Marines at the Helm

Why the Marine Corps needs an organic, over-the-horizon, fast-attack boat capability

by Maj Nicholas B. Law

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As described in 2016's *Marine Corps Operating Concept* (MOC), our Corps' leaders adeptly highlight the growing chasm between the Corps of today and the challenges it faces in achieving success in the future operating environment. As explicitly described, the Marine Corps is

> currently not organized, trained, and equipped to meet the demands of a future operating environment characterized by complex terrain, technology proliferation, information warfare, the need to shield and exploit signatures, and an increasingly non-permissive maritime domain.[1]

Furthermore, the MOC predicts a global environment in which internal and interstate conflict will persist in the decades to come: conflict that will become more complex and whose effects will not be isolated or easily mitigated. As America's most trusted force, the Marine Corps must adapt to meet this uncertain future or risk obsolescence.

And on the 8th Day, God created the Marines, and the fish rose from the sea.

—Anonymous

Although not explicitly stated in the overarching problem statement highlighted in the MOC, the Marine Corps is faced with a crisis of commitments. Both the current and future operating environment demand that the Marine Corps maintain its theater reserve role through its MEU/ARG deployment rotations while also ensuring persistent crisis response, a humanitarian assistance capability, the ability to conduct non-combatant evacuation operations, and security cooperation initiatives. With so many commitments and potentialities, the Corps is simply spread too thin.

In addition, the Marine Corps is still completely reliant on a naval amphibious fleet that is facing a crisis all its own. According to a recent Government Accountability Office report on the health of the Navy's ship, aviation, and submarine fleets, the naval Service faces significant challenges across the entire spectrum of its inherent responsibilities. These problems include severe manning shortfalls, inadequate training standards, ship maintenance backlogs, massive budget shortfalls, and generally an exhausted and overworked fleet.[2] The recent failure to adequately support the high-profile Rim of the Pacific (RimPac) Exercise in 2018 by two naval amphibious ships—USS *Boxer* (LHD-4) and USS *Bonhomme Richard* (LHD-6), stalwarts of Navy/Marine expeditionary operations—highlight this growing concern.[3] If the Marine Corps is to return to its naval roots and reinvigorate naval expeditionary employment while maintaining the myriad commitments expected of the Nation's force-in-readiness, more creative ways of improving the Marine Corps' ability to operate and maneuver from the sea are needed to fight and win in the future operating environment.

Mark VI patrol boat. *(Photo courtesy pacom.mil.)*

Of course, this problem is not something new. In the face of constrained sea and intra-theater lift over the past two decades of combat in Iraq and Afghanistan, the Marine Corps creatively established its Special Purpose MAGTF Crisis Response (SPMAGTF-CR) forces in both the Africa and Central Command areas of responsibility. Through the use of organic Marine air (MV-22 and C-130 support), these tailored task forces overcame the vestiges of traditional naval support, resourcing themselves to operate as both a cohesive fighting unit as well as the potential for disaggregated or dispersed operations throughout their assigned region. While this construct has been effective, the full potential of regionally aligned crisis response forces, currently embodied under the SPMAGTF-CR paradigm, must be enhanced and adequately resourced in order to compete against adversaries and allies in coming decades.

The Future Operating Environment Requires Persistence and Speed

The future operating environment is likely to be one in which more actors have a meaningful say in global events. As globalization and media saturation spur further societal awakenings among cultures becoming "self-aware" for the first time, especially among impoverished nations and within equatorial zones of conflict, it is likely that the Marine Corps will be tasked to apply military power driven less by the calculation of nation states that defined its employment in the 20th century and more by the insurrections, violent upheavals, and mass mobilizations made more likely in an interconnected and globalized world. Deterrence will not be as effective. Rapid information sharing, technological proliferation, and power diffusion to sub-state actors and organizations that exist beyond normal state control will water down the classic deterrent that an embarked naval force presented in the previous century.

In the future operating environment, relationships will matter even more. The Marine Corps must remain the partner of choice in providing indigenous and host-nation forces with training, mentorship, and development while remaining engaged in this mission for the long-term and without temporal or territorial gaps. Intimate and close coordination with partners will be paramount to achieving desired political and military end states. Other nation states and transnational organizations will compete with the United States in security cooperation efforts, foreign military sales of high- and low-tech military hardware, as well as exploring any and all advantages to influence behavior in favor of the aggressor.

The reality is that the future operating environment and the predicted chaos that it forebodes will not have the same effect at every level. Political calculation will still be based on rational self-interest and security; however, communities, tribes, organized criminal organizations, terrorist networks, and many others will make calculations based on their own self-interest, which may be in conflict with the states that either harbor them or fail to control them. To exist under these conditions, these groups have to be faster (think faster, process information faster, and exploit gaps faster). Sub-state groups taking advantage of technology proliferation and exploiting marginal populations have the potential to disrupt U.S. security interests in every theater, all of which will stress traditional elements of U.S. national power. As information exchange and technological innovation continue to proliferate, the future Marine Corps must be a force that can overcome *time* as a function of *distance*, or better stated, better at exploiting time and distance than the enemy. In order to exploit time, we need to be fast. That is, how quickly and for how long can the United States position itself in a competitive zone of conflict in order to mitigate risk or exploit opportunities throughout the global battlefield of the future while using the sea as maneuver space?

Speed, agility, and maneuver will be of the utmost importance in deterring threats, reinforcing partners, and striking the enemy with overwhelming firepower. If our return to the sea and reenergized emphasis on naval expeditionary operations is imminent, the Marine Corps must be able to conduct its own maneuver from the sea without reliance on an aging and undermanned amphibious fleet. Rather, the Marine Corps should look to proven platforms that will enable its crisis response forces throughout the world, specifically the littorals, facilitating independent maritime operations, more effective security cooperation initiatives, and more combat power in and around the global commons. With the added benefit of organic Marine air, intelligence, surveillance, and reconnaissance, and security cooperation augmentation, Marine crisis response forces of the future will rely less on transient, slow-footed, and impersonal MEU/ARG rotations, and instead be based on quick, agile, and lethal MAGTFs that have established long-term and enduring relationships in their respective regions. The way to unlock this future potential is by resourcing standing and future crisis response forces with an over-the-horizon, fast attack fleet under its own control.

A Short and Unfulfilled History

The utility and need of a light, agile, and cost-effective watercraft is not a new concept for the Marine Corps. From the August 1942 Makin Island Raid conducted by 2d Marine "Raider" Battalion through the use of small, rubber reconnaissance craft by elements of battalion landing teams embarked on MEUs over the past 35 years, the Marine Corps has traditionally seen the value in this capability. Beginning in the 1990s, the Marine Corps expanded its small boat capability with riverine assault craft employed by 2d MarDiv's Small Craft Company. 2d Small Craft Company was utilized for a variety of mission sets, to include security operations in Central America and the Middle East, over its fifteen year existence. This unit operated from the end of Gulf War in 1991 until its decommissioning in 2005, eventually turning over its vessels to the newly created Navy Expeditionary Combat Command, which assumed the mission of close-to-shore and riverine operations. In 2006-2007, Navy Riverine Squadron 1, part of Naval Expeditionary Combat Command, deployed to Al-Anbar province in support of Regimental Combat Team 2. Those cooperative efforts provided a

significant capability to the Regimental Combat Team, especially in controlling the waterways in and around Haditha Dam. Despite favorable operational reviews, the organic small boat capability fell out of favor with Corps leadership as protracted combat far from shore stretched on in Iraq and Afghanistan.

Despite the Service-level campaign of a return to the Marine Corps' naval heritage at the beginning of this decade, the Marine Corps has been slow to reenergize efforts to bring back a small boat capability. Sensing this need to adapt ways in harnessing a variety of naval assets beyond traditional amphibious ships, the MOC calls for more adaptive thinking in getting Marines aboard all manner of vessels, insisting that Marine leaders should "examine ways to increase the use of Marines on naval warships such as DDGs, ESBs, and LCS/FFs as well as HSVs, T-AKEs, and MPS to support sea control and power projection operations."[4] In 2017, MajGen David Coffman, then-Director of the Navy's Expeditionary Warfare (N95), detailed the then-Commandant's aspiration to get back in the "itty-bitty boat business," expressing Gen Robert B. Neller's request to pursue up to 1,000 small craft in coming years and intimating the possibility of acquiring a version of the dependable rigid-hulled inflatable boat (RHIB)—a platform that has been in use by Marine and naval special operations forces for decades.[5]

The RHIB provides an excellent and cost-effective option as a means to return to the small boat business, as Marine special operators and raid forces have significant experience in operating this craft and it can be stowed in the well deck of amphibious ships, allowing more functionality with embarked forces under the MEU/ARG. The RHIB also provides a blue, green, and brown water option but is limited in range and troop capacity. Another small option in use by naval special warfare is the Special Operation Craft-Riverine (SOC-R), which is similar to the RHIB but with greater troop capacity. The latest variant, the Anaconda SOC-R, is a diesel-powered, all-aluminum vessel with a water jet propulsion system ideal for shallow water. According to manufacturer details, the Anaconda can transport six to fourteen personnel and can support five weapon hard mounts for crew-served and heavy weapons.[6]

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Although the RHIB or the SOC-R are viable options for a Marine Corps researching a return to small boats, the limited range of both the RHIB and SOC-R generate a need to look elsewhere for a true over-the-horizon capability necessary for persistent crisis response and partnership with host-nation forces. Instead of cautiously wading into independent maritime operations via small craft, the Marine Corps should take a bolder leap.

Speed, Firepower, and Self-Sufficiency

Instead of the boats of the itty-bitty variety, still reliant on traditional amphibious shipping and support, the Marine Corps must take the lead in operations near the shore, utilizing the low-draft patrol vessels and fast-attack craft currently employed by the U.S. Navy's Coastal Riverine Squadrons and naval special warfare units, adapting their employment for long-term crisis response and security cooperation. This bold approach will allow for independent operations and maneuver from the sea without the tether to traditional MEU support. These craft could also be used as an augmentation to traditional MEU employment where necessary, relieving MEU rotations of some of their regional commitments and engagements, all while strengthening the Navy/Marine/joint team.

In order to make this great leap forward, the Marine Corps should look to platforms that have a proven record of reliability and operational relevance. The Mark V SOC, currently operated by naval special warfare units (SEALs and Special Warfare Combatant-craft Crewmen), is one such option. The Mark V SOC has been in use by the Navy since the mid-1990s, enabling the rapid insertion and extraction of Naval special warfare units worldwide. Adapted for Marine Corps use, the Mark V SOC could carry a 15-Marine squad up to 500nm. The Mark V also has the ability to deploy and recover small rubber craft which could be used to enable adjacent or disaggregated forces conducting vehicle, board, search and seizure, as well as other interdiction operations. The Mark V also has the ability to be adapted for launch and recovery of Groups 1 and 2 UAS systems, such as Scan Eagle or RQ-20 Puma, which would offer organic intelligence, surveillance, and reconnaissance capability afloat, thus increasing the self-sufficiency and maneuverability of embarked Marines and the wider SPMAGTF-CR force as a whole.

The Mark VI variant has a published range of 600nm and recently completed a 500nm movement from Guam to the Micronesian Island of Yap.[7] With a crew of ten and additional capacity for eight passengers, a reinforced Marine squad could embark on one Mark VI with adaptive crew solutions and cross training. In terms of firepower, the Mark VI is armed with two remotely operated 25mm cannons as well as six .50 caliber machine guns, more than exceeding the mobile firepower of a conventional Marine squad. At a cost per unit of roughly $7 million, the Mark VI is both cost-effective and capable.[8] With the latest counter-unmanned aircraft systems (C-UAS) technology now being deployed by Marine units afloat, it is likely that systems such as Light Marine Air Defense Integrated System could

Mark V SOC launching a Scan Eagle unmanned aerial vehicle. *(Photo courtesy of U.S. Navy.)*

be integrated with either the Mark V or Mark VI, creating a robust C-UAS architecture where required. These small but capable vessels also have the ability to operate "under the radar" and within the weapons employment zones of increasingly more capable anti-access/area denial weapons systems and outside of the clogged sea lines of communication that will predictably become more crowded.[9]

Training opportunities for both platforms, as well as others, could be leveraged at special boat and riverine squadrons currently operating these types of fast attack watercraft located in Coronado, CA, and Little Creek, VA, supporting naval special warfare units in both locations. Through existing relationships between naval special warfare and Expeditionary Warfare Training Groups Pacific and Atlantic, the Marine Corps could very efficiently establish training programs that could quickly get Marines "at the helm" of these capable craft.

Resourcing Crisis Response and Security Cooperation Task Forces with Persistence and Speed

Outdated notions of posturing forces 4-5,000 miles away from potential conflict zones, reliant on an aging naval fleet, and expecting to influence the societal and political forces at the crux of the future operating environment will not be solely sufficient for future success. Rather, the Marine Corps must adopt new employment concepts for its forces that reduce the time for crisis response, derail undesirable actions by adversaries, and reinforce strategic partners while still maintaining the ability to integrate with the larger naval/joint force and harness the ability of sea as maneuver space. With fast attack craft, regional Marine crisis response and security cooperation forces could augment dedicated Marine air with a maritime capability. With either the Mark V, Mark VI, or similar vessel, the Marine Corps could operate independently, over much greater distances, and dramatically increase loiter time in zones of conflict or influence. In this same context, adaptive expeditionary basing solutions could dramatically alter the landscape and redefine expeditionary naval employment.

To understand the impact of this proposed capability, Marine leaders should contemplate the idea of forces operating in the greater Mediterranean basin, with hubs located in Spain, Italy, Crete, and the Horn of Africa, as identified in Figure 1. Under this construct, Marines could independently range the entirety of the Mediterranean and Red Seas, relatively independent of transiting MEU support. With organic aviation assets in support, this newly aligned force would be extremely lethal, adaptable, and agile. Furthermore, resourcing regionally positioned forces with a maritime self-deployable option will allow the MEU/ARG rotations to focus on serving the primary role of theater reserve, regional deterrent, and middleweight forcible entry option, as well as providing needed relief from the close coordination and relationship-building required for long-term partnerships with established and potential allies in a particular region. That task would become the responsibility of Marine task forces operating their own watercraft for as long as required. Time will be on our side.

Figure 1. Range of the Mark VI Patrol Boat (600nm/1100km). *(Map courtesy of Google Maps.)*

As Gen "Howling Mad" Smith said,

> Hit quickly, hit hard and keep right on hitting. Give the enemy no rest, no opportunity to consolidate his forces and hit back at you. This is the shortest road to victory.

If a return to the Corps' naval legacy and refocus on maritime expeditionary operations is necessary to succeed in the future operating environment, the Marine Corps must adhere to Gen Smith's mantra and harness the power of a persistent, over-the-horizon, fast-attack vessel capability to gain and maintain an offensive stance and balance. Failing to do so will force the Marine Corps to maintain a reliance on an amphibious fleet that will continue to struggle to meet its obligations and provide the Marine Corps with the platforms required for its global commitments. The time to give Marines a real say on this matter is *now*.

Notes

1. Headquarters Marine Corps, *Marine Corps Operating Concept*, (Washington, DC: 2016).

2. Government Accounting Office, "Rebuilding Ship, Submarine, and Aviation Readiness Will Require Time and Sustained Management Attention, Report on Testimony Before the Subcommittees on Seapower and Readiness and Management Support, Committee on Armed Services, United States Senate," (Washington, DC: December 2018).

3. Sam LaGrone and Megan Eckstein, "Failure of Two Ships to Participate in RIMPAC Highlight Amphibious Readiness Gap," United States Naval Institute News, (August 2018), available at https://news.usni.org.

4. *Marine Corps Operating Concept*.

5. Joseph Trevithick, "The Marine Corps Wants to Craft a Fleet of 1,000 'Itty Bitty Boats,'" *The Drive.com*, (December 2017), available at http://www.thedrive.com.

6. Staff, "Special Operation Craft Riverine," *Swiftships.com*, available at https://swiftships.com.

7. Ben Werner, "Mark VI Patrol Boats Sail 500 Nautical Miles in Record Transit," (Annapolis, MD: United States Naval Institute, January 2019).

8. Staff, "Mark VI Patrol Boats," *Naval Technology*, available at https://www.naval-technology.com.

9. "The Marine Corps Wants to Craft a Fleet of 1,000 'Itty Bitty Boats.'"