



Soldiers with 25th Infantry Division conduct air assault operations onto deck of 8th Theater Sustainment Command's Logistical Support Vessel-2, off coast of Honolulu, Hawaii, January 11, 2020 (U.S. Army/Jon Heinrich)

Frustrated Cargo

The U.S. Army's Limitations in Projecting Force from Ship to Shore in an A2/AD Environment

By Brian Molloy

In recent years the joint force has rediscovered and discussed at length the challenges of contested air and sea control¹ and the antiaccess/area-denial (A2/AD) environment. With

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this renewed focus, it is entirely possible that the joint force could overcome the A2/AD threat, achieve local sea control, push Marines ashore, and land Army airborne forces in support of airfield seizures only to become stalled in its ability to offload Army combat power at its critical vulnerability: in port. In this scenario, with denied port

infrastructure, nearly the entire U.S. Army could become frustrated cargo at sea, putting the success of the joint force at risk.

Denied ports as part of an A2/AD strategy is a reality in numerous potential flashpoints around the globe. The Korean Peninsula, Taiwan, or any number of contested islands and landmasses in the

Pacific provide instructive examples. The current joint concept relies on a relatively small initial entry force to establish a lodgment with the preponderance of the combat power flowing as follow-on forces through established or hasty infrastructure.² This dynamic will be challenged in an A2/AD environment, which will require entry forces to mobilize over the shore without the benefit of a lengthy reception, staging, onward movement, and integration (RSOI) process, a task the U.S. Army is unprepared to perform. The Army has largely ceded the forcible entry over-the-shore responsibility to the Marine Corps; they are tasked to open a lodgment for follow-on forces. However, in an A2/AD environment, the Army will be unable to capitalize on this initial lodgment due to the likelihood of contested or denied ports and airfields inherent in these operations.

To overcome this vulnerability, the Army must harness its capacity to maneuver from ship to shore without mobilizing through port facilities. To do so, the Army needs to avoid overreliance on static infrastructure that may not be available in an A2/AD environment, prepare to reinforce the Marines at the beach for the joint force to operate as doctrine demands, and develop new training and doctrine to posture itself to fill this role.

Doctrinal Framework

Joint forcible entry operations break down into five phases: Phase I, preparation and deployment; Phase II, assault; Phase III, stabilization of the lodgment; Phase IV, introduction of follow-on forces; and Phase V, termination.³ Joint doctrine calls for either the Marines or the Army to act as the principal element of assault, stabilization, or follow-on forces.⁴ Both the assault and reinforcing forces must be postured to execute operations over the shore without benefit of a lengthy RSOI.⁵ The follow-on force can then enter theater through hasty or established aerial and sea ports of debarkation and conduct RSOI in Phase IV before continuing operations.⁶ Currently, however, Service doctrines of both the Army and the Marines neglect the role of Army forces in Phases I to

III, effectively ceding the responsibility to the Marine Corps. This approach is shortsighted and insufficiently joint to gain the most benefit from the strengths of each Service. The Marines are adept at conducting Phase II initial assault operations, while the U.S. Army has the staying power for protracted land operations in Phase IV and beyond. The question becomes where in the forcible entry continuum the Army is best suited to enter this power into theater. The best approach leverages the relative strengths of each Service while operating in a joint capacity to deliver the best result to the joint force commander. Waiting until Phase IV to enter the Army into the fight is insufficient and introduces a significant vulnerability into the power projection capabilities of the joint force.

Avoiding the Static Infrastructure Trap

The Army currently relies too heavily on static infrastructure, specifically well-defended decisive points at ports and airfields. From the end of the Korean War until very recently, the United States has enjoyed the luxury of fighting in environments with friendly allies willing to provide defended ports outside the envelope of enemy A2/AD weapons. The first Persian Gulf War and Operation *Enduring Freedom* in Afghanistan provide instructive examples. In the Gulf War, over 90 percent of all supplies moved through only three accessible ports, all located in Saudi Arabia. The Iraqi navy destroyed portside infrastructure and scuttled vessels in the harbor at Ash-Shauybah, denying the only deep-draft port available in Kuwait.⁷ Only after a significant effort to clear it after hostilities ended did the Army reopen the port. This port denial action, while tactically insignificant, shows the ability of a poorly equipped naval force to deny static infrastructure easily. Similarly, in Afghanistan, the United States relied on only one deep-water port in Pakistan to supply the war with the vast majority of its supplies moving by sea.⁸ In both cases, the majority of Army combat power, including nearly every piece of

artillery and armor, came through a port. In an A2/AD environment, these static ports, easily targeted by precision munitions, mined by submarine, or denied through scuttling commercial ships, present critical vulnerabilities to continuing operations. This significant reliance on a small number of ports for major combat operations is an unacceptable and avoidable risk in the current operating concept.

Contrasting the permissive entry in the Gulf War and Afghanistan to the denied experience entering theater during World War II and Korea, the reliance on static infrastructure becomes starker. Arguably, these conflicts were the last time the United States faced a peer threat. The invasion of Normandy provides an excellent example of this need. Planning included five reinforced divisions making up the initial amphibious assault element, with an additional 30 divisions flowing over the beach as the reinforcing force.⁹ Only after 3 weeks would Cherbourg be opened to allow unopposed follow-on forces to enter through ports. A similar case occurred during the Incheon landings during the Korean War, where the initial assault elements came ashore in mid-September. It was not until October 10—25 days later—that the port at Incheon was cleared and opened to allow follow-on operations.¹⁰ In a peer-on-peer fight, the time-force balance of rapidly pushing combat power ashore requires the ability to deliver the preponderance of combat power over the beach. In a peer conflict, the preponderance of that combat power will be the U.S. Army, and the joint force will not have the luxury of waiting 25 days to enter that combat power into theater.

Airfields present a similar challenge to ports as static infrastructure and are likely to be among the first targets of an A2/AD campaign. While aerial forcible entry can move troops and supplies rapidly, it is severely limited in its ability to move heavy equipment, particularly armor, and as such is unable to fill the gap if ports are denied. Even if airfields themselves are not denied, the Air Force cannot move armor through the air in quantity. Joint Publication (JP) 3-17, *Air Mobility Operations*, assumes as

much, stating, “Ninety percent of inter-theater cargo goes by sea.”¹¹ Indeed, it would take 54 sorties of C-17s to replace just one LPD-17 amphibious ship in strategic lift capability, and over 500 sorties of C-17s to replace one large, medium-speed, roll-on/roll-off ship (LMSR).¹² The need to move armor rapidly into theater becomes a significant operational constraint in a peer conflict. In the case of an A2/AD environment, the option of force projecting the Army over the shore as a complement to the Marines becomes an attractive one.

Finding the Army’s Role

Considering this challenge, the Army must again develop an over-the-shore capability to reinforce Marines as the assault force at the beach well before follow-on operations in Phase IV. The Army must be prepared to enter theater to assist in the expansion of the lodgment in Phases II and III to be able to capitalize on operations effectively. Amphibious assaults during the Korean War precisely demonstrated this concept. At Incheon, the 1st Marine Division executed the initial assault, with the Army’s 7th Infantry Division acting as a reinforcing force early in what we would now call Phase II.¹³ This approach leveraged the expertise of the Marines in amphibious operations with the combat power of the Army division to exploit the objective. In planning this operation, General Douglas MacArthur understood his limitation in the number of Marines available. The ability to put Army Soldiers across the beach following the Marines allowed him significant flexibility as an operational commander by leveraging relative capabilities of both the Army and Marines under his command.

Army reinforcement at the beach still complements Marine Corps capabilities well, with each providing different capabilities to the fight. While the Marines are adept at pushing light forces ashore, the Army’s unique role is in providing substantial armor to the fight. In addition to the armor itself, the Army also maintains the most substantial maritime surface connectors in the joint inventory. While the Marine Corps surface connectors are

incredibly versatile in projecting light forces to shore, they are limited in their capability with armor. Since divesting the Landing Ship Tank, the Marine Corps currently does not have surface connectors that can put more than two M1 Abrams on the beach at a time. The Army Logistics Over-the-Shore (LOTS) fleet, however, includes the LCU-2000, with the capacity to land five M1 Abrams,¹⁴ as well as the largest surface connector in the U.S. military inventory—the Logistics Support Vessel (LSV)—that can land up to 24 M1A2 Abrams at a time.¹⁵ The LSV is an incredibly versatile workhorse of the LOTS fleet, which is not only blue-water capable and able to operate independently, but also can operate as a surface connector in concert with gray-hulled Navy amphibious vessels, all with the ability to completely bypass ports and deliver armor directly into the fight through the surf zone. The challenge is that these vessels are not currently seen as tactical assets.¹⁶ If reimagined, the potential to re-mission them as assault craft would provide the operational commander a significant capability. If this approach is taken, though, doctrine must be developed to harness those assets in their new role.

Confronting the Challenge of a Neglected Mission

The Army is currently unprepared to provide forces earlier than Phase IV despite the demand in joint doctrine that it must do so. Both JP 3-02, *Joint Amphibious Operations*,¹⁷ and JP 3-18, *Joint Forcible Entry Operations*, state that either the Marine Corps or the Army can make up the landing force.¹⁸ Despite this, the Army has neglected doctrinal development on amphibious operations, has not trained in amphibious operations, and would not be able to fully integrate into the joint fight with the Navy and Marine Corps team. The doctrinal challenge is particularly stark. The Army functionally has no amphibious doctrine. It last published an amphibious operation manual in 1966 and has since discontinued its use. In the most recent Army doctrinal framework, the word “amphibious” appears only 14 times, and 5 of those

times are to define the term or its graphical symbols.¹⁹ The Marine Corps, meanwhile, has a complete and detailed amphibious framework, albeit one that is not well suited to the Army.²⁰ The Marines and Army operate with different equipment, command and control, and organizational structures that would make a cut-and-paste usage of Marine Corps doctrine a good starting point, but not a complete solution to the problem. Additionally, the Army’s role is not as the initial assault force, which is where the preponderance of the Marine Corps doctrine focuses. The Army must develop the doctrine to allow it to supplement existing Marine Corps and Navy doctrine where it provides unique capabilities.

Compounding the doctrinal problem, the Army recently considered significant cuts to its LOTS capabilities, further hampering the ability to conduct sustained operations in a denied environment.²¹ Following the successful operations in World War II and Korea, the Army gradually shifted focus from amphibious operations to amphibious logistics. Shortly after the Korean War, the Army transferred its entire amphibious capability away from the maneuver support-focused Army Corps of Engineers to the logistics-focused Transportation Corps.²² This transition effectively ended the Army’s interest in conducting amphibious operations as an entry method to theater, yet it retained hundreds of LOTS vessels in a logistics capability. Recently, the Army again has shifted focus, announcing the near-total divestiture of its remaining waterborne fleet.²³ This divestiture widens the capability gap and reduces options to re-mission logistics vehicles for maneuver over the shore if the Army is forced to do so. The Marine Corps is not trained or equipped to pick up the responsibility of carrying Army units ashore either, as evidenced by limited surface connectors and capacity on amphibious lift. The divestiture of the LOTS fleet also opens the potential to reimagine the use of these vessels. As the Army divests these assets from the Transportation Corps, the time is right to begin the conversation of reutilizing them in a maneuver role.



During Korean War, Marines use scaling ladders to storm ashore at Inchon in amphibious invasion on September 15, 1950 (U.S. Marine Corps/National Archives and Records Administration/W.W. Frank)

The Army must also begin to train for amphibious operations. Without the benefit of a doctrinal foundation or the ready access to equipment, the hard-won lessons of past conflicts atrophied and the skills necessary to succeed in the littorals vanished. The last major planning exercise in the Army for amphibious operations was in 1964, conducted by the Army Engineer School. Even this exercise existed only on paper and was never tested on the ground with Army equipment.²⁴ In fits and starts, the Army has tried to get back into the business of amphibious operations, but never to the extent of standing up a headquarters or providing a proponent to maintain proficiency. Meanwhile, the Navy-Marine

Corps team has not incorporated Army forces into its annual amphibious training events. Even though joint doctrine calls for both the Army and the Marines to be capable of performing jointly with each other in amphibious operations,²⁵ neither is prepared to do so.

The rapid buildup of combat power from the sea to shore is a fundamental characteristic of amphibious operations.²⁶ The Army maintains the preponderance of U.S. ground combat power, and nearly all conflicts have required the Army to carry the burden of sustained fights. Without the ability to enter this combat power into theater, the entire Army runs the substantial risk of becoming frustrated cargo afloat on commercial ships while the Marine

Corps is left without a sufficient follow-on force to capitalize on their gains.

Moving from a “Corps” Competency to a Core Competency

Some—indeed, most—senior Department of Defense officials would argue that the Army has little business operating in amphibious landings.²⁷ The Marine Corps is rightfully seen as the standard bearer in amphibious operations, and most would argue that the Marines alone are capable of providing lodgments for follow-on forces. Allowing the Army to generate its own amphibious capability would compete for resources with the Marine Corps and



During Nautical Horizon 2018, distinguished visitors from 1st Theater Sustainment Command, Kuwait military, and other coalition forces, got firsthand look at U.S. Army vessels participating in logistics over-the-shore mission, Shuaiba Port, Kuwait, June 24, 2018 (U.S. Army/Charlotte Reavis)

would ultimately provide limited value in the joint fight. This argument, however, misses the point. The reality is that the Army-Marine Corps team, working together at the beach, provides more value to the operational commander than either force working alone. The current model works well when noncontested ports are available. In an A2/AD environment, this will not be the case. In a contested environment, the Army needs the ability to act as a reinforcing force earlier in the operation to expand the lodgment initially gained by the Marines. Instead of waiting for the initial assault force to secure a port, entering both the Army and the Marines in an over-the-beach approach allows the operational commander considerable flexibility in projecting the preponderance of their heavy combat power directly into the fight. Though leaders' concerns of a duplication of effort are valid, they are misplaced. The Army's role in over-the-beach operations seeks not to replace Marine Corps capabilities but rather to reinforce those capabilities as a force multiplier. Conventional wisdom would state that it is not the tip of the spear that does the killing but the weight of the shaft behind it. The Marines have developed the capability, specialty, and expertise to continue to be the tip of the spear

in amphibious operations. The Army, however, must be capable of providing the spear's shaft. Just as a spearpoint is ineffective without its shaft, so too is the joint force ineffective when it neglects its greatest contributor of ground combat power during amphibious operations.

Recommendations to the Joint Force

The Army has always wrestled with its role in over-the-beach operations. It is at a crossroads again, but if the joint force is to be successful against a peer enemy, the Army must confront the reality that unopposed port and airfield operations are unlikely to be available. As was the case in 1942, the Army today finds itself unprepared to fight over the shore despite the foreseeable situation where the need is manifest. Prior to World War II and during the Korean War, the Army adapted and developed the capability to project force in a denied environment. The Army cannot stay complacent and overreliant on the static infrastructure used for the last decades of war. The only viable alternative is to maneuver over the beach as a complement to the Marine Corps, and the Army must develop the doctrine to support such actions. The joint force must likewise plan and implement truly joint capabilities that comple-

ment the strengths of all the uniformed services to dominate the beaches.

First, the Army must lean on the Marine Corps in development of its own Army-specific doctrine. Before World War II, the Army directed the establishment of the Army Engineer Amphibian Command.²⁸ Today, the Army should direct a proponent under the auspices of the Maneuver Support Center of Excellence to develop Army doctrine for how it will integrate into the joint fight in maneuver over the shore. The Army does not need to start from scratch, as doctrine already exists, but it must adapt the existing doctrine to modern capabilities. Beyond doctrinal changes, it needs to integrate the other levers of the joint capabilities framework: organization, training, material, leadership and education, personnel, and facilities.²⁹ The Army is lucky to have a partner in the U.S. Marine Corps that it can lean on to develop this expertise. It should leverage this expertise by training Army officers in planning and executing amphibious operations by embedding them on Marine Expeditionary Unit deployments to gain operational experience in maneuver from ship to shore and developing competency in amphibious planning.

Second, the Army must immediately reverse its course on the divestment of its LOTS capability, and instead re-mission the fleet to perform a dual function. The Army needs to view its waterborne fleet as more than solely a transportation and logistics asset,³⁰ and instead view it as a vital maneuver support asset. Assessing the fleet as a maneuver support asset allows Army combat power to maneuver over the shore in Phases II and III of an amphibious assault and transition to LOTS activities in Phase IV. The Army must also become adept at operating off nonstandard platforms. Due to the well-documented shortage of amphibious lift capability for the Marine Corps, it is unlikely that the Army will be able to utilize the large, gray-hulled amphibious ships commonly used by Marine forces.³¹ General Mark Milley went to great pains to explain this at his confirmation hearing to be Army Chief of Staff.³² Because of this, the Army needs to practice operating from roll-on/roll-off

Military Sealift Command vessels, converted civilian vessels,³³ or the amphibious vessels of allies.³⁴ Congressional support for investing in new large-scale Army maritime fleets is doubtful.³⁵ However, the use of nonstandard platforms combined with a re-missioned LOTS fleet provides a viable short-term alternative.

Finally, the joint force must welcome the Army back into the fold in joint exercises in the littorals. The Marine Corps hosts annual amphibious exercises, such as the 2019 Exercise Pacific Blitz,³⁶ where the Army has generally not participated in an amphibious capacity, performing a more traditional role supporting airborne forces, and with logistics behind the beachhead. Just as the Army trains to enter theater from the air, so too must they train to enter through the littorals. Professional military education programs, starting with the Maneuver Support Center of Excellence, must begin to conduct exercises to discuss its role in the entry to theater over the beach. These exercises were regularly conducted in the past with the last—Operation *Sunset*—occurring in 1964. It is now time to resurrect these exercises and again gain the planning proficiency for amphibious operations. Training and education are critical to the Army operating as a viable member of the joint force in the littorals.

Despite the myriad challenges discussed above, all is not lost. As was the case in 1942, the Army now has the time to correct these deficiencies. The Army's role as part of the joint force in the littorals is clear. In order to fulfill this role, it cannot remain reliant on static ports, and therefore must work to reinforce the Marines at the beach. These operations are not in conflict with the mission of the Marines; instead, they are complementary, just as joint doctrine describes it. The Army can conduct these operations, and it must now build the doctrine and training to execute them. The fight of the future will be rife with challenges. The Army must accept the reality that it will need to fight if only to get to the fight. Failure to understand this could result in the Army remaining frustrated offshore, never able to disembark, while the joint force waits for its arrival. JFQ

Notes

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⁴ JP 3-02, *Amphibious Operations*, II-7.

⁵ *Ibid.*, IV-4.

⁶ JP 3-18, *Joint Forcible Entry Operations*, IV-9.

⁷ *Army Watercraft Master Plan* (Fort Lee, VA: Combined Arms Support Command, May 18, 1999), chap. 2.

⁸ "NATO Hopes for Reopening of Supply Routes Through Pakistan," Associated Press, January 2, 2012, available at <www.foxnews.com/world/nato-hopes-for-reopening-of-supply-routes-through-pakistan>.

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¹⁴ Army Techniques Publication 4-15, *Army Watercraft Operations* (Washington, DC: Headquarters Department of the Army, April 2015), 2-4.

¹⁵ *Ibid.*, 2-13.

¹⁶ Michael Carr, "Save the Army's 'Navy,'" U.S. Naval Institute *Proceedings* 144, no. 9 (September 2018), available at <www.usni.org/magazines/proceedings/2018/september/save-armys-navy>.

¹⁷ JP 3-02, *Amphibious Operations*, I-2.

¹⁸ JP 3-18, *Joint Forcible Entry Operations*, IV-9.

¹⁹ Joseph E. Malone, *The Army and the Need for an Amphibious Capability* (Ft. Leavenworth, KS: U.S. Army Command and General Staff College, 2015), 32, available at <<https://apps.dtic.mil/dtic/tr/fulltext/u2/1001650.pdf>>.

²⁰ Harry M. Murdock, *Doctrine for Combined Airborne and Amphibious Operations* (Ft. Leavenworth, KS: U.S. Army Command and General Staff College, 1990), 41.

²¹ Colin Clark, "Army AMC Head Wants to Stop Buying Ships," *Breaking Defense*, May 24, 2018, available at <<https://breakingdefense.com/2018/05/army-amc-head-wants-to-stop-buying-ships/>>.

²² Boose, *Over the Beach*, 72-83.

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²⁴ Boose, *Over the Beach*, 336.

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²⁶ *Ibid.*, I-4.

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