the Sea links naval warfare and manoeuvre warfare. OMFTS uses critical components of warfare such as speed, mobility, fire support, communications, and navigation to exploit enemy weaknesses across the entire spectrum of conflict.

OMFTS enables expeditionary forces to provide Army and Air Force flow when sustained operations are required. This can be as simple as creating the command and control architecture for the combatant commander to use or as complex as taking a forward air base for the flow of larger forces. An OMFTS capable task force can also act as an exploitation force when serving as an OME by attacking units or supply depots of enemy forces already engaged by other friendly forces.[12]

The capture of Seoul in 1950 was a classic example of an Operational Manoeuvre from the Sea. It was a completely focused operation, unified under a single commander, that flowed coherently from San Diego, Sasebo, and Pusan, through an amphibious power projection at Inchon, to key objectives well inland. The Seoul operation was focused on a critical North Korean vulnerability, the lines of support (and withdrawal) through the Han River Valley at Seoul. It maintained that focus and with it an unmatched tempo of aggressive action. As a result, it was crushingly successful, leading to the destruction of the North Korean Army and the liberation of South Korea. If the operation had lost its focus, however, and been planned and executed as merely an amphibious lodgement at Inchon, it would have generated only an operationally insignificant tactical “ victory”.[13]

Use of the sea is the main difference in OMFTS from all other types of operational manoeuvre warfare. The sea ensures an avenue for friendly movement at the same time it acts as a barrier to the enemy and a means of avoiding disadvantageous engagements. OMFTS applies across the full spectrum of military operations, from Major Theater War (MTW) to Small Scale Contingencies (SSC) and applies manoeuvre warfare to expeditionary power projection in naval operations or as part of a joint or multinational campaign.

OMFTS is not merely moving around the enemy but projecting power to the enemy’s Center of Gravity (COG) on our terms. By using a manoeuvrable naval power to launch an assault at the time and place we determine, the enemy’s weakness will be decisively exploited. OMFTS envisions making the beach transparent to amphibious warfare through STOM.[14]

## Ship to Objective Manoeuvre (STOM)

OMFTS requires new tactical concepts for amphibious operations. Although the focus is on operational objectives ashore, the sea becomes essential manoeuvre space for the landing force. Successful execution of OMFTS demands that the landing force maintain the momentum gained by manoeuvre at sea. This is achieved by Ship-to-Objective Manoeuvre (STOM)[15].

STOM employs the concepts of manoeuvre warfare to project a combined arms force by air and surface means against inland objectives. It takes advantage of emerging trends in Command, Control, Communications, Computing, Intelligence and Information C4I2 Systems to land forces in their tactical array from the ships directly to the objective, replacing the cumbersome ship-to-shore movement of current amphibious warfare. True STOM is not aimed at establishing a beachhead, but at landing combat units ashore in their fighting formations, to a decisive place, and in sufficient strength to ensure mission accomplishment. The advantages of STOM over conventional amphibious operations are[16]:-

STOM provides tactical as well as operational surprise, something seldom possible in past amphibious operations.

Operations can begin over the horizon and project power deeper inland with more speed and flexibility than conventional amphibious operations.

The enemy has to defend a vast area against seaborne mobility and deep power projection as compared to conventional beachhead. This will also force the enemy to thinly spread his defenses thus allowing friendly forces greater freedom of manoeuvre at sea and ashore.

The gradient of shores and relative location of beaches with respect to the objective is rendered insignificant.

Naval forces can take advantage of night and adverse weather conditions, as well as the ability to control the electromagnetic spectrum. These capabilities will enable exploitation of known enemy vulnerabilities, create opportunities, achieve tactical surprise, and result in mission accomplishment.

Tenants of STOM. The key elements of STOM are[17]:-

Operational objective. Focuses on the operational objective and provides increased flexibility to strike enemy critical vulnerabilities.

Sea as Manoeuvre Space. The open sea can be a protective barrier or a freeway of supreme mobility. Movement of forces is faster on sea than on land. Outflanking of enemy defence forces can easily be achieved.

Strength against Weakness. STOM applies strength against weakness and projects combat power through gaps located or created in the adversary’s defenses. These gaps are not necessarily geographical; they may be exploitable weaknesses, such as limited night fighting capability, poor command and control, lack of endurance or low morale.

Tempo. Air and surface units manoeuvre from ships to inland positions faster than the enemy can effectively react. The landing force maintains the initiative and operates at a pace that allows it to dictate the terms of engagement. Operational surprise delays enemy identification and disrupts his response. The enemy continues to face dilemmas and a tempo of operations that denies him control of the battle and keeps him off-balance and reactive.

Integration. Integrates all elements in accomplishing the mission. Thus employing all available assets in support of ship-to-objective manoeuvre in order to maximize the effectiveness of the landing force.

Successful implementation of the STOM concept requires improvements in mobility, command and control, intelligence, fires, sea-based logistics, organisation, doctrine, training, and education. STOM takes advantage of innovations in technology to enhance the capability of naval forces to conduct amphibious operations in the 21st Century. Ship-to- Objective Manoeuvre directly links manoeuvre at sea to manoeuvre on land by seamless manoeuvre from over the horizon directly against objectives deep inland.

## SEA BASING

Sea basing represents a future capability with antecedents in amphibious operations. A seabase is a system of systems enabling personnel, material, fires, and command and control to come together rapidly, integrate, and be projected as a flexible force capable of undertaking a broad spectrum of over-the shore operations. Such operations could range from humanitarian relief, operations other than war, and conflict prevention to brigade sized or larger combat operations. Even larger operations could be enabled by the addition of more seabases or by the ability to flow additional forces through the seabase. A seabase may serve as an integration point for joint as well as coalition forces. Sea basing is more than simply traditional amphibious assault operations. It entails the projection of land forces substantially beyond the beachhead, independent of in-theater land bases. A seabase also needs to sustain such forces for prolonged periods[18].

Sea basing can be defined as: “ The capacity and/or capability to project rapidly sustainable military power ashore from the sea”[19]. From the period prior to the onset of a crisis through the completion of stabilization operations, Seabasing provides scalable power projection option through sequential and concurrent integration of the five primary Seabasing lines of operation as stated below and are described as[20]:-

Close. Rapid closure of joint force capabilities to an area of crisis.

Assemble. Seamless integration of scalable joint force capabilities on and around secure sea-based assets.

Employ. Flexible employment of joint force capabilities to meet mission objectives supported from the sea base.

Sustain. Persistent sustainment of selected joint forces afloat and ashore, through transition to decisive combat operations ashore.

Reconstitute. The capability to rapidly recover, reconstitute and redeploy joint combat capabilities within and around the manoeuvreable sea base for subsequent operations.

## Overview of Sea Basing[21]

Principles of Seabasing. There are seven overarching Seabasing principles that apply across a wide range of scenarios[22]:

Use The Sea as Manoeuvre Space. Seabasing exploits the freedom of the high seas to conduct operational manoeuvre in the maritime (includes littoral) environment relatively unconstrained by political and diplomatic restrictions, for rapid deployment and immediate employment. Sea-based operations provide an operational flexibility to support the immediate deployment/employment/sustainment of forces across the extended depth and breadth of the battlespace.

Leverage Forward Presence and Joint Interdependence. Joint forces operating from the sea base, in conjunction with other globally based joint forces; provide an on-scene, credible offensive and defensive capability during the early stages of a crisis. Combined with other elements of this joint interdependent force, forward deployed joint forces can help to deter or preclude a crisis or enable the subsequent introduction of additional forces, equipment, and sustainment.

Protect Joint Force Operations. Seabasing provides a large measure of inherent force protection derived from its freedom of operational manoeuvre in a maritime environment. The combined capabilities of joint platforms in multiple mediums (surface, sub-surface, and air) provide the joint forces a defensive shield both at sea and ashore. The integration of these capabilities and freedom of manoeuvre effectively degrades the enemy’s ability to successfully target and engage friendly forces while facilitating joint force deployment, employment, and sustainment.

Provide Scalable, Responsive Joint Power Projection. Forces rapidly closing the sea base by multi-dimensional means (air, surface, and subsurface) give the ability to rapidly scale and tailor forces/capabilities to the mission. Seabasing provides an option to mass, disperse, or project joint combat power throughout the battlespace at the desired time to influence, deter, contain, or defeat an adversary.

Sustain Joint Force Operations From The Sea. Sea-based logistics entails sustaining forces through an increasingly anticipatory and responsive logistics system to support forces afloat and select joint/multinational forces operating ashore. The sea base is sustained through the interface with support bases and strategic logistics pipelines enabling joint forces to remain on station, where needed, for extended periods of time. Seabasing uses selective off-load to assemble and deliver tailored sustainment packages directly to joint forces operating ashore.

Expand Access Options and Reduce Dependence on Land Bases. Seabasing integrates global and sea-based power projection capabilities to provide multiple access options to complement forward basing, and reduces reliance on forward basing when the security environment dictates. This includes theater access capabilities at improved and unimproved ports and airfields.

Create Uncertainty for Adversaries. Seabasing places an adversary in a dilemma through the conduct of dispersed and distributed operations. The options of multiple points and means of entry require an adversary to either disperse or concentrate his forces, creating opportunities to exploit seams and gaps in defenses.

## NEW EMERGING PLATFORMS

MV-22 Osprey. The Bell-Boeing MV-22 Osprey is an American multi-mission, military, tiltrotor aircraft with both a vertical takeoff and landing (VTOL), short takeoff and landing (STOL) capability. It is designed to combine the functionality of a conventional helicopter with the long-range, high-speed cruise performance of a turboprop aircraft. The MV-22 originated from the United States Department of Defense Joint-service Vertical take-off/landing Experimental (JVX) aircraft program started in 1981.[23]

LHA-6. The USS America (LHA-6) is based upon the USS Makin Island (LHD-8) design. The USS America is a gas-turbine powered warship capable of carrying a Marine Expeditionary Brigade with the capacity for carrying many Marine helicopters, MV-22 Osprey tilt-rotor aircraft, and F-35B V/STOL Joint Strike Fighters. This warship is due to be delivered to the Navy in 2012. At a displacement of 45, 000 tons, and carrying a complement of F-35 Joint Strike Fighters, it will be able to serve in the role of a small aircraft carrier, an America-class ship will be able to operate as a flagship for an expeditionary strike group or amphibious ready group. Warships of this type may also play a key role in the Maritime Pre-Positioning Force[24].

Joint High Speed Vessel (JHSV). The JHSV Program will provide high speed, shallow draft transportation capability to support the intra-theater manoeuvre of personnel, supplies and equipment for the U. S. Navy, Marine Corps, and Army. The JHSV program merges the previous Army Theater Support Vessel (TSV) and the Navy High Speed Connector (HSC), taking advantage of the inherent commonality between the two programs. JHSV will be capable of transporting 600 tons 1, 200 nautical miles at an average speed of 35 knots. The ships will be capable of operating in shallow-draft ports and waterways, interfacing with roll-on/roll-off discharge facilities, and on/off-loading a combat-loaded Abrams Main Battle Tank (M1A2). Other joint requirements include an aviation flight deck to support day and night air vehicle launch and recovery operations.[25]

Mobile Landing Platform (MLP). The MLP is intended to be a new class of auxiliary support ship, as part of the US Navy’s Maritime Prepositioning Force of the Future (MPF-F) program. They’re intended to serve as a transfer station or floating pier at sea, improving the U. S. military’s ability to deliver equipment and cargo from ship to shore when friendly bases are denied, or simply don’t exist.[26]

LMSR. Military Sealift Command’s Large, Medium-Speed, Roll-on/Roll-off ship, or LMSR, program significantly expands the US sealift capability for the new millennium. All of the LMSRs have been prime movers of U. S. military equipment during Operations Enduring Freedom and Iraqi Freedom, supporting both combat and humanitarian missions. These vessels are among the largest cargo ships in the world and can carry more than 300, 000 square feet of combat cargo at speeds up to 24 knots[27].

## CONCLUSION

27. The future of Navies lies in ability to operate in the littoral regions of the world. The Naval forces of today have to continually evolve, maintain a robust amphibious capability and develop countermeasures to the hostile anti-access capabilities manifested in the growing threat of littoral warfare. The principles of war are constantly evolving. Speed and tempo of operations along with quick response are critical to success. Joint operations and ability to synergise forces are the order of the day. Future operations will be conducted with unilateral, joint or multi-national forces and will require a ready force that can respond quickly, project power, and attack with force across the entire spectrum of conflict. New concepts such as OMFTS, STOM and Sea Basing offer today’s commander a scalable, interoperable, swift and decisive means to shape the international environment. The traditional concepts of establishing beach heads and hard landing is a thing of the past. The concept is to hit the objective directly without going through the tedious process of amphibious landings. Though these concepts place a greater demand on procurement and upgradation of present force levels and equipment, it is a necessity for the future.

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