The Seven Principles of (EABO) Logistics

Sustaining Stand-in Forces

by Capt Taylor Sneed

Whether it is *Force Design 2020, 2025*, or *2030*, what the past decade has taught Marines is that there will always be a need to adapt and evolve our tactics to meet the challenges of the global geopolitical landscape. As a force, Marines must compete with the pacing threat. Unlike the traditional mission of "locate, close with, and destroy," compete is a bit more gray. Competing implies perpetual struggle, not destroying a singular enemy. Under the context of game theory, competing is an infinite game, so how do logisticians support a competition that does not end? Like all great philosophical questions pertaining to warfighting, military professionals must begin with doctrine. *MCWP 3-40, Logistics Operations*, outlines logistics principles that "like the principles of war, are guides for planning, organizing, managing, and executing. They are not rigid rules, nor will they apply at all times."[1] These principles are the starting point for figuring out how to support expeditionary advanced base operations (EABO), but as logisticians and military professionals, we must recognize that EABO is unlike anything we have fought before. The solutions proposed must fit EABO even if that requires an overhaul of existing practices. As a logistics planner in 3d MarDiv, we have experimented with logistical solutions to EABO problem sets. In solving each challenge, the seven principles of logistics endured and remain essential to enabling mission accomplishment.

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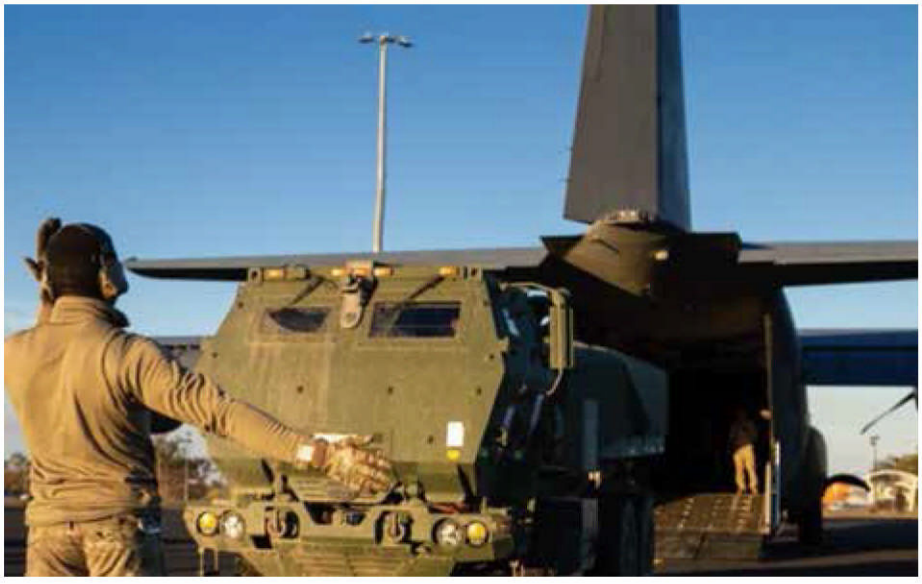


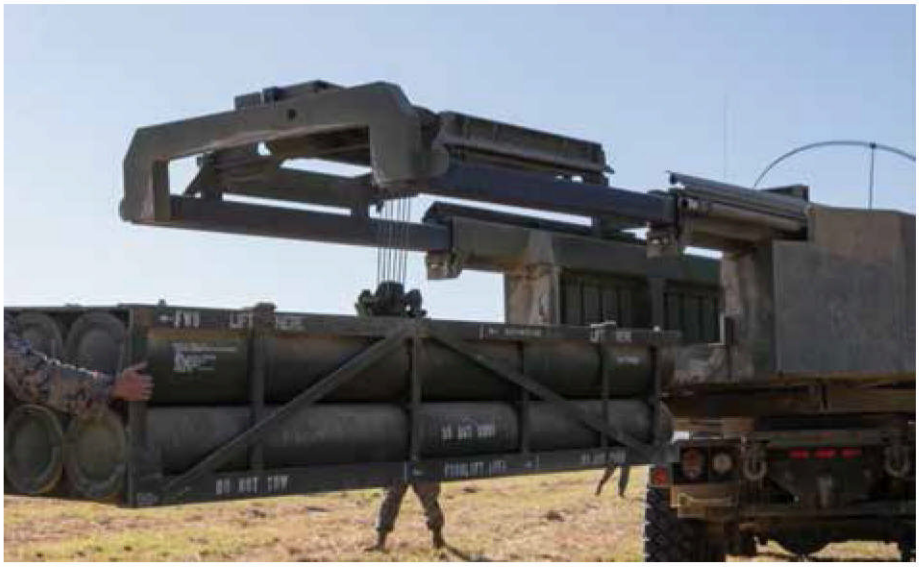
A HIMARS launcher being loaded into a C130 by Marine Corps, Air Force, and Royal Australian Air Force personnel. *(Photo by LCpl Ujian Gosun.)*

The most important aspect of logistics is that it needs to be responsive. Responsiveness provides "the right support in the right place at the right time."[2] In the Middle East, Marines were able to pre-stage supplies across the area of operations to provide a wide range of support. In an EABO environment, they do not have vast desert plains to spread out our logistics. Fitting an entire battalion on one island will prove difficult, let alone an additional CLB to support it. As an institution, the Marine Corps needs to push more capabilities down throughout the force. During Exercise TALISMAN SABRE 21, company reinforced sized fires EAB's with combat logistics platoons proved effective but were still found lacking in capabilities that are resident in low density military occupations such as food service, contracting (KO) and field ordering officers (FOO), and pay agents. Traditionally, low-density skills and assets are held at higher levels to control their use. In the future, we should look to reverse this practice by creating more incidentally trained personnel with the authority to act at the battalion and company level. Just as independent duty corpsmen can certify water for consumption, they should also certify foraged food. Setting up heat and serve rations is no more difficult than operating generators. KOs, FOOs, and pay agents enable foraging. KOs at the regimental level with appointed FOOs with their pay agents at an EAB enable responsive support to forward deployed forces without having to reach back to higher

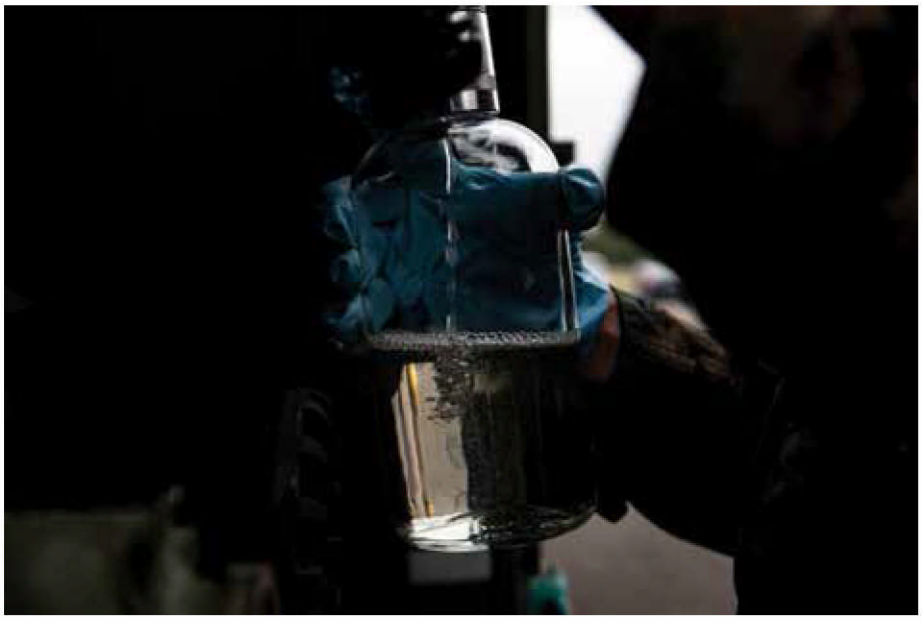
headquarters. This allows units to better provide support organically when they need it and where they need it.

Logistic support plans should be simple and not overly complicated. Simplicity "fosters efficiency in both planning and execution."[3] Efficiency often gets oversimplified to doing what is easy, but what is easy is not a bad thing. Marines would much rather hit the easy button than use a complex process; we need more easy buttons in the Marine Corps. The "easy button" is a simplified version of a complex process. Our current supply chain system requires using exclusive suppliers, and to go outside of this requires completing an intricate approval process. This system of checks and balances works in garrison but begins to fall apart further forward. To simplify the process in EABO environments, foraging lets Marines acquire what is needed in the operating area rather than trying to predict what will be needed and carrying it in or trying to have it shipped to the EAB. While this idea sounds simple, current administrative procedures have impeded Marines from realizing the full potential of having pay agents at the battalion and company level. Laws and policy prevent us from buying food, purchasing parts, and repair services for principal end items. JP-8 can be created with additives from diesel, but our equipment can also simply run on diesel. Marines will always be hungry, equipment will always break, and so long as we have engines, they will need fuel. For food and repair parts, policy must be reevaluated to give Marines more available options before having to get an exception to policy. For fuel, Marines should look to adapt their equipment to the predominant source available in their planned operating area. During TALISMAN SABRE, diesel was the primary fuel source in Australia. Military and civilian supplies had to special order JP-8 and adapters. Adapting Marine equipment to operate on diesel will incur extra Class IX block costs, but that cost is vastly cheaper than deploying JP-8 from DLA strategic stores. Holistically, it is more affordable to adapt our equipment. By adapting to the world rather than forcing the world to adapt, we will find that answers to current logistical problems simplify themselves, making it easier to support Marines in EABO.

Resources are finite and must not go to waste. Logistically, this means economizing the implementation of resources. Economy "is providing sufficient support at the least cost without impairing mission accomplishmen."[4] After the initial deployments to Korea, Vietnam, Iraq, and Afghanistan, moving people and things was accomplished by truck. They are organic, affordable, and reliable. While our ground fleet of vehicles is designed to ford several feet of water, their tires are not big enough to float vehicles from island to island. The use of ships and planes is an operational necessity in EABO, but the problem is that the surface and air connectors belong to other Services, are low in density, and are expensive. The cost and scarcity require economic employment, but this is alleviated through more ships and planes. The Marine Corps relies on the Navy for its blue water surface movements, but in the littorals, it is worth looking at expanding Marine green water capabilities. Akin to a medical battalion construct, establishing a "green water" navy squadron attached to Marine units enables greater surface mobility. As an organic unit within a MEF, it provides the ability to move Marines around the EABO battlespace, enable better sensing capabilities, and better command and control to Marine and Navy fires. In regard to air support, we need more C130s. Marine C130s facilitate the rapid deployment of forces. A procurement rule of thumb should be that if it does not fit in a C130, we should not own it. This requires replacing much of the ground transportation fleet with a smaller truck that fits in a C130 like Army's FMTV that the HIMARS system is built upon. To get more C130 sorties, rather than procure and stand up more squadrons, basing more of the existing squadrons in the Pacific provides a more economical solution. In the continental United States, unlike in the Pacific, the robust civilian road freight and rail networks allow for comparatively easy and affordable deployment of forces. In the Pacific though, it is an operational necessity to fly. Moving more C130s to the Pacific reduces costs and burdens of utilizing Joint Force Aviation. While repositioning squadrons from the United States to the Pacific negatively impacts the current Global Force Operating Model, the *CPG* states that the Commandant is willing to accept risk in some areas to succeed in the EABO environment—this is a risk he should accept. To better enable sustained EABO, Marine units should have surface and air connector assets within their equipments sets, or at the very least, in a direct support relationship.



A HIMARS being reloaded for the next fire mission. *(Photo by LCpl Ujian Gosun.)*



A Marine tests fuel after the additive process. *(Photo by LCpl Samantha Sanchez.)*

No plan survives first contact, thus adaptation and flexibility are essential to planning logistical support. Flexibility "is the ability to adapt logistics structure and procedures to changing situations."[5] The ability to adapt begins with preparation and training. The more skills Marines have, the more prepared they are to exploit opportunities and react to change. In an EABO environment, Marines not only need to know how to do more, but they need this knowledge when they arrive to the Fleet Marine Force. Historically, the model was to have Marines basically trained initially and have them learn advanced individual skills once assigned to the operational forces. The problem with this logic is that in the rush to fill manpower shortfalls, more shortfalls are created when Marines are sent back to schoolhouses for advanced training. Moreover, it was near impossible during COVID to send Marines back to the schoolhouse—especially in III MEF. An example of overcoming this was selecting the top performers from the Motor Transport Operators' Basic Course to go straight into the Wrecker Operators' Course. When these Marines reported to the fleet, they had more skills and knowledge to enable mission accomplishment. Just as the Infantrymen's Course was lengthened and expanded to give grunts more knowledge, the institution must do the same for logistics MOSs. Motor transport operators should come with a license to drive any piece of rolling stock and pull any trailer in the fleet. Supply Marines should know fiscal, warehousing, packaging, and how to expedite when arriving to their first unit. Given a basic knowledge of combustion, hydraulic, pneumatic, and electrical systems, a mechanic should be able to take a technical manual and fix any piece of ground equipment. This goes the same for communications and ordnance mechanics. Combat arms shoot, move, and communicate; combat service support must enable respectively. By spending more time in initial training, we create a stronger force from the ground up. The better we train combat service support Marines, the more flexible their responses can support EABO.

EABO is a major deviation from the three-ship Amphibious Ready Group. Attaining EABO is not without growing pains, but through those pains Marines learn and excel. Attainability "is the ability to provide the minimum, essential supplies and services required to begin combat operations."[6] To affect the EABO battlespace, Marines must sense and shoot. Sensing requires highly technical equipment with specialized operators and maintainers. Shooting, on the other hand, is more complicated. Ground-based fires are limited in their ability to affect EAB operations hence why missile batteries are slated to replace many cannon batteries. Missiles, unlike small arms, are expensive and sensitive—Marines cannot just throw them in the back of a truck at the ammunition storage point. This creates two problems: supply and transportation. Missiles are sensitive and costly to make. Their size and complexity require equally large and capable assets to move them around which translates to greater cost across the board. This increase in costs competes with other needs and forces Marine to forgo spending in other areas. The *Commandant's Planning Guidance* acknowledges this through the divestment of MOSs and equipment that do not meet the needs of EABO, but as Marines continue to figure out how to conduct EABO, they will likely find that their original plans do not work exactly as planned, and it will take both more and different resources to attain EABO.

Once Marines establish EABs, they must persist and sustain our presence to compete effectively. Sustainability "is the ability to maintain logistics support to all users throughout an area of operations."[7] There are two constants in the Pacific: the sun and the ocean. Sunlight provides a near limitless source of power that reaches all potential areas of operation. The ocean provides near limitless source of drinking water. To sustain EABO, Marines must tap into the sun and ocean. Utilizing solar energy reduces reliance on fuel and shrinks the footprint required to support EABs. Moreover, even with overcast skies, you cannot turn off the sun. As the civilian sector continues to develop more efficient and portable solar systems, the Marine Corps must look to it as an alternative source of power. As for the ocean, converting salt water to fresh water is easily scalable from the platoon to regimental level. Currently, III MEF is using the Parker Hannifin's Platoon Water Purification System, a tool-less kit that fits into the back of an ultra-light tactical vehicle that can produce 600 gallons per day. This system replaces bulky containers and specially trained Marines to give

smaller units greater flexibility. Adapting green energy enterprise wide gives the Marine Corps the flexibility to go anywhere. After a typhoon, it is not uncommon for power and rudimentary water systems present in much of the Pacific to be damaged and unreliable. Solar power and generating fresh water eliminate this issue and frees forces to focus on other missions. By having systems that allow Marines to tap into readily available green resources, this furthers the capabilities of 21st Century foraging and increases their ability to sustain in places once deemed too austere to support.

Not only do Marines need to sustain, but they need to survive. Survivability "is the capacity of the organization to protect is forces and resources."[8] EABO will require us to blend in, not dig in, and once engaged, higher roles of health service support will be too far away. Constructing defensive positions that can survive naval surface fires and missiles requires heavy equipment and extensive fortifications. While heavy equipment is available to contract in much of the Pacific, creating large positions clearly gives away positions. Instead, Marines should look to hide it what already exists. In TALISMAN SABRE, firing positions were hidden inside barns and would rotate farmer's fields between fire missions. Vehicles and equipment were covered in blue and yellow tarps that resembled those used by the civilian populace. Camouflage works well in the tree line but not so much an urban environment. No matter how well Marines hide, inevitably they will suffer casualties. Unlike recent conflicts in the Middle East, there will not be a "golden hour" to evacuate casualties, and the local medical care may not be better than the corpsmen attached to EABs. This is further compounded by the fact that it could be days before casualties are flown out to shipboard care. To better chances of survival, Marines require better medical training at the individual level. The training given to Army Special Forces Medics should be learned by front-line corpsmen to sustain life. As a part of work ups, corpsmen should work at local emergency rooms and trauma centers to further practice their skills. Traditionally, a shock trauma platoon stabilizes patients, but moving over twenty quadcons of equipment is too cumbersome for EABO. Increasing individual medical abilities mitigates the difficulties of casualty evacuation in EABO. The ability to survive starts with the ability to preserve life. Blending in makes Marines harder to target. Both are essential to EABO survivability.

Pushing resources down and throughout, keeping it simple, economizing and being flexible with our resources, achieving attainability, and then sustaining and surviving will be essential to logistics in EABO. These concepts require vast deviation from traditional schools of thought, but EABO and competition require a departure from the past while embracing everlasting principles. Alexander the Great said that "my logisticians are a humorless lot, they know if my campaign fails, they will be the first ones I slay." As the humorless lot, it is up the logisticians to make EABO work. The Commandant outlined his campaign. It is now upon all logisticians to experiment with new ideas and share our knowledge amongst each other so that we may thrive in competition.

Notes

1. Headquarters Marine Corps, *MCWP 3-40, Logistics Operations*, (Washington, DC: 2016).
2. Ibid.
3. Ibid.
4. Ibid.
5. Ibid.
6. Ibid.
7. Ibid.
8. Ibid.

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