The LEEG

Littoral engineer and explosive ordnance disposal group

by LtCol Paul B. Bock & Capt Maxwell Stewart

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The Indo-Pacific Command (INDOPACOM) Area of Responsibility (AOR) is an engineering problem. It is an operating environment characterized by vast stretches of open ocean, pockmarked by tiny atolls, each comprised of beaches, jungles, and mountains to be pushed, pulled, dozed, or demolished to reshape the battlespace in support of friendly maneuver. It is an environment subject to the tyranny of distance, requiring widely dispersed logistics and resupply hubs to project and sustain forces forward. It is a complex environment in which centralized planning, vision, and coordination are key and decentralized execution critical. Moreover, it is an environment in which INDOPACOM's current Navy and Marine Corps engineer force is not built to fight.

This article recommends restructuring the existing Navy and Marine Engineer and Explosive Ordnance Disposal (EOD) units within the INDOPACOM AOR to provide the credible and focused littoral mobility and sustainment force required to fight and win. The proposed changes will transform the existing structure (compensated) into a permanent III MEF Littoral Engineer and EOD Group (LEEG) that will better enable the MEF to "support fleet operations and naval campaigns."[1] As stated in the Marine Corps Functional Concept for FMF engineering, "current engineer force organization, capabilities, and capacities impede the ability of the FMF to achieve combat credibility."[2]

This failure is primarily caused by the disjointed nature of the current Navy and Marine engineer and EOD forces in INDOPACOM. Engineers exist in all elements of the MAGTF under separate and distinct battalions and squadrons. Additional naval engineer capacity is found within our sister Service in the form of the Naval Mobile Construction Battalions (NMCB), or Seabees, and EOD Mobile Units (EODMUs). These disparate organizations, though sharing a commonality in capability, equipment, and culture, have no centralized planning or coordination element. This results in a lack of vision and direction for the premier battlespace-shaping community in INDOPACOM. Dialogue between units is ad hoc at best, and lessons learned are often shared only through interpersonal connections. This is not a sustainable model for an era of high-end great power competition characterized by distributed maritime operations within an adversary's weapon engagement zone. The naval engineer and EOD communities of INDOPACOM simply cannot continue to stovepipe their capabilities and must change.

LEEG engineers will be critical to theater development creating expeditionary advanced bases, advanced naval bases, and expeditionary airfields (depicted above on Ie Shima Island, Okinawa Prefecture). *(Photo credit: 9th ESB, III MEF.)*

The remedy for this deficiency in capability and capacity is the creation of a FMF Engineer and EOD Group. An Engineer Group is "a large, task-organized unit of combat support and [Combat Service Support] units from

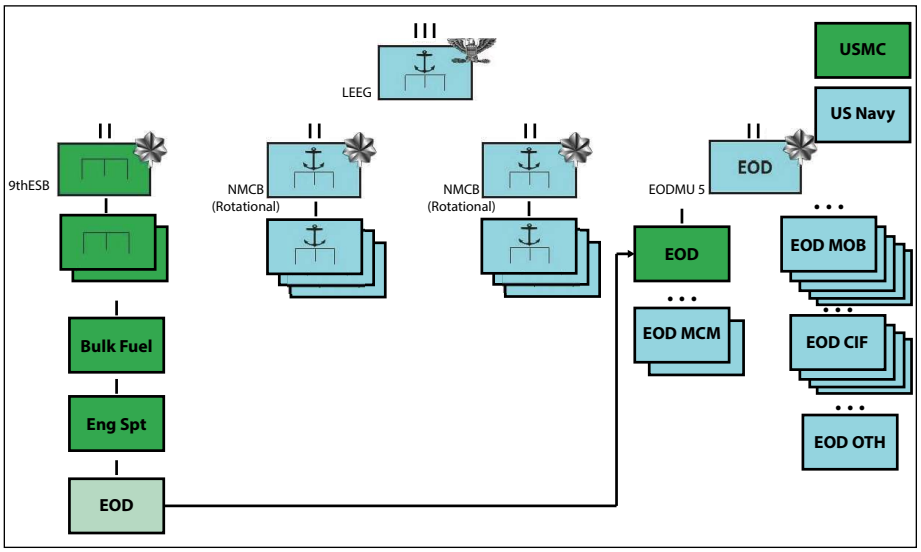

Figure 1.

available Marine Corps, [Naval Construction Force], and engineer attachments from other U.S. military forces and host nation assets."[3] The III MEF LEEG will merge existing structure from Navy and Marine engineer and EOD units, specifically the 30th Naval Mobile Construction Regiment and its subordinate NMCB(s), 9th Engineer Support Battalion (ESB), and Explosive Ordnance Disposal Mobile Unit-5 (EODMU 5). Massing FMF Engineers and EOD under a single commander (Navy Commodore) will provide the commanders of 7th Fleet and III MEF with a capable, credible, and centrally-directed FMF Engineer and EOD force to support littoral sustainment and mobility throughout the theater. LtCol Carr discusses in his Marine Engineer Regiment article how the III MEF LEEG will allow "an appropriate headquarters to lead integration"[4] across the vast expanse of INDOPACOM and properly prioritize and synchronize engineer missions.

The primary mission and purpose of the ESB is "to provide a combat engineering capability for the entire MAGTF" and to serve as the proverbial MEF's Engineer Linebackers.[5] By this, we mean that ESB uses its large personnel and equipment structure to conduct independent engineer operations in support of the MEF. These mission sets can be as diverse as breaching obstacles, building bunkers, creating potable water, providing tactical electrical supply, storing and distributing fuel, or rendering safe explosive hazards. Additionally, the ESB provides depth and capacity to reinforce the engineers from both the GCE and the ACE.

The mission of the Seabees is

> to provide responsive military construction support to Navy, Marine Corps, and other forces in military operations; to construct and maintain base facilities; to repair battle-damaged facilities and to conduct limited defensive operations as required by the circumstances of the deployment situation.[6]

Seabees are a highly capable engineer unit that share some similar engineer capabilities with Marine engineers; however, they are a more robust general engineer force that provides unique capabilities not found within the Marine engineer repertoire such as well digging, asphalt road construction, or port improvements.

Notably, the Seabees are organized into regiments, battalions, and companies in order to allow their seamless integration with Marine units, as has historically occurred in wartime. Combining the ESB's combat and limited general engineering capabilities with the NMCB's powerful general engineering competences will provide the MEF with a FMF engineer capability that is better suited to support across the full spectrum of operations, from combat support to combat service support in the most austere and expeditionary environments.

The centralization of naval EOD capabilities under the LEEG will streamline their employment and simplify their ability to support other elements of the MAGTF or the Fleet. While Navy and Marine EOD share many similar capabilities and tactics, techniques, and procedures, they are also different in several ways. Marine units operating in the littorals facing maritime explosive hazards will likely find themselves in need of the unique abilities of Navy EOD divers. Currently, a request between the Services for EOD support, which happens often, is subject to a complex bureaucratic hierarchy that cannot respond to rapidly changing circumstances. The LEEG will enable Marine and Navy units to provide support from a single EOD organization, EODMU 5.

Furthermore, the LEEG is the ideally suited gray zone force. Unlike other communities, engineers do not wait for war to begin to conduct critical tasks and provide a variety of mission sets to support information operations and the development of partner nation capacity. The LEEG will plan, supervise, and execute engineer projects that support phase zero actions such as the theaterwide Humanitarian Mine Action efforts and the countless civil infrastructure improvement projects conducted by

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Navy EOD forces task organized under the III MEF LEEG will provide assured mobility and freedom of maneuver to the Marine Littoral Regiment. *(Photo by Chief Petty Officer Brett Cote.)*

engineers with partners and allies. Additionally, LEEG engineers will be critical to the establishment of the limited military infrastructure required for the eventual creation of Expeditionary Advanced Bases.

During combat operations, the LEEG will be perfectly well suited to support naval maneuver with operational-level engineering and EOD employment and reinforce the organic tactical engineer and EOD capabilities of the Marine Littoral Regiments. The LEEG's missions would range from the establishment of High Mobility Artillery Rocket System firing positions on Expeditionary Advanced Bases, construction of expeditionary ports or piers, building well-concealed logistical hubs, and expeditionary fuel distribution. In an era where the hider/finder competition can be decisive, the engineer expertise in deception provided by the LEEG will be critical to the survivability of the naval force and its land-based components. The LEEG will also allow the MEF commander to provide additional support to the Navy's Composite Warfare Commander—Mine Warfare Commander in the form of EOD units that enable the maneuver of the Fleet to identify and reduce naval mines in the littorals.

In order to remain relevant and ready, we must make bold adjustments to the current III MEF Engineer Support Battalion and work with the Naval Construction Force to leverage existing Navy engineer and EOD structure to build a single FMF engineer and EOD Force. We cannot grow additional structure, but we can reallocate existing structure to better support the naval campaign within the contact and blunt layers. As our Commandant says, "we need to refocus on how we fulfill our mandate to support the Fleet."[7]

The LEEG Design Recommendations:

1. Establish the III MEF LEEG within 3d MLG from existing Navy and Marine Engineer and EOD structure.
2. 30-NCR and subordinate units become organic to 3d MLG and form the nucleus of the LEEG Command Element.
3. 9th ESB transfers and becomes organic to the III MEF LEEG.
4. Elements from EODMU 5 transfers and becomes organic to the III MEF LEEG. 9th ESB EOD Company transfers and becomes organic to EODMU 5.

While the counterargument exists that III MEF, as the "inside force" within the contact layer, should be pushing for maximum decentralization vice consolidation, such an argument misses the core purpose of this proposition. The LEEG would centralize, synchronize, and enable engineer operations across INDOPACOM but execute in a highly decentralized fashion. During wartime, engineer units within the LEEG would inevitably break away, as they often did in Iraq and Afghanistan, to assume new supporting command relationships with units in the fight. However, the LEEG would ensure those units are properly manned, trained, and equipped to do so while also providing engineer insight to higher headquarters and identifying engineer specific missions to support the prosecution of a naval campaign. It should also be stressed that much of the contribution of the LEEG will be during phase zero and the ongoing engineer preparation of the battlespace, which is occurring every day in INDOPACOM.

Concentrating engineer and EOD forces under one centralized command element will enable coordination and synchronization throughout the geographically dispersed operating environment. Missions will range from phase zero theater shaping and partner capacity development to phase III operations in support of littoral maneuver and sustainment and the survivability and mobility of the joint force. The LEEG should not become the new standard across the Marine Corps but rather an organization built from existing structure, uniquely tailored to the challenges of INDOPACOM AOR—an AOR that is fundamentally an engineering problem.

Notes

1. Gen David H. Berger, *38th Commandant's Planning Guidance,* (Washington, DC: 2019).

2. Headquarters Marine Corps, *FMF Engineer Functional Concept*, (Washington, DC: 2020).

3. Headquarters Marine Corps, *MCWP 3-34, Engineering Operations,* (Washington, DC: 2016).

4. LtCol Walt Carr, "The Marine Combat Engineer Regiment: A Better Organizational Model for Combat Engineers," *Marine Corps Gazette,* (Quantico, VA: May 2020).

5. *MCWP 3-34, Engineering Operations.*

6. Ibid.

7. *38th Commandant's Planning Guidance.*