

# Tomorrow Will Be Different

## Logistics in the future operating environment

by LtCol Ian Fletcher, Maj Steven Coulon & Capt John Bailey

It is increasingly apparent that logistics operations in the current SOE (special operations environment) are a close analog for the future operating environment envisioned by the most recent *MOC (Marine Operating Concept)*.<sup>1</sup> Today, small teams of MARSOC (Marine Special Operations Command) logistics Marines are providing cross-functional CSS (combat service support) to MSOCs (Marine special operations companies) operating across the spectrum of complex physical and political terrain under three different geographic combatant commands. What is unique is that this type of CSS requires these teams to project all functions of logistics from EABs (expeditionary advanced bases) with low signatures and minimal external support. These MARSOC LSTs (logistics support teams) provide daily direct support without the benefit of an integrated DOTMLPF framework designed to generate Marine forces to meet the special operations mission requirements.<sup>2</sup> These junior officers and enlisted Marines are creating a functional framework for the future environment by capturing, analyzing, and codifying their own experiences; experiences that the Marine Corps may find valuable as it attempts to broaden its ability to quickly adapt to the future distributed fight.

### Where to Start?

Since 2006, MARSOC's CSS elements have experienced several evolutionary modifications, some purposefully and some by happenstance. CSS structure was initially minimized

under the premise that support would come from conventional forces, specifi-

>LtCol Fletcher is currently the CO, 2d Marine Raider Support Battalion.

>>Maj Coulon is currently the Logistics Officer (S-4), Marine Raider Support Group.

>>>Capt Bailey is currently the Commander, Logistics Company, 3d Marine Raider Support Battalion.

cally the Marine Expeditionary Unit (MEU), Special Operations Capable (SOC) with whom MARSOC units would deploy.<sup>3</sup>

At the time, this decision was in step with MARSOC's concept of MEU-based employment. In 2007, however, USSOCOM (U.S. Special Operations Command) separated MARSOC from the

published its findings on 27 January 2009. The study linked MARSOC's success in the future SOE to the establishment of a CSS Element consisting of "four functional groupings:"<sup>5</sup> a headquarters, a joint special operations task force liaison, convoy operations, and company support cells. OAD recommended that each element be manned as shown in Table 1.

Element	CSS Mar Officer	CSS Mar Enlisted
MARSOTF FOB	2	47
CJSOTF Liaison	0	3
Convoy Operations	1	17
Company Support	0	16

Table 1.

MEU (SOC) ... creating a void for deployed MARSOC, [and this void drove MARSOC to realize] that they were a command that did not possess [adequate] CSS capacity.<sup>4</sup>

Leadership quickly and correctly perceived that a lack of organic MARSOC CSS structure presented substantial risk for the tactical commander. Consequently, MARSOC sought support from HQMC, resulting in a study of the MARSOC CSS requirements outside of the OEF environment. Analysis Branch, OAD (Operations Analysis Division),

OAD's report followed a disciplined, requirements-based methodology and produced recommendations that represented the smallest possible Service solution to meet MARSOC cross-functional requirements. Unfortunately, MARSOC commanders quickly realized that the solutions presented were too large to meet the SOF theater force footprint limitations. Moreover, the OAD study highlighted a flaw in MARSOC's original assumption that MAGTF CSS was suited to support a MSOC across the range of special operations. Functional



**LST Marines use digital devices to plan and provide tactical logistics support for MARSOC units.** (Photo by LCpl Juan Bustos.)

capabilities contained within the Marine Corps logistics enterprise (04XX, 13XX, etc.) could not be task organized down to a level employable by SOF and still provide all functions of logistics. Despite this revelation, MARSOC continued to rely on a sub-optimal model which attempted to balance the implications of OAD’s recommendation with the tactical realities of operations in the “boots on the ground” restricted environment. The result was CSS structure that “addressed organic logistics concerns” by relying heavily on theater, local, or contracted external support.<sup>6</sup> This compromise generated a concept of support which proved to be successful throughout OEF and OIF.<sup>7</sup> But as MARSOC missions shifted in nature and geographic expanse, MSOCs became increasingly dispersed beyond the reach and scope of adjacent conventional support.

With its new regionally aligned deployment model, MARSOC commissioned a second study to address these changing conditions. In 2012, CNA produced a study entitled *Combat Service Support for Distributed SOF Operations*. This study focused on the CSS requirements beyond Afghanistan and provided recommendations based on the projected future SOF operating environment across multiple regions of

the globe. The CNA study found that MARSOC’s OEF CSS model relied extensively on a “take everything ... and buy the rest” mindset, one that almost mirrors the MAGTF approach. Interestingly, CNA predicted that this approach to CSS was not suited for the distributed SOF environment. This study further noted that MARSOC CSS continued to be challenged by its lack of SOF-specific logistics doctrine, operational logistics capability, minimal tactical capability, and most importantly, a stable mechanism to engage, coordinate, and integrate with external supporting agencies.

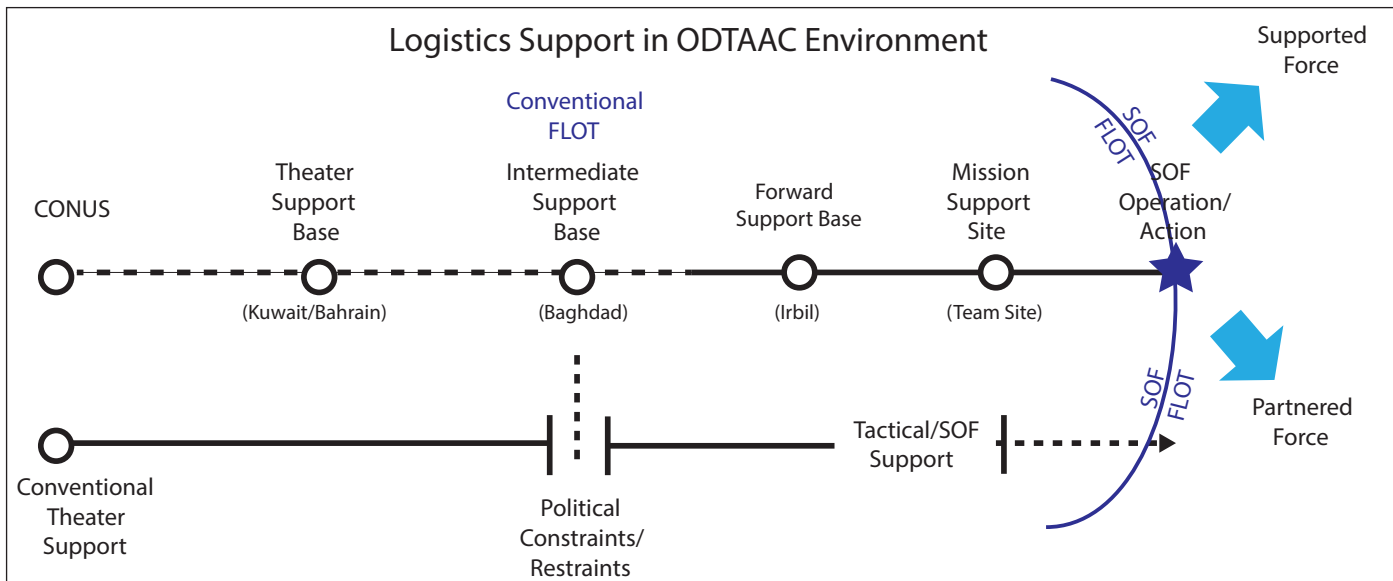
MARSOC began to address CNA’s observations in 2014 when it codified the LST as a diversified task organization of CSS personnel led by a captain as the MSOC’s direct CSS support element. With the LST came an associated increased level of CSS training, the ability to decentralize subject matter expertise, and an integrated reach-back capability from independent team sites. The goal of this effort was to enable a MSOC’s capacity to operate throughout the “strategic, operational, and tactical levels of war” regardless of the environment.<sup>8</sup>

Concurrently, the MARSOC G-4 (Logistics) has addressed training shortfalls by establishing the MLC (MARSOF Logistics Course), an in-

formative, week-long seminar that provides a much-needed introduction to operational-level logistics, authorities, and competency for the LST’s junior captains, lieutenants, and SNCOs. This seminar also reduces the impact of the LST’s structure/manpower shortfalls through more efficient and effective use of SOCOM’s robust contract support network. Unfortunately, MARSOC was unable to obtain from the Service the structure required to close MARSOC’s CSS gaps as identified in the 2009 and 2012 studies. This dependency on contracted support has become a double-edged sword. Deployed companies have learned, especially in OIR (Operation INHERENT RESOLVE), that contractors are not as agile and flexible as uniformed support personnel. This reality has forced LST Marines to develop innovative solutions to emerging problems, often beyond the scope of their training.

**Today’s SOF Logistics Environment: Lessons Learned**

Today, the base operating unit remains the regionally aligned MSOC composed of four MSOTs (Marine special operations teams) that are distributed across operating environments characterized by great distances, underdeveloped transportation infrastructure, political boundaries, and/or maritime mobility challenges. This environment, referred to within USSOCOM as ODTAAC (Outside the Declared Theater of Active and Armed Conflict), frequently places the MSOC’s maneuver units under very sensitive political constraints. This means that the MARSOC CSS requirement for support to the SOF forward line of troops often extends beyond the reach of conventional logistics support (see Figure 1). As a result, MARSOC logisticians often face situations where their training, equipment, and task organization do not fully meet the demands of the mission. Yet, these Marines continue to find highly creative vertically and horizontally integrated CSS solutions for a broad spectrum of tactical logistics requirements demanded by the MSOC’s mission sets. For example,



**Figure 1.**

LST Marines today actively use digital devices to develop solutions for low-visibility forward operation base power and water management, non-standard (i.e., civilian) vehicle maintenance, and general engineering (since the LSTs no longer have 13XX structure).

To prevent the MSOC/MSOT from culminating in this environment, the LST requires a high degree of integration and interdependence with conventional forces as well as a reliance on non-standard support, acquisition, and

transportation.<sup>9</sup> Therefore, to succeed in this environment, MARSOC logisticians accept the following conditions as standard within the special operations environment:

- *Contracted non-standard maintenance and supply capabilities are critical to mission success.* Locally procured equipment, transportation, and supplies are a necessity and are generally far more simple, interoperable, and easy to maintain than standard military assets. However, these systems

often do not meet U.S. commercial or government manufacturing and safety standards. Additionally, these platforms may not always be U.S.-owned, operated, or contracted, meaning that USMC CSS training venues or publications do not address the proper use, maintenance, and repair of these systems. These are all factors that translate into risk for the MSOC commander.<sup>10</sup>

- *USSOCOM-provided equipment bridges capability gaps associated with Service-provided equipment.* One of the distinguishing characteristics of SOF in joint doctrine is the employment of specialized equipment. Specially designed means of transportation, subsistence, communications, medical care, and weapons systems are inherent to SOF and their acquisition, accountability, maintenance, embarkation, and final disposition. All have unique requirements associated with USSOCOM programs (or the lack thereof). Alternatively, when normal procedures apply, MARSOC is numerically disadvantaged in terms of the CSS force required to conduct these activities.

- *Force restrictions demand cross-functionality.* LST Marines must not only possess the necessary knowledge and proficiency within their own MOS but also be cross-trained to accurately and efficiently establish connections with



**Oftentimes, CSS support for MARSOC forward-deployed units is beyond conventional logistics support capabilities. (Photo by Cpl Shellie Hall.)**



**The joint tactical aerial resupply vehicle is being tested by 1stMRB as a potential technical solution for rapid resupply.** (Photo by Sgt Salvador Moreno.)

both tactical and operational logistics providers, the host nation, inter-agency partners, embassy personnel, and partner-nation forces.<sup>11</sup> Supply administrators, mobility specialists, and systems technicians all interface with both non-standard (or commercially available) and standard assets in the provision of logistical support regardless of their location. Because the LST Marines are the MSOC's CSS subject-matter experts, all deployable SOF logisticians must be trained in the maintenance, mobilization, and corresponding procurement processes of all mission-critical assets.

- *Solutions require a collaborative approach.* Beyond a cross-functional foundation, LST Marines must be capable of properly coordinating support from experts outside of their technical field. More often than not, LST marines find themselves in forward locations performing functions outside of their field of expertise. Therefore, it is essential to leverage technology to develop virtual reach-back capabilities to cover their experience gaps.

By accepting these "truths," MARSOC logisticians continue to enable MSOC projection and maneuver without the build-up of supporting infrastructure, iron mountains, or logistics lines of communication. If

history reflects reality, however, then this current approach to problem solving is only temporary and will require MARSOC to continue to innovate to meet the next challenge. This is exactly what the MRSG (Marine Raider Support Group) is seeking to accomplish.

#### Further Innovation

Since 2016, the MRSG has worked diligently to address logistics support within their manpower constraints. Each battalion has adopted its own functional contribution toward the

---

**... the MRSG has worked diligently to address logistics support ...**

---

improvement of CSS in a distributed environment. At Camp Pendleton, CA, 1st MRSB (1st Marine Raider Support Battalion) is exploring potential technical solutions to address rapid resupply requirements through cargo unmanned logistics systems. 1st MRSB is working closely with 1st MLG and the Marine Corps Warfighting Lab to test platforms, like the joint tactical aerial resupply vehicle, that reduce transit time

and exposure during ground movement. On the east coast, 3d MRSB is attacking gaps in individual MOS training through the execution of a "home grown" 10-week course known as the Multi-Dimensional Logistics Operations Course. This course, broken into two phases, seeks to cross-train CSS Marines in skills across the spectrum of logistics. Concurrently, 2d MRSB is working closely with the Marine Raider Regiment to incorporate a robust and rigorous collective training environment for the LSTs headed to OIR. Woven within the MRST's (Marine Raider Support Team) team readiness exercise, this collective training seeks to develop the LST's capability to procure and maintain logistics supplies and services within a reduced signature environment.

These grassroots solutions are generated solely from experience, inter-Service study, and after-action reports. This over-reliance on experiential learning is partly due to DOTMLPF gaps associated with logistics doctrine or specific SOF training and readiness standards for CSS. As a result, the MRSG and its MARSOC logisticians are now exploring beyond the "Service standard" into new emergent concepts.

#### Relevance to the MAGTF

The Marine Corps logistics enterprise continues to seek out new technology and capabilities to support highly distributed forces in complex environments. With increased pressures to downsize combat service support personnel while providing greater levels of support, perhaps MARSOC's dilemma isn't far removed from the challenges facing the Marine Corps' logistics community at large. Already, there are grassroots discussions within the Marine Corps logistics to merge occupational specialties to create a smaller number of more capable and flexible Marines (0431 with 0481 or 3521 with 1142), but those sorts of massive changes are nearly impossible to implement without a proof of concept. MARSOC's experiences with challenging CSS conditions may provide the framework needed to ensure the Marine Corps maintains a competitive advantage in power projection.

Truth be told, a great deal of ad hoc analysis drove MRSG leadership to develop these aforementioned solutions, and while the development/integration of UAS systems, training of cross-functional specialists, and immersive validation of collective capabilities are potential solutions, we accept that there are many other solutions we are possibly missing. As we are learning from the recent communications and intelligence

the current LCE is adaptable enough to support distributed, low signature, multi-domain operations, a notion that is contrary to MARSOC's education in the "school of hard knocks."<sup>13</sup> Current logistics doctrine primarily addresses only overt MAGTF operations, largely characterized by clear lines of communication, visually recognizable logistics nodes, and the classic push-and-pull methodology; it does little to provide

In conclusion, why would any of these revelations be of interest to the MAGTF logistician or planner? To put it simply, by the very nature of the special operations environment, MARSOC logisticians are already addressing the challenges forecasted in the MOC. MARSOC logisticians have adapted through significant challenges to provide logistical support to highly dispersed units in austere, politically sensitive environments without "adding logistics structure ashore and building the inevitable 'iron mountain' that always follows."<sup>14</sup> So, if the Marine Corps is serious about expanding its logistics capability sets to include supporting distributed, maritime, or multi-domain campaigns, then we believe MARSOC presents the Marine Corps with an advantageous starting point to assess the true DOTMLPF requirements for the future CSS force. If our experience rings true, the gap between the special operations environment and the MAGTF future operating environment will close, and all Marine Corps logisticians will "become even more creative, agile, and responsive in supporting distributed, forward-deployed, and pre-positioned forces" in a hostile, denied, or politically constrained environment.<sup>15</sup>

---

**... maybe it is time for the MARSOC logistics community to undergo its own modernization/professionalization.**

---

modernization efforts, maybe it is time for the MARSOC logistics community to undergo its own modernization/professionalization. To accomplish this feat, we are exploring the efficacy of using a more rigorous and deliberate process such as a capabilities-based assessment or a front-end analysis to capture the problem in total. The reality is that MARSOC lacks the in-house capability for such analysis. With the Service's means, however, these efforts may generate DOTMLPF solutions that not only meet MARSOC's requirements, but present a significant opportunity for the Marine Corps logistics enterprise to tackle key CSS issues associated with the MOC and the future Marine Corps operating environment.

Finally, if *Marine Corps Force 2025* is designed to adapt the Marine Corps to the challenges presented by the future operating environment, then it appears that the Marine Corps is following a path similar to the one MARSOC did in 2006. It is assuming that current MAGTF CSS organizations are scalable and suitable enough to support the future distributed environment. This notion is contrary to doctrinal beliefs that "the information age will have significant effects on all aspects of warfare, and logistics is no exception." *Force 2025's* use of CSS structure as a "zero growth" offset for new information capabilities indicates to the authors that Marine Corps force developers believe

a framework for the MLGs to develop the small cross-functional teams that will be required once the MAGTF projects capabilities from expeditionary advanced basing in a hostile, denied, or politically constrained environment. If Marine Corps force developers believe Service CSS is poised to meet future needs, then the MAGTF may be embarking on a similar path of self-discovery as MARSOC has done over the past decade.



**Offloading the MRZR.** (Photo by Sgt Scott Achtemeier.)

Notes

1. The *MOC* describes, in broad terms, how Marine Corps forces will conduct the range of military operations in accordance with our Title 10 responsibilities. The *MOC* provides the foundation and context for subordinate operating and functional concepts, guides analysis, wargaming and experimentation, and informs

capability development and budget programming decisions. Concepts, in their simplest forms, are ideas that are matured and refined through exploration, debate, and discussion. See Headquarters Marine Corps, *The Marine Corps Operating Concept: How an Expeditionary Force Operates in the 21st Century*, (Washington, DC: September 2016).

2. DOTMLPF stands for doctrinal, organizational, training, materiel, leadership and education, personnel, and facilities. This framework provides the foundation for Service-generated capabilities to meet mission requirements.

3. Personal discussion with LtCol Moye.

4. Ibid.

5. Analysis Branch, Operations Analysis Division, 27 January 2009.

6. Personal discussion with LtCol Moye.

7. In Operations ENDURING FREEDOM and IRAQI FREEDOM, logistics nodes were highly prevalent and lines of communication were easily definable. Additionally, conventional and SOF support nodes were often collocated, facilitating local support.

8. Jennifer Yopp and Annemarie Randazzo-Matsel, "Combat Service Support for Distributed SOF Operations," *CAN Analysis and Solution*, (report, MARSOC Leadership, July 2012).

9. Joint Staff, *Joint Publication 3-05, Special Operations*, (Washington, DC: July 2014).

10. David M. Moore, David Allen, and Peter D. Antill, *Strategy Development for Special Operations Force Logistics*, Cranfield CERES, (Online: 2012), available at <https://dspace.lib.cranfield.ac.uk>.

11. Combat Service Support for Distributed SOF Operations.

12. Headquarters Marine Corps, *MCDP 4, Logistics*, (Washington, DC: February 1997).

13. The concept for multi-domain operations is captured in Service and joint concepts such as EABO (Expeditionary Advanced Base Operations), LOCE (Littoral Operations in a Contested Environment), and MDB (Multi-Domain Battle).

14. *MOC*.

15. *Expeditionary Force 21*, (Washington, DC: HQMC, March 2014), concepts challenge our Marine Corps logisticians to become even more creative, agile, and responsive in supporting distributed, forward-deployed and pre-positioned forces, operating from both land and sea; in disaggregated and distributed operations; in austere, unstable, and uncertain environments; and within an increasingly constrained budgetary environment.



MARINE Corps WEDDINGS

Whether you're getting married at the local courthouse or walking down the aisle in a cathedral, wedding planning is stressful and we are here to help. From locations and lodging, to uniforms and regulations, Marine Corps Association & Foundation Weddings is a one-stop resource page to help you and your family plan this momentous occasion.



Find more information

[www.mca-marines.org/marine\\_corps\\_weddings](http://www.mca-marines.org/marine_corps_weddings)

