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Expeditionary Warrior 08 Seabasing



Final Report
August 2008



**Expeditionary Warrior 08
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Executive Summary

In the current destabilized security environment rife with rogue states, global terrorist organizations, and access challenges, the Joint Seabasing concept provides policymakers with strategic options not viable with current doctrine and platforms which require fixed infrastructure to introduce forces in long-term static operations. Joint Seabasing provides responsive, scalable national power projection with maximum flexibility and an optimized footprint ashore.

The sea base allows the Joint Forces Commander (JFC) the ability to put the optimal force on the ground, tailored specifically to the mission, reducing unnecessary footprint and the “Iron Mountain” in conjunction with or independent from land bases. Seabasing enables Interagency operations and provides the U.S. Chief of Mission a whole of government approach without triggering negative sentiments amongst the populace, ready at a moment’s notice to provide support or a show of force.

Special Operations Forces (SOF) are a significant component of the Global War on Terror (GWOT). The sea base is an enabler for the wide variety of SOF missions. The effectiveness of SOF can be enhanced even further through the “marinization” of SOF equipment and the concurrent maintenance effort required to sustain long term SOF operations from the sea base.

A single Executive Agent in charge of a Joint Seabasing office is needed to articulate, coordinate, integrate, and advocate the Seabasing concept at all levels in and outside the Department of Defense and across all agencies of the U.S. government. To this end, a Seabasing Presentation Team has been formed by Commanding General (CG) Marine Corps Combat Development Command (MCCDC) to visit Combatant Commanders and Coalition allies to illustrate the full range of military and civil operations capabilities that Seabasing offers.

I. Introduction

Since the fall of the Berlin Wall and the end of the Cold War, the global security environment has changed dramatically. Instead of the tense stability of a bipolar world, the United States (U.S.) and her Coalition allies face threats such as rogue nations determined to sow discord in their respective regions by developing weapons of mass destruction and non-state actors who exploit the under- and un-governed areas of the world as a base to spread terror. Additionally, access challenges have increased in many of the world's flash points, undermining the presence U.S. and Coalition forces once took for granted.

Seabasing is not a specific ship or platform but rather a set of capabilities that enable the U.S. to have persistent presence and deterrence world-wide. It is a concept that provides a solution to the access challenges of the current and foreseeable security environment for the JFC. Using the sea as maneuver space, Seabasing enables Joint operations across the range of operations, from the littorals to ashore. Further, it provides for the application of capabilities that will leverage a Joint, Interagency, and Multinational effort allowing for early arrival and shaping, increased operational tempo, optimized footprint ashore, and reduced force protection issues.

The Seabasing concept provides a vast array of options for senior policymakers allowing the optimal force presence on land and at sea. Sea based forces ashore can be increased if needed or rapidly pulled back as the operation dictates. The sea base can be close to shore as a show of force and resolve, or it can operate from over the horizon to minimize political sensitivities and increase surprise and flexibility. Seabasing offers a method to minimize the host nation's (HN) political sentiments against the presence of foreign troops as well as providing the ability to maintain a presence in the region when there is difficulty trying to secure basing or over flight agreements.

The sixth iteration of the Marine Corps' Title 10 Wargaming program, Expeditionary Warrior 08 (EW 08) brought together all five branches of the U.S. Armed Forces, U.S. Special Operations Command (USSOCOM), U.S. Joint Forces Command (USJFCOM), U.S. Transportation Command (USTRANSCOM), representatives from the Intelligence and Interagency communities, academia/think-tanks, and 11 multinational partners – Australia, Canada, France, Germany, Netherlands, New Zealand, Romania, Singapore, Spain, Sweden, and the United Kingdom. A list of participating organizations is at Annex G.

At the direction of the Commandant of the Marine Corps (CMC), EW 08 examined the concept of Seabasing to:

- Develop and promote a common understanding amongst Joint, Interagency, and Multinational partners
- Examine interoperability issues
- Inform the Naval Seabasing Concept of Operations (CONOPS) development and Seabasing Functional Solutions Analyses (FSA).

Through the use of three vignettes of increasing mission complexity focused on the left side of the spectrum of operations (theater security cooperation to limited regional conflict), EW 08 examined these objectives.

II. Understanding Seabasing

While EW 08 was successful in informing war game participants of the Joint Seabasing concept, one of the primary insights from EW 08 is that the Joint Seabasing concept is not only misunderstood within the Department of Defense (DOD) but also among the Interagency community and Coalition partners. In order for the Joint Seabasing concept to become reality, a common understanding of Joint Seabasing must be distributed across the U.S. Government and to Coalition partners.

MYTH

Seabasing is limited to MCO

FACT

Seabasing supports all Joint operations

Full Range of Military Operations

MYTH

Seabasing replaces shore basing

FACT

It is part of a flexible, networked global basing system

Seabasing enables and supports the broad array of military operations across the spectrum of operations. As shown in Figure 1, the sea base is able to conduct and prosecute operations that range from the left side of the conflict spectrum (peace time and crisis response operations) to the far right side (major combat operations, regional conflict, and global war) and all operations in between. In today's security environment, the sea base provides enhanced capability, flexibility, and reach for the U.S. and its allies in the Global

War on Terrorism (GWOT) that maximizes forward presence with an optimized footprint ashore.

A unique aspect of Seabasing is the ability to use the sea as maneuver space. This asymmetric advantage provides the JFC freedom of movement to operate at the necessary proximity to operational objectives without being limited by geography or lack of infrastructure. The sea base also offers the JFC multiple points of entry via air and surface platforms allowing the U.S. and Coalition partners the choice of when and where to engage.

The sea base can function, if necessary, independently from land bases. Seabasing also minimizes operational pause as forward units can be immediately re-supplied after employment and do not need to seize and secure land bases for follow-on forces and support. This is especially useful in operations where available land basing is deteriorated or destroyed – allowing forces operating from the sea base to act promptly.

MYTH

Seabasing equals MPF(F)

FACT

Joint "at sea transfer" will be enabled by MPF(F)

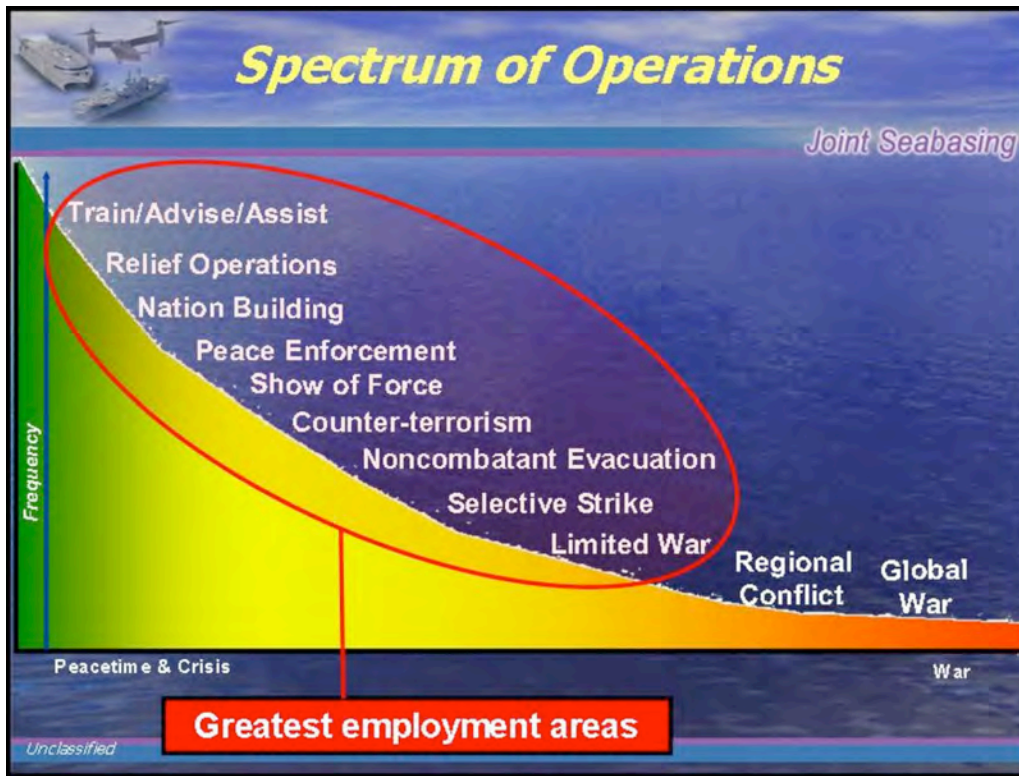


Figure 1: The Spectrum of Military Operations.¹

Complementary Basing and Presence

Seabasing can be used either independently of land bases or in the case of larger and more persistent operations, in conjunction with land bases. The former situation allows U.S. and Coalition forces to be based without reliance on access or support from land bases. Figure 2 illustrates a complementary system of presence and basing. Recent events have underlined the fact that the availability of land bases during operations may be uncertain owing to physical or political factors that delay, limit, or prevent their use. In foreseeable future military operations, the assumption of readily available, secure land bases is likely to be open to debate. Unlike the often lengthy process of securing land bases through status of forces agreement (SOFA), sea-based assets can commence operations as soon as they reach the area of operations (AO). The sea base provides enhanced flexibility in basing options especially in early phases of an operation when land bases are often not available or at full operational capacity. While the sea base is part of a network of basing options it is not

MYTH

At sea arrival and transfer requires calm seas

FACT

At sea arrival and transfer is viable at high sea states

¹ The left side represents frequent operations conducted in peace time or crisis and the threat level to U.S. forces is either absent or relatively low. The right side represents operations that are less frequent but of higher threat to U.S. forces, such as regional conflict or global war.

meant to replace land basing as a means of supporting operations ashore. The sea base provides the JFC the ability to employ forces early in an operation before Air and Sea Ports of Debarkation (APOD/SPOD), if necessary, are available.

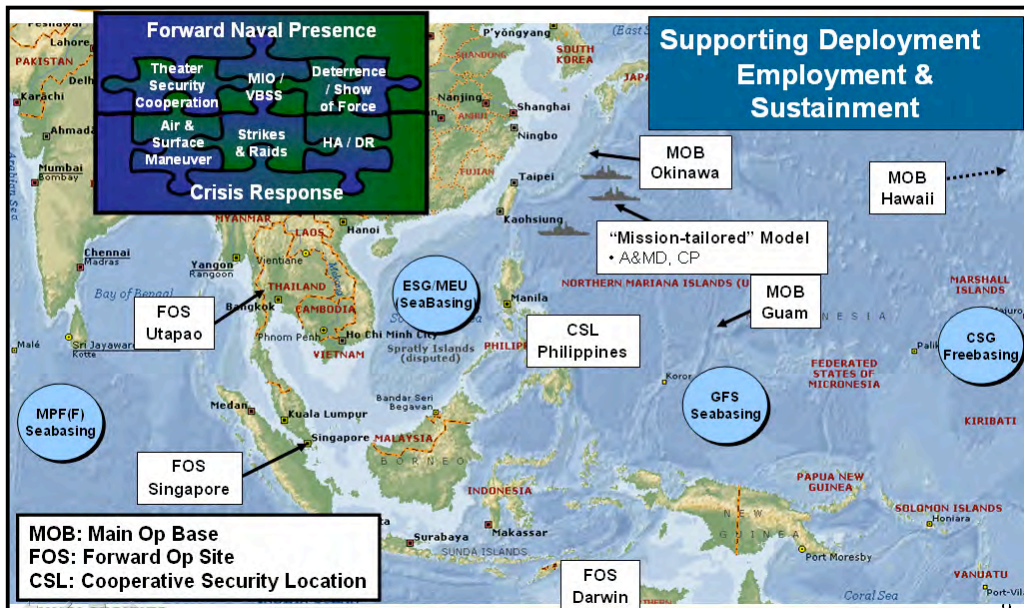
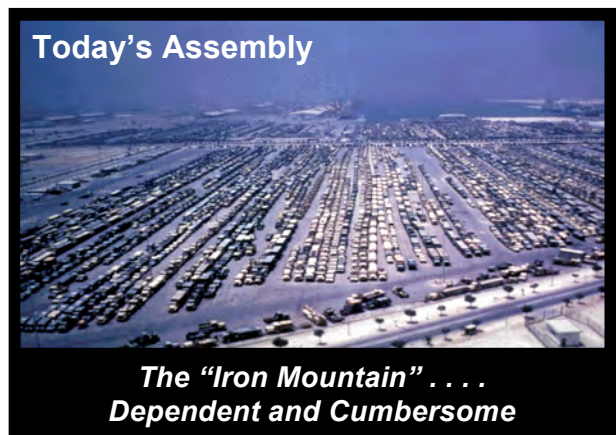


Figure 2: Complementary System of Presence and Basing

In the current and foreseeable future security environments, the actual presence of military forces is often problematic for numerous political reasons. Even in permissive environments, nationalistic sentiments and issues of HN sovereignty often necessitate that U.S. and Coalition forces maintain a low profile. Seabasing allows the JFC to optimize the footprint of troop presence as well as the footprint of the “Iron Mountain” – the massive collection of supplies and equipment placed ashore to support operations.

Scalability

There is no specified size or force posture for a sea base. In fact, a sea base is a constantly evolving group of Joint and Coalition air, sub-surface, and surface platforms. Adaptive force packaging factors such as the enemy, time, and mission, determines what platforms are included in the sea base. Furthermore, the actual composition of aggregated platforms of the sea base can change as these factors vary. The sea base, as a result of expansion and contraction, can be a very different assortment of platforms from one day to the next.



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In addition to the changing sea base, the forces and platforms ashore will also change as required. The JFC has the flexibility to position the forces ashore dictated only by immediate operational need or local political sensitivity. This allows the JFC to use air and surface connectors originating from the sea base to rapidly insert or “dial-back” U.S. and Coalition forces as necessary, allowing for the optimum presence on land, while keeping support forces and supplies afloat.

Survivability

Seabasing provides U.S. and Coalition forces a mobile basing capability, thereby increasing survivability compared to static land bases. Unlike land bases, the sea base is not static and can remain at safe distances until the anti-access threats from weapons such as cruise missiles or coastal artillery are eliminated. As a result of the continual movement and agility of the sea base, sea-based forces have an inherent degree of safety and survivability. With the inclusion of U.S. and Coalition surface combatants, aircraft carriers, and submarines, the sea base can protect itself in a hostile anti-access environment.

In addition to the greater degree of protection that Seabasing provides to forces at sea, force protection ashore is enhanced as well. In situations where forces employed and sustained from the sea base are operating in a non-permissive environment, the forces ashore are combat units and not the supporting rear echelon. Thus, the sea base can minimize the amount of supporting units ashore. Having the “teeth” ashore and the “tail” at sea reduces the force protection requirements necessary on the ground. Just as the sea base shapes how the mission is executed, the mission shapes the composition of the sea base. Accordingly, the amount of personnel ashore and the type of operations conducted will determine the actual composition of platforms included in and demands of support from sea base. What this suggests is the ability to focus on force protection and reduce the footprint ashore..

A final consideration of the survivability of the sea base is the ability to relocate in severe weather conditions (i.e. hurricanes) and then reassemble after the situation is calm again. This allows the sea base to resume its mission at full operational capacity even when available land basing and infrastructure in the AO have been damaged or destroyed.

III. Integration & Partnering

Command and Control

Co-locating command and control (C2) of various Joint, Interagency, and Coalition units and platforms aboard the sea base provides many operational benefits such as a common operational picture and centralized C2 structure. Several issues for consideration include the need for dedicated C2, information sharing among the Joint/Interagency/Coalition environment, and aspects related to intelligence, surveillance, and reconnaissance (ISR) assets.

The need for dedicated C2. The organic C2 capability needs to be maintained during the reconfiguration that constantly occurs as a result of platforms flowing to, from, and out of the sea base. If critical C2 assets afloat were to leave the AO temporarily, the rest of the sea base could cease to function in a unified manner or without a common operational picture. As a result, the sea base needs to have dedicated capabilities that can provide for a Combined Joint Task Force (CJTF) headquarters afloat. Ideally this capability would be modular, possibly on more than one naval platform. The increase of platforms that exist in the sea base and the complexity of the operation will drive the demand for increased bandwidth. The sea base will need to collect and share data with numerous sea and air platforms. Furthermore, units employed and supported by sea base will need to be a part of the C2 architecture and the sea base needs a robust ability to command and coordinate with units ashore. This necessitates the ability to collect and send data between from the sea base to ensure real-time battle space awareness for the JFC afloat.

Information sharing among the Joint/Interagency/Coalition environment. Information sharing is often hindered by classification issues as well as the lack of a common data-sharing architecture. In the former case, necessary information is often classified at a level above what Coalition partners are able to access. In the latter, databases among different platforms are not able to interface because technologies and standards are incompatible. As a result, the sea base needs a knowledge repository based on common network architecture that is accessible by all partners in the sea base. While these issues of classification and data-sharing are problems that exist in all Joint, Interagency, and Coalition operations, the nature of sea-based operations exacerbates them.

ISR assets. ISR assets are the final C2 issue this report considers. Organic ISR assets are a necessity for the sea base especially for complex missions in non-permissive environments. The ability to “plug-in” to ISR platforms not organic to the sea base such as Global Hawk unmanned aerial vehicle (UAV) is also a necessary C2 capability for the sea base.

Multinational Integration

Coalition partners have a long history of operating with U.S. Naval and Marine forces at sea. Every mission across the spectrum of operations is one in which Coalition partners can make significant contributions to the sea base and the overall mission outcome. Recent multinational operations have included: non-combatant evacuation operations (NEO), search and rescue

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(SAR), humanitarian assistance/disaster relief (HA/DR), and selective strike. Often our Coalition partners have niche capabilities that enhance, expand upon, or fill a gap in U.S. capabilities. Furthermore, every capability provided by a Coalition partner is one that does not need to be provided by the U.S., allowing forces to maintain presence in other trouble spots.

Beyond the C2 challenges discussed in the previous section among Coalition partners operating in and with the sea base, other issues remain such as having the ability to maintain and repair coalition air and surface assets, specifically having the spare parts on hand. However, our Coalition partners usually sustain themselves if they have particular logistical needs. Furthermore, the U.S. is the only country likely to possess selective offload capability, at least initially. Working with Coalition partners in longer sustained sea-based operations will have challenges associated to dealing with legacy Coalition ships though these challenges can be addressed.

Political Enabler

Seabasing provides many unique benefits and capabilities to strategic policymakers contemplating or authorizing military action. It also allows freedom of movement in international waters that are not subject to laws or statutes of any nation. Similarly, Seabasing allows policymakers the ability to have military presence without an actual commitment. By granting U.S. and Coalition forces basing in the AO without having to reach lengthy political agreements or seize basing assets, U.S. and Coalition partners can show immediate resolve without potentially lengthy negotiations or initiating kinetic operations, respectively.

In the current security environment, perceptions are important. The perceptions of U.S. and Coalition domestic audiences as well as the HN population, if negative, can seriously undermine the efficacy and continuation of military operations. The aforementioned force protection capability, inherent to the sea base, minimizes the “CNN Effect” that often undermines domestic sentiments towards a military operation. The sea base can position itself over the horizon (and out of sight) or close to shore based on mission objectives. Furthermore, the limited footprint of the forces ashore minimizes issues of foreign soldiers operating amongst inhabitants of another country. A limited footprint in humanitarian assistance and disaster relief operations (HA/DR), training and advisory missions, and Irregular Warfare (IW) operations in general underscores that U.S. and Coalition are focused on assisting the host nation and are not there as occupiers.

Partnering nations often have different rules of engagement (ROE) or operational restrictions imposed by their governments. Due to the flexibility of sea based operations conducted from over the horizon, political sensitivities are reduced. These nations will more likely be able to support operations originating from a secure sea base than those from land.

Finally, when the mission is over, forces ashore can rapidly reconstitute to the sea base and exit the AO as the “Iron Mountain” and forward operating bases (FOBs) are either minimal or not present, thus giving U.S. and Coalition policymakers an option for a rapid departure.

SOF Integration

Seabasing enhances the ability of SOF to prosecute the wide range of SOF missions including counterinsurgency (COIN), foreign internal defense (FID), direct action (DA) and counterterrorism (CT). The sea base overcomes many of the political anti-access challenges allowing SOF to conduct sustained operations without having to consider many of the sovereignty issues that would arise for a HN that provides basing to SOF units. The long term over-the-horizon (OTH) concealment and maneuverability that the sea base provides is a significant capability for SOF. Furthermore, the sea base can play a supporting role for SOF missions offering enhanced C2, logistics, fires, and medical capabilities.

However, challenges remain in fully integrating SOF into the sea base for long term missions. Whereas SOF has initiated missions from the sea it is unable to continue those operations long term. The marinization of SOF equipment and platforms, specifically aviation assets is an issue. This is because the surface platforms that would be a part of the sea base are currently unable to store, maintain, and repair SOF air platforms. Foldable rotor blades and increased standardization of aviation platforms mitigates the interoperability issues between SOF and the sea base.

Interagency Integration

The sea base provides the U.S. Chief of Mission (COM) in a foreign country an ability to bring a whole of government capability to bear without triggering sensitivities in a HN over a large U.S. presence. First and foremost, the sea base provides the COM with additional options – options that the COM would not have with traditional land based operations. The sea base can remain off-shore and out of sight, ready to support a NEO or demonstrate U.S. commitment to regional security and stability on short notice.

While the vast bulk of interagency personnel in the AO are likely to be ashore, the sea base can serve as the headquarters for the Joint Interagency Task Force (JIATF) and the Joint Interagency Coordination Group (JIACG). If a COM is not present in the AO or if the embassy is not capable, the sea base can serve as the C2 nucleus for lead interagency personnel. This further coordinates military and interagency missions as well as providing a central communications point with IA teams ashore.

The Civil-Military Operations Center (CMOC) is an important tool to enhance local perceptions and increase mission effectiveness and can enable interfacing and coordinating among HN nationals and the U.S. and Coalition military. Unless there is a compelling reason that it be afloat, the ideal location for the CMOC is ashore. Under most circumstances the prospect of regularly ferrying host nation nationals and non-governmental organization (NGO) personnel back and forth to meet on the sea base is inefficient. During initial stages of an operation, a CMOC may be first staged on a sea base until further capabilities of the interagency can be transitioned ashore as the security environment evolves.

IV. Functional Attributes of Seabasing

Asset Visibility and Selective Off-load of Logistics

The sea base provides a unique venue to stage, assemble, and deploy logistics for the forces ashore. However, to enhance the sea base's functionality and minimize the need for a large build-up of supplies ashore, the sea base must be able to selectively off-load equipment and



Selective Offload

supplies, manage its embarked inventories (asset visibility), and move equipment and supplies between ships and connectors. The size of the Joint force that is ultimately deployed and sustained by the sea base is largely dependent on the numbers and capabilities of these attributes.

Asset visibility is the capability to have real-time information about what is and is not aboard the collection of platforms that make up the sea base. This includes the ability to know when certain supplies and ordnance are running low and order replacements, track current stores and forthcoming shipments, and take delivery of received

orders for eventual retrieval and usage. Asset visibility, already a regular practice among many companies in the commercial sector, greatly improves efficiency and reduces the need for excess storage. As it relates to the sea base, asset visibility needs to be able to provide real-time data to the JFC on a number of Joint and Coalition cargo carrying platforms that are either in-transit or already part of the sea base.

Selective offload, or the ability to retrieve specific supplies and ordnance from the cargo hold of a ship without unloading the entire ship. It allows the sea base to operate independently of land bases and avoid the need for the "Iron Mountain" ashore. Working in conjunction with asset visibility, selective offload allows for highly tailored packages of logistics to be retrieved and assembled before being sent via connectors to forces ashore.

While both asset visibility and selective offload are currently being adapted for military use, many organizational challenges specific to the military remain. Military logistical practices in the beginning of the 21st century still rely on the "Iron Mountain" focusing on an often bewildering array of stores ashore. This "more is better" mindset reduces efficiency and increases footprint in the AO. However, the "Iron Mountain" remains because the JFC often wants a hedge in dealing with the unknown. Sea-based operations using asset visibility can track and order supplies as they run low, and pre-positioned shipping and bases near the AO can be used to bring quick delivery, therefore reducing the risks of not having the "Iron Mountain" ashore.



Joint Modular Intermodal Container (JMIC)

Standardization of Logistics

Having a single standard is essential for interoperability on the sea base. Currently Coalition and even Joint partners do not have a common set of standards for petroleum, oil, and lubricants (POL), ordnance, and containers. This undermines integration and flexibility that is essential to the sea base. Many North Atlantic Treaty Organization (NATO) standards have been developed with our Coalition partners, though full implementation has yet to occur. Even among the U.S. Joint environment, many materiel standards are specific and unique to the individual Services. Furthermore, the standards of commercial shipping such as the twenty-foot equivalent unit (TEU) for containers need to be addressed. Integrating commercial shipping assets into the sea base is a key enabler for sea-based operations. Beyond developing common standards, other sustainment considerations such as interoperability between ships remain. The sea base will include current and future amphibious warfare ships as well as the current and future Maritime Pre-positioning Force (MPF) squadrons. It is important to note that the future enabling capabilities of selective offload, at sea arrival and assembly, and skin to skin transfer, reside only in the MPF (Future) ((MPF)(F)). The sea base needs to be able to work with legacy Joint and Coalition partner ships that do not have capabilities such as skin-to-skin transfer or the ability to selectively offload.

Consideration is needed to thoroughly review the maintenance procedures for equipment of units ashore for sea-based operations. This includes reviewing necessary support equipment, storage of parts, and maintenance personnel and how these factors will work in and from the sea base. Depending on the size, scope, and needs of the operation, maintenance of damaged or broken equipment can be done either ashore or brought back to the sea base. Connectors, which will be looked at more closely in the next section, play a key role in bringing supplies and units to the sea base, among the ships in the sea base, and ultimately ashore to support operations. While a footprint ashore will still exist, it will be light relative to the size of the force as the need for FOBs will be minimized.

Connectors and Connecting Platforms

Air and surface connectors play a crucial role in Seabasing. Sustainment is driven by employment of forces ashore. As a result, the demand for capable and higher quantity connectors grows in relation to the size and complexity of the operation. Similarly, the availability of connectors is the key limiting factor for supportability of the sea base and ultimately for forces ashore.

Connectors (Joint High Speed Vessels (JHSV), MV-22s, etc.) come in all shapes and sizes and comprise intra-theater, and tactical lift. Strategic lift includes air and sea platforms such as shipping and cargo planes. These platforms bring supplies and units from the continental United States (CONUS) or other U.S. and Coalition bases worldwide to either the sea base or intermediate staging areas. Operational lift assets ferry supplies and units to and from basing near the AO to the sea base. Tactical lift carries units and



MV-22

supplies ashore from the sea base. Ultimately, the amount of throughput of supplies and units from the sea base is determined by the capabilities (carrying capacity + speed) as well as numbers of connectors. Prioritization of time-sensitive assets is crucial for smooth sea-based operations.

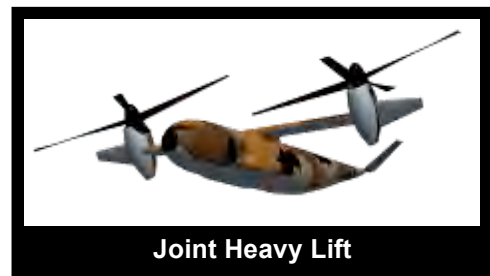
Beyond connectors, the sea base needs connecting platforms such as the Mobile Landing Platform (MLP). What is unique about the MLP is that it serves as an interface between cargo ships and connectors facilitating at sea assembly and then movement of forces ashore.



Service Component Enablers

In order for the U.S. Army, U.S. Air Force, and U.S. Coast Guard to take full advantage of the sea base, systems and platforms need to be interoperable. This includes ensuring a common C2 architecture as well as the necessary modification of U.S. Army equipment for operations in a maritime environment. Interoperability and compatibility among the various Service platforms is of paramount importance. A review of current Title 10 responsibilities and a requirement for a common Seabasing Logistics Enabling Concept is necessary.

It is important that U.S. Army systems are able to seamlessly operate with and flow through the sea base. Plans and designs for the U.S. Army's Future Combat Systems and the naval platforms carrying those systems need to address sea-based operations. Marinization, or making Army platforms, equipment, and ordnance capable of operating at sea is important. Capabilities as varied as the ability of U.S. Army helicopters to land on naval vessels to ensure that ordnance does not corrode in the harsh environment of the sea need to be reviewed, and platforms and ordnance need to be compatible. Furthermore, the U.S. Army would have to consider how to train for operations in a maritime environment and develop a concept for maintenance procedures afloat.

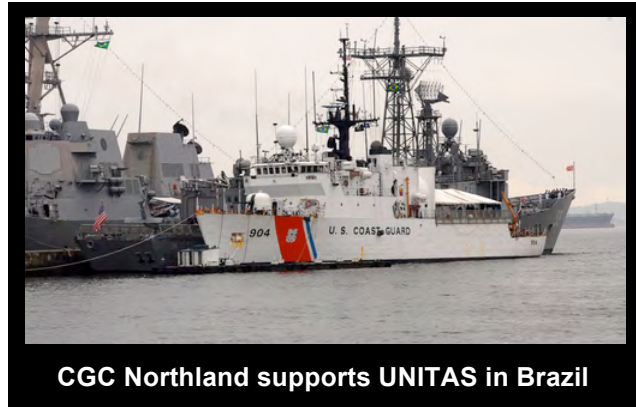


The U.S. Air Force provides inter-theater strategic lift of time sensitive personnel and supplies to the sea base via an advance base in or near the AO. Intra-theater connectors (such as the JHSV

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or MV-22) then deliver the cargo to the sea base. A second capability is to provide the sea base with persistent ISR to expand situational awareness and command and control capability.

The U.S. Coast Guard can play a significant role as part of the sea base in missions where a military anti-access threat is not present but sea-based security and maritime law needs to be upheld. The Coast Guard also has unique capabilities to build partnership capacity (BPC) with partner nations around the globe, enhancing and training other nations' naval and coastal forces for a variety of law enforcement missions. Seabasing can be used as a platform to leverage the U.S. Coast Guard's efforts across the globe at the left side of the spectrum of operations to expand U.S. assistance into regional training and advisory efforts to improve the naval capacity of partner nations



V. Proponency for Seabasing

Establishment of a Joint Seabasing Office

A common perception within the Sister Services and in the greater government community is that Seabasing is only a Navy/Marine Corps program. A Joint office under a single Executive Agent is needed to articulate, coordinate, integrate, and advocate the Seabasing concept at all levels internal and external of DoD. A Joint office for Seabasing can ensure seminal guidance documents reflect future Seabasing capabilities and concepts and focus current related interests. Various independent Service development efforts (and experiments) need to be coordinated through the Joint office to ensure unity of effort, promote integrated capabilities, and develop a truly Joint sea base.

A Joint vision is essential not only for DoD to operate a coherent sea base but also to inform and promote Seabasing to Interagency and Coalition partners, the latter of which are currently developing Seabasing platforms.

Strategic Communications

The Executive Agent would be in charge of strategic communications on behalf of the Seabasing community. The Executive Agent would ensure that the Joint Seabasing concept is well understood throughout the U.S. government and other nations. The development of a “road show” presentation team is required to ensure Joint and Coalition understanding of Seabasing concepts, capabilities, and technical aspects provided by the sea base.

The presentation team would brief the vast array of Combatant Commanders, Congressional members, Interagency partners, Joint Chiefs of Staff/Office of the Secretary of Defense, Service schools, NATO and Allied Command Transformation (ACT) HQs, and Coalition nations on Seabasing. The specific capabilities and benefits of Seabasing need to be shared in a tailored message made specifically for the particular audience.

Explicit attention needs to be given to Combatant Commanders and Congress. For the former, it is important to illustrate the capabilities Seabasing offers to Combatant Commanders to build partner capacity as well as prosecute other operations without intrusion of HN sovereignty. For the latter, Congress needs to be aware of the unique ways Seabasing capabilities can be used to influence countries and regions with minimal footprint. The presentation team should first focus on educating the DoD and other U.S. Government Agencies, ultimately extending its outreach to Coalition partners.

Finally, an important aspect of strategic communication is clarifying and highlighting how Seabasing supports core national security documents such as the National Security Strategy (and other strategies) and is included in the upcoming Quadrennial Defense Review (QDR).

Training and Education

It is important that Seabasing awareness and understanding be promoted at all levels throughout the Services and the interagency. This is done through utilizing the Seabasing Presentation Team road show, officer and enlisted education at Service schools, and necessitate Seabasing materials as required reading.

Seabasing Team. In absence of an Executive Agent for Seabasing and a Joint Seabasing Presentation Team, a Seabasing Presentation Team has been formed by CG MCCDC with the purpose to educate Combatant Commander Staffs and allies on the aspects of Seabasing. As of August 2008, the team, led by the Deputy CG, MCCDC traveled to Europe in June 2008 and visited nine commands. The visits informed, developed contacts, shaped future Seabasing related exercises and in turn, were informed by the hosts' perspectives and views on Seabasing.

Education. The Service Chiefs must ensure that the Joint Seabasing Concept becomes an integral part of the education process of all U.S. Service members. Service Professional Military Education (PME) Schools are the primary avenues to develop officers with expertise and knowledge appropriate to their grade, branch, and occupational specialty. At the Service level, the distinct perspective of each individual Service will determine the necessary curriculum emphasis in order to ensure there's a broad understanding of the scope and scale of Seabasing and how it will affect future civil and military operations.

Rooted within Service PME are the Joint PME (JPME) requirements legislated to the services by Title 10, U.S. Code (USC), and overseen by the Joint Staff. Educational levels are outlined in CJCSI 1800.01C, Annex A to Appendix A. Seabasing, as a JIC, necessitates educating joint officers at all five levels of the JPME continuum.

Through the Joint Staff J7, Joint Education Branch, Seabasing needs to be included in the EJPME/JPME Joint Learning Areas to ensure both officers and enlisted attain the essential knowledge to function in a joint, interagency, and multinational environment.

Similar to the Maneuver Warfare Concept of the late 1980s and early 1990s, a concerted effort to shift the mindset of the warfighter and his philosophy on conducting operations needs to begin now. Doctrine and concepts must continuously evolve to meet the future security challenges to the United States and its allies. It begins with the education of the entire force from the newest private to the CMC.

Until the Seabasing Concept can be added to school curriculums, PME, and JPME a grassroots effort to educate the force is necessary. The Seabasing Presentation Team is one part of that effort to reach Marines and other services and nations but more is required. For the Marine Corps, required reading is the

"With its inherent advantages as a seabased, expeditionary force, the Marine Corps can reach the key areas of the globe in spite of challenges to U.S. access."

**General James T. Conway, USMC
Commandant of the Marine Corps, 2007**

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quickest mechanism to reach the operating forces. Marine Corps doctrinal publication (MCDP) 1 *Warfighting* is read by all Marines and the current series of MCDPs make reference to an operating environment and several characteristics that suit the Seabasing Concept. Inferences can be made from these publications but a full understanding of the Concept is lacking. If Seabasing is to be the future operating construct of choice it needs to be emphasized in an MCDP that will be required reading by all Marines. Other possibilities for required reading include the Marine Corps warfighting publication (MCWP) 3-31.7 *Seabasing* that provides operational-level doctrine for planning and executing scalable operations from a sea base today and in the near term and the Seabasing JIC version 1.0 that conforms to strategic guidance and focuses on the long term, 2015-2025 timeframe.

"We are developing joint sea bases that will allow our forces to strike from floating platforms close to the action, instead of being dependent on land bases far from the fight."

**President George W. Bush
USNA Commencement Address, 2005**

Exercise and Experimentation

The coordination authority for all Seabasing experimentation and exercises would fall under the purview of the Joint Seabasing Office. For experimentation, it is of utmost importance to avoid duplication of efforts. With regard to exercises, this includes ensuring that aspects of Seabasing are incrementally incorporated into current Combatant Command (COCOM) exercises and Title 10 war games to the maximum extent possible, enlisting USJFCOM support for enabling Combatant Commanders, and including Congressional, Interagency, and eventually Coalition participation in live exercises. These exercises and demonstrations are important to exhibit the capabilities, gaps, interoperability issues, and flexibility of the sea base as well as educate key decision makers.

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ANNEX A

Acronyms

ACT	Allied Command Transformation
AO	area of operations
APOD	aerial port of debarkation
AUR	all up round
BPC	building partnership capacity
C2	command and control
CAESR	close, assemble, employ, sustain, and reconstitute
CBA	capabilities based assessment
CCP	concept capability plan
CG	commanding general
CJTF	combined joint task force
CLF	combat logistics force
CMC	Commandant of the Marine Corps
CMOC	civil-military operations center
COCOM	combatant command
COIN	counterinsurgency
COM	chief of mission
COMSECONDFLT	Commander, Second Fleet
CONOPS	concept of operations
CONUS	continental United States
CSG	carrier strike group
CT	counterterrorism
DA	direct action
DoD	Department of Defense
EFV	expeditionary fighting vehicle
ESG	expeditionary strike group
EW	Expeditionary Warrior
FID	foreign internal defense
FNC	future naval capability
FOB	forward operating base
FOC	full operational capability
FSA	functional solutions analyses
FY	fiscal year
GFS	global fleet station
GWOT	global war on terror
HA/DR	humanitarian assistance/disaster relief
HN	host nation
IA	interagency
IOC	initial operating capability
ISR	intelligence, surveillance, and reconnaissance

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JFC	joint force commander
JHSV	joint high speed vessel
JIACG	joint interagency coordination group
JIATF	joint interagency task force
JIC	joint integrating concept
JMAC	joint maritime assault connector
JMIC	joint modular intermodal container
JPME	joint professional military education
JSAW	joint seabasing analysis and wargaming
LCAC	landing craft, air cushion
LMSR	large, medium speed roll-on/roll-off
MCCDC	Marine Corps Combat Development Command
MCDP	Marine Corps doctrinal publication
MCWP	Marine Corps warfighting publication
MEB	Marine expeditionary brigade
MFE	Marine Forces Europe
MLP	mobile landing platform
MPF	maritime pre-positioning force
MPF (F)	maritime pre-positioning force (future)
MSPRON	maritime pre-positioning force squadron
NATO	North Atlantic Treaty Organization
NEO	noncombatant evacuation operation
NGO	nongovernmental organization
NSWCCD	Naval Surface Warfare Center – Carderock Division
ONR	Office of Naval Research
OTH	over the horizon
PEO	program executive office
PME	professional military education
POL	petroleum, oils, and lubricants
QDR	quadrennial defense review
ROE	rules of engagement
SAR	search and rescue
SOF	special operations forces
SOFA	status-of-forces agreement
SPOD	seaport of debarkation
SSARS	shipboard selective access and retrieval system
SSC	ship-to-shore connector
TEU	twenty-foot equivalent unit
UAV	unmanned aerial vehicle
US	United States
USAFRICOM	United States Africa Command
USC	United States Code
USEUCOM	United States European Command
USJFCOM	United States Joint Forces Command
USTRANSCOM	United States Transformation Command
WATC	West African Training Cruise

ANNEX B

Joint Sea Base Components

The Joint Sea Base will be specifically tailored to the mission requirements. A sea base can be as small as a single JHSV or LPD on a mission of theater security cooperation. On the other end of the spectrum, a sea base can be a massive fleet of ships aggregated for major combat and joint forcible entry operations. The typical sea base will contain components of some or all of the following as dictated by the mission:

- Carrier Strike Group (CSG)
- Expeditionary Strike Group (ESG)
- Maritime Pre-positioning Force (MPF)
- Combat Logistics Force (CLF)
- Connectors: Joint High Speed Vessel (JHSV), Assault Connectors (JMAC, EFV)
- Coalition Force and Sister Service Ships

Navy Amphibious Shipping

The U.S. Navy's amphibious warfare ships will continue to be the nucleus of major sea based operation. These ships possess inherent survivability, self-defense capabilities, and Navy manning, unlike MPF, to support maritime forcible entry operations. They are the assault echelon shipping for a sea base. Navy amphibious warfare ships are constantly underway in ESGs, showing the flag, as a forward presence providing deterrence.



The WASP-class includes the largest amphibious ships in the world. WASP class ships are the first to be specifically designed to accommodate the AV-8B Harrier jump jet and the Landing Craft Air Cushion (LCAC) hovercraft, along with the full range of Navy and Marine helicopters, conventional landing craft and amphibious assault vehicles. The ships have six fully equipped operating rooms and a 600 bed hospital, by far the largest at sea with the exception of hospital ships.



Dock Landing Ships support amphibious operations including landings via LCAC, conventional landing craft and helicopters. LSD-41 was designed specifically to operate LCAC and has the largest capacity for these landing craft (four) of any U.S. Navy amphibious platform.

The SAN ANTONIO (LPD 17) Class of amphibious transport dock ships represents the Navy and Marine

Corps' future in amphibious warfare. The LPD 17 class program will be the replacement for three classes of amphibious ships that have reached the end of their service life, the LPD 4, LSD 36, and LST 1179 classes – and one class that has already been retired, the LKA 113. It is the first ship designed specifically to operate the MV-22.

Maritime Prepositioning Force (MPF)






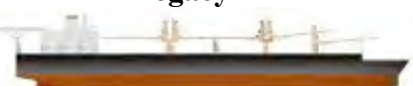
The sea base will also draw forces from the MPF. There are currently three MPF Squadrons (MPSRON) in operation located in the Mediterranean, Diego Garcia, and Guam. Their mission is to preposition forward deployed war stocks to support the Marine Expeditionary Brigades (MEB). These “legacy” MPSRONs are dense-pack loaded to fit the maximum amount of equipment onboard. To use the equipment, the ships must be offloaded in a functioning port and build the “iron mountain” ashore. To enhance the capability of the preposition ships, a new MPF(F) squadron is under development.



The MPF(F) has the same basic mission as the legacy MPSRON; to provide propositioned equipment and supplies sufficient to support a MEB. The difference is that ships in the MPF(F) will not be locked into deep-draft ports to offload. New and modified ship designs as well as new technologies will enable the MPF(F) to be an integral part of the sea base. Troops will no longer fall in on their equipment ashore after it has been offloaded. The MPF(F) will provide the means for at sea arrival and assembly of ground forces on the sea base and will enhance all five Seabasing lines of operation: close, assemble, employ, sustain, and reconstitute (CAESR).

The MPF(F) will have organic air assets based on three big deck amphibious ships. The squadron will have two LHA(R), a follow-on design to the LHD which does not have a well deck and is optimized for air operations. The MPF(F) will also have one LHD. The bulk of the lift in the squadron will be provided by three T-AKR ships. These large roll-on/roll-off ships will be modified versions of the successful LMSR design and will incorporate new features to make it more versatile for sea based operations. The MPF(F) will also incorporate three Mobile Landing Platforms (MLP), a new design based on commercial float-on/float-off technology. The MLP will be a central hub in the sea base where vehicles, personnel, and supplies will flow through from the LMSR to surface connectors and then ashore. The squadron will also have three T-AKE ships, which will be adaptations of the U.S. Navy's Lewis and Clark class dry cargo ships. Filling out the MPF(F) will be two legacy ships from the MPF.

MPF(F) Squadron Composition

<p>2 LHA(R)</p> 	<ul style="list-style-type: none"> • New Build • No well deck • Optimized for flight operations
<p>1 LHD</p> 	<ul style="list-style-type: none"> • New Build • Reincorporates well deck
<p>3 T-AKR</p> 	<ul style="list-style-type: none"> • New Build • Modified LMSR
<p>3 MPL new build/design</p> 	<ul style="list-style-type: none"> • New Build/Design • Float-on/Float-off technology • Interface between LMSR and surface connectors
<p>3 T-AKE new build, modified L&C</p> 	<ul style="list-style-type: none"> • New Build modified Lewis and Clark dry cargo ship
<p>2 Legacy MPF</p> 	<ul style="list-style-type: none"> • Legacy MPF platform • Dense-packed


Integral to the success of the MPF(F) are several emerging technologies that will greatly expand the capabilities of the MPF(F) and any sea base to which it is a component.

- **Skin to Skin Transfer.** MLP and MPF(F) LMSR will operate “skin to skin” to transfer cargo
- **Stabilized Crane.** Move equipment and 20ft containers between ships in high sea state
- **Vehicle Transfer System.** Stabilized ramp that is the primary system to transfer vehicles and personnel from the MPF(F) LMSR to the MLP underway
- **Selective Offload.** Will enable the MPF(F) to offload as needed to support operations ashore


- **Automated Cargo Handling.** This system is the key to selective offload.

 **Science & Technology and Research & Development**


Skin-to-Skin Transfer **High Capacity UNREP** **Selective Offload**



Stabilized Cranes




Joint Modular Intermodal Container (JMIC)



Mobile Landing Platform Interface



Automated Cargo Handling



At-Sea Arrival, Assembly, Employment, Sustainment

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ANNEX C

Current Status of Seabasing Programs

Shipbuilding

- The Fiscal Year (FY) 2009-2013 shipbuilding budget includes several ships for the sea base to include one LMSR, three MLPs, and five JHSVs.
- MPF(F)
 - FY 17 – Initial Operating Capability (IOC)
 - FY 22 – Full Operational Capability (FOC)

Connectors

- **JMAC.** The Ship-to-Shore Connector (SSC) program, work has begun on the CDD.
- **EFV.** The EFV provides the teeth in a surface assault from the sea base to shore. EFVs, carrying Marines and their equipment at high speeds, join the sea base initially in late FY 15 and are a fully operational component of the sea base by FY 25.
- **MV22.** A vital component in the movement of Marines and their equipment from the sea base to shore, the MV-22 is already in service in Iraq. As more aircraft are produced, medium-lift squadrons transition from the CH-46 and the CH-53 to the MV-22, increasing their presence on the battlefield and in the sea base.
- **CH-53K.** Post-MS B, IOC in FY 16. Like the MV-22, a vital component in the movement and sustainment of the Marines from the sea base.

ANNEX D

Testing and Experimentation

Selective offload

- **Shipboard Selective Access and Retrieval System (SSARS).** USTRANSCOM funded, MCCDC/Naval Surface Warfare Center—Carderock Division (NSWCCD) effort to capture, lift, and provide omni-directional movement of vehicles and containerized cargo aboard ships at sea. Currently in a preliminary design phase. Detailed design late in FY 08. FY 10 transition.
- **High Rate Vertical/Horizontal Material Movement System.** Office of Naval Research (ONR) Future Naval Capability (FNC). Enables the automatic transition from the horizontal to vertical plane and vertical to horizontal plane during cargo/munitions movement in sea state 5. Enabling technology for strike-down to occur at the rate of receipt (UNREP), achieve required sortie generation rate, and reduce overall manning. FY 10 transition to acquisition.
- **Compact/Agile Material Mover.** ONR FNC. Enables efficient weapons/cargo transport in high sea states by providing the capability to move very large payloads (~10K lbs) using minimal manpower (human amplification technology). FY 08 transition to acquisition.
- **Automated Warehousing.** ONR FNC. Fully Automated Shipboard Cargo Warehouse enables automated storage and retrieval of cargo/munitions onboard ship at rates up to 280 pallets/hour. Handles standard pallet or JMIC. FY 07 transition to acquisition.
- **Automated Weapons Assembly.** ONR FNC. Reduces the time, deck space and manpower required to unpack and/or assemble component-based configured weapons and All-Up-Round (AUR) weapons into ready-service weapons. FY 12 transition.

Large Vessel Interface Lift On/Lift Off (LVI LOLO)

- Advanced Positive-Control Crane that enables the rapid and safe at-sea transfer of standard ISO 20ft containers from military or commercial vessels onto the Sea Base in sea state 4. Will be installed on FLICKERTAIL STATE in FY 09. Transition in FY 09. ONR FNC.

Small to Large Vessel at-Sea Transfer

- Enables efficient combined MLP, LCAC/JMAC, and MPF(F)/LMSR on-load / off-load operations through the high end of sea state 4 through the development of close-in precision dynamic positioning systems, and advanced fender interface systems. FY 10 transition. ONR FNC.

Interface Ramp Technologies

- Also known as the “Test Article Vehicle Transfer System.” Enables vehicle transfer via an advanced side port ramp system consisting of a lightweight ramp section, integrated

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advanced connections, and an active, motion mitigation ramp foot. Transitions to the MPF(F) program in FY 12. ONR/Program Executive Office (PEO) Ships initiative.

High Speed Ship-to-Shore Connector

- In support of the JMAC program, Lift fans and Advanced Skirts enables Seabase-to-Shore Connector by providing the connector with the capability to carry greater payload or have increased range, operate at higher speeds in sea state 4 conditions, and still allow for well deck and beaching operations. FY 10 transition. ONR FNC.

Intra-Connector Material Handling

- Enables the rapid tensioning and instant release of vehicular cargo onboard current and future surface connectors. FY 10 transition. ONR FNC.

Transformational Craft (T-Craft)

- Self-deploying ship-to-shore connector. 40 knot, 300 ton payload directly to beach. 500 NM range. Currently in Concept Refinement, will move into Technology Development later this FY. ONR Innovative Naval Prototype (INP).

Lightweight Modular Causeway System (LMCS)

- An Army-led ACTD, LMCS provides a causeway system that bridges the gap between shallow draft connectors (JHSV, LSVs, etc.) and the beach. Carried and deployed by those connectors. Full scale launch and recovery test in Vicksburg, MS April 08. FY 11 transition to acquisition. System deliveries begin in FY 11.

ANNEX E

Exercises

West African Training Cruise (WATC)/African Partnership Station (APS) '08

- Recently completed EUCOM/AFRICOM employment of the Global Fleet Station (GFS). Marine Forces Europe (MFE) conducted a proof of concept in limited at sea arrival and assembly, and sea base operations from MPF platforms tied into the Global Fleet Station. While small in scale, this event identified key requirements for transition of MPF to include the integration of MPF(F).

Cobra Gold '08 (CG 08)

- CG 08 is April-May '08 exercise in Thailand with heavy MPF emphasis. A combined MCCDC/NSWCCD team will observe the MPF off-load to inform MPF(F) ship designs.

ANNEX F

Concept Development

Seabasing JSAW/FSA

- The pace for the Joint Seabasing Analysis & Wargaming (JSAW) effort and its subsequent Functional Solutions Analyses (FSAs) continues. Observations from EW 08 are frequently mentioned in conjunction with confirming/validating already identified gaps. EW 08 insights are particularly valuable in informing the JSAW on Joint (U.S. Army) and Interagency Seabasing interdependencies.

Navy CONOPS Development

- COMSECONDFLT, at the direction of US Fleet Forces Command, initiated a Seabasing CONOPS development effort. The COMSECONDFLT CONOPS will describe how a Maritime Force Commander may close, assemble, employ, sustain, and reconstitute forces to conduct low to mid-intensity missions when forward basing is constrained. The CONOPS should be complete in November 2008.

U.S. Army Concept Capability Plan (CCP)

- “U.S. Army Contributions to Joint Land Operations from a Joint Seabase: 2015-2024.” In late-stage development by the Army Capabilities Integration Center, the Army Seabasing CCP will serve as the baseline document to integrate Seabasing capabilities for the future Modular Force. It focuses on the application of integrated sea-based capabilities from different proponents in the Army and introduces a goal to develop a comprehensive sea-based capability across the force that will increase deployment speed, enhance employment options and support force sustainability.

ANNEX G

Participating Organizations in Expeditionary Warrior 08

- DOD
 - USMC (MCCDC, HQMC, MARFORCOM, MARFORPAC, MARFORCENT, MARFOREUR, MCIA, 4th Civil Affairs Group)
 - USA (ARSTAFF, ARCIC, AMED)
 - USN (OPNAV, C2F, NWDC, NAVSEA)
 - USCG
 - USAF
 - JFCOM J9
 - SOCOM (WARCOM, AFSOC, MARSOC)
 - TRANSCOM
 - Military Sealift Command
 - Joint Staff: J8
 - Interagency (DoS, CIA, USAID, DOE, DOT)
- Academia / Think tanks
 - NWC, MCWAR, RAND, CNAS, CFR
- Multi-National
 - NATO HQ SACT
 - United Kingdom
 - Australia
 - New Zealand
 - Netherlands
 - Sweden
 - Canada
 - Germany
 - France
 - Romania
 - Spain
 - Singapore

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ANNEX H

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