Professionals Talk Logistics

by Col Matthew W. Blackledge

Logistics support was key to battlefield success during Operation IRAQI FREEDOM; however, the Marine Corps must continue to improve its logistics capabilities to ensure future success.

In the space of a few weeks, I Marine Expeditionary Force (I MEF) moved from its tactical assembly areas in Kuwait to Baghdad and beyond. I MEF attacked farther and faster than anytime in Marine Corps history and accomplished this due to the determined and innovative logistics efforts at every level from the MEF staff down to the smallest combat service support detachment (CSSD) and unit S–4 (logistics) requesting support. Rest assured, however, history is not easy to make. The successes of I MEF were the result of intense and repeated coordination between operators and logisticians at all levels over an extended period of time.

The complexities of the logistics issues that faced I MEF during Operations ENDURING FREEDOM (OEF)/IRAQI FREEDOM (OIF) were far greater than that of Operations DESERT SHIELD/DESERT STORM (DS/DS). During Operations DS/DS, I was a newly promoted lieutenant colonel designated as the officer in charge of the Headquarters Marine Corps (HQMC) Logistics Readiness Coordination Center. During OEF/OIF, I have been the Assistant Chief of Staff G–4) for I MEF. The similarities and differences between the two operations that took place a little over a decade apart highlight the strengths of the Marine Corps as well as some of its challenges. The Corps' strength, as always in our illustrious history, rests in the dedication of Marines and sailors of all ranks and job descriptions. Despite any obstacle or difficulty, they will find a way to get the job done and succeed.

There are many challenges in providing logistics in the complex environment of combat. Some are newly discovered, and some were identified over a decade ago but yet persist. I will cover a few of our key successes achieved and several of the challenges that we still face as logisticians. To place the entire operation in proper perspective, we must take a hard look at both. We must ensure that compliments are passed to the appropriate commands and personnel. We must not, however, celebrate our logistics success so much that we lose sight of the improvements that are still needed to assist the Marine infantryman on the battlefield. The detailed discussion of these successes and challenges could each fill a *Gazette* volume, but these detailed discussions will take place in their proper venues. I will attempt to provide an executive summary from my perspective as the I MEF G–4. There may be other perspectives or even disagreements on every issue I surface. That is fine. The solution to each hinges upon the integration of these various observations in an unemotional context to determine the best solution for the Corps.

Why Marines Succeed in Combat

There were several contributing factors to our logistics successes, but they can be reduced to a few key points.

One of the greatest strengths of the Corps is our planning process and our flexibility once execution commences. The planning processes and working relationships between action officers and staff principals laterally and vertically are key to the flexibility needed to support the intense pace of combat operations. These relationships were established during the months of operational planning team efforts and several key conferences prior to the commencement of combat operations.

The military education program in its current form of resident courses, nonresident courses, and the professional reading program ensured that the Corps had a team of leaders who could effectively tackle the challenges we faced. They drew on the lessons of history and the warrior ethos articulated so well in the volume of reading material they consumed.

The innovative spirit of the individual Marine that the drill instructors instill in Marines in boot camp and Officer Candidates School is second to none. This enables operators and mechanics to ensure that their equipment shoots, moves, and communicates in combat where all logic says it should not. It gives them the determination to work in the dark under a poncho or work on a tank or assault amphibious vehicle (AAV) while it is being towed to the next engagement. When they arrive, it is ready.

These intertwined factors are the reasons for some of the successes I will articulate.

Logistics Successes

First of all, logisticians on the MEF staff must have the correct focus on logistics to ensure success. The MEF G–4 considers the current fight and the next 96 hours as a reference point for the issues it must monitor to ensure that the logistics effort for the next 7-, 14-, and 30-day periods are synchronized. It permits the force service support group (FSSG) to take care of the current logistics fight while I MEF maintains the pulse on the theater logistics effort as well as effort from beyond the theater level. I MEF is prepared to and does take action on critical logistics issues within the 7-day window that significantly impact mission success. Beyond 30 days is only monitored for critical items based on industrial base or strategic sealift concerns.

Like many other commands, I MEF took advantage of web technology to keep all parties informed. This made a significant difference. It required updating the report formats and content of the web to keep pace with the commander's critical information requirements as well as key issues that require monitoring at the MEF level. Several experiments using e-mail and the web for logistics reporting and monitoring status during exercises in the years prior were the key. An observation was made that the MEF G–4 during OIF operated almost identically to the way it operated during exercises over the past 3 years. Do not misinterpret the previous comments. The MEF staff logistics effort is but one level of the many levels that must function properly for logistics to effectively support the Marine infantryman.

The 16-day offload of the 11 maritime prepositioning ships can be attributed to training that has occurred throughout the Corps as well as the maritime prepositioning force (MPF) maintenance cycle supervised by Blount Island Command. In 2002, I MEF conducted an intense card exercise simulating the offload and movement of a multiple ship offload. That exercise significantly contributed to I MEF's swift offload.

In the 6 months prior to D-day, I MEF requested and received about 60,000 pieces of equipment worth over $100 million as a result of the submission of 70 urgent universal need statements. The effective teamwork between the Marine Forces Commands (MarFors), MEFs, Marine Corps Systems Command (MarCorSysCom), Marine Corps Combat Development Command, Materiel Command (MatCom), and HQMC made this happen. Some were new items and some were accelerated fielding. Most items were a success story. The following are a couple of examples of success:

- Small arms protective insert plates. The accelerated fielding of these inserts into our new body armor saved the lives of several Marines.
- Gypsy racks. The addition of these racks gave our Marines the ability to carry about 6 extra cans of gas each giving units that extra confidence to push their vehicle to the limit in combat.
- Mabey Johnson Bridge. Provided I MEF the ability to replace tactical bridging with semipermanent replacement bridging so that the tactical bridging could be moved forward to cover other gaps.
- Blue Force Tracker. Provided the commander the ability to instantly locate units on the battlefield. The Marine Corps must clarify the exact capabilities that will meet the requirements of all units within the MEF.

I MEF forces traveled over 2,300 miles of road networks for a straight line distance of approximately 700 miles in roughly 3 weeks. This was accomplished using every bit of determination of Marine drivers and pushing every vehicle to the limit. We were augmented by two Army petroleum, oil, and lubricant companies and by a fleet of commercial rental vehicles. The MEF established a force transportation board, published a ground transportation order, was represented on the combined forces land component command (CFLCC) distribution management board that controlled theater assets, and developed a software program used by the logistics movement and engineer control center and unit movement control centers. Officers from I MEF were repeatedly asked to brief our concepts to CFLCC, and some of our programs developed here to assist I MEF control movement on congested lines of communications were adapted to meet theater requirements. The combination of these agencies and detailed planning efforts played a major role in the effective movement of I MEF forces.

Fuel was considered a major challenge to the rapid movement of combat forces, and repeated reviews of detailed fuel requirements and capabilities paid off. I have already mentioned the fuel companies from the 377th Transportation Support Command. These augmented the I MEF refuelers as well as the rented commercial refuelers driven by Marines. The crown jewel of fuel support was the two sections of Marine Corps hose reel system (HRS) laid by the FSSG. The 65-mile and 20-mile sections were laid parallel to the intended site of the Army inland petroleum distribution system (IPDS). Where it takes the Army weeks to lay the IPDS, which carries a much greater volume, it takes the Marine Corps only days to lay the HRS over the same distance. The successful installation of the HRS and the uninterrupted fuel provided to the fuel farms at two locations in Iraq were the key to the rapid advance of both I MEF and V Corps.

Marine Wing Support Group 37's (MWSG–37's) rapid and efficient establishment of forward operating bases and forward arming and refueling points was crucial to the ability of 3d Marine Aircraft Wing (3d MAW) to support the rapid advance of 1st Marine Division and Task Force Tarawa. Their performance validated the value of retaining the MWSG capability within 3d MAW.

Detailed planning and coordination at all levels ensured that both ground and aviation ammunition were provided to the MEF as needed. It was a team effort that was watched closely as its availability was based on strategic sea- and airlift of crucial munitions as well as movement by both ground and air from ammunition supply points in Kuwait to the forces in Iraq. This detailed coordination and flexible execution ensured that our Marines did not run out of ammunition.

The first employment of the newly fielded forward resuscitative surgical system (FRSS) filled a void in our casualty treatment. Six of these systems with the two pre-operative and two post-operative beds (litters on stands) were employed. Each has the capability to treat 18 patients in 48 hours without resupply. These innovations in combination with the shock trauma platoons, surgical companies, fleet hospitals, and a detailed casualty evacuation plan, significantly enhanced the quality of medical care provided to combat casualties.

Despite our successes, we had challenges that kept all logistics planners quite busy. It was the challenges and the potential remedies that required our careful and logical attention to find effective solutions without hidden agendas. I will list some of the most important causes in a condensed fashion as the details must be analyzed carefully to find the correct solutions.

Logistics Challenges

Unity of effort. In support of I MEF maneuver forces there is a single air wing (3d MAW). For ground logistics, 1st FSSG from within and Marine Logistics Command (MLC) that reported to Marine Forces Central Command (MarCent) supported I MEF. This was found to be an inefficient and complex design that required` frequent discussions to work out gaps and seams in support. It created the need for excessive liaison officers. At CFLCC C–4 and the 377th Transportation Command, there were several representatives from both the MEF and the MLC as well as a MarCent liaison officer. On some issues, this caused confusion as to who represented the Marine Corps position as each would present the issue from their perspective. The MLC concept, role of the MEF G–4 in coordinating logistics issues, and the role of the component G–4 need to be reexamined to improve logistics support, reduce liaison officer requirements, eliminate duplicative efforts, minimize gaps in logistics capability, and ensure the Marine Corps speaks with one voice on logistics matters.

Asset tracking and logistics automated support system (ATLASS). I MEF forces use ATLASS I, and II MEF forces use ATLASS II (Plus) for ground supply matters. During planning efforts and coordination with HQMC, it was decided that I MEF forces would continue to use ATLASS, and MLC would use ATLASS II (Plus). As a result, I MEF units had zero visibility on repair parts status for any item passed to the MLC and no confidence in our Class IX system. The Marine Corps must never again deploy forces to combat with two systems that cannot effectively communicate between each other and thus provide commanders the ability to project readiness status.

Intransit Visbility (ITV). ITV is still not effective on the battlefield. The most forward CSSD on the battlefield is still unable to tell its supported command the status of needed repair parts. This was, in part, due to the two different ATLASS systems being employed. It was also compounded by the fact that once the part was placed in the ground or air transportation pipeline, visibility was lost until receipted for by the most forward CSSD. In some cases, that took days due to the volume of ammunition, food, water, fuel, and other classes of supply being pushed forward to a force covering ground at a rapid pace.

Repair Parts. The time it takes to unload Class IX supplies from containers into supply warehouses, mobile load them to move forward, and establish them again does not effectively support the rapid movement of combat forces. It is too time consuming to move, establish, reestablish, and effectively access parts. The Marine Corps needs to develop containers that will tell us what is in them and where. Easy access is required. Major parts blocks need to have computerized locator cards and durable carousels. Additional analysis must be conducted on critical secondary reparables and repair parts to ensure that we have the correct parts needed for combat operations.

Medical Supplies (Class VIII (A)). Providing effective Class VIII support needs significant improvement in several areas. The contents and distribution of authorized medical allowances (AMALs) needs to be reviewed and revalidated for both combat operations and the preparation time prior to the commencement of combat operations that result in the consumption of supplies. Further, the support from Theater Army Medical Command needs reevaluation and coordination between the Marine Corps medical and logistics planners and their counterparts in the Army to ensure Marine Corps requirements for resupply are included in Theater Army Medical Command planning. The Marine Corps uses ATLASS for processing medical supply requests, but the Army uses a module from the Theater Army Medical Management and Information System (TAMMIS) called the TAMMIS Customer Assist Module (TCAM). TCAM and ATLASS are not compatible and required the use of excel spread sheets to ensure an effective method to provide requirements.

Contracting officers. The combined contracting office of MarCent, I MEF, and FSSG contracting officers wrote over 3,000 contracts worth over $260 million. With our increased reliance on host-nation support, I MEF needs additional officers and staff noncommissioned officers trained to perform this crucial mission. Their early deployment is critical and is effective and efficient for reception, staging, onward movement, and integration as well as sustaining the force for the duration of the deployment.

Truck fleet. The Marine Corps truck fleet needs to be analyzed in concert with potential future missions. One size does not fit all. Although a capable vehicle, the medium tactical replacement vehicle (MTVR) does not meet all requirements. Movement of smaller loads and restricted road networks due to road width, bridge capacity, etc. require access to trucks smaller than the MTVR but larger than the high-back HMMWV. We also need a replacement for the logistics vehicle system and a sturdy trailer for the MTVR.

Line haul support. OIF demonstrated that the Army has barely enough line haul support to take care of itself. Both 1st FSSG and MLC were required to rent a considerable commercial transport fleet to assist the movement of equipment, supplies, fuel, and water. Heavy equipment tractor trailers (HETTs) were a major shortfall in theater that required extensive coordination to obtain needed transport for M1A1s, AAVs, and D9s (armored bulldozers). Lack of confidence in line haul support caused the MEF major subordinate commands (MSCs) to mobile load in a significant amount of equipment and supplies that probably should not have been mobile loaded. This exacerbated the line haul shortfall. The Marine Corps must reevaluate its dependence on Army line haul support and its structure of motor transport within the Reserves.

FSSG communications. The FSSG does not have sufficient communications assets to effectively communicate with its CSS subordinate elements. It needs a significant increase in assets with far greater range than they currently possess. There must also be a significant increase in communications assets to allow convoys to effectively communicate with traffic control points,

supported units, and air assets dedicated to convoy support.

FSSG organization. As I recommended to the Force Structure Planning Group in 1998, I again recommend that the FSSG be organized in a similar fashion to the MWSG. The FSSG should be organized into a direct support regiment providing CSSDs to the MEF and a general support regiment that includes those assets that are not required or not practical to be mobile.

Logistics reporting. Logistics reporting to the MEF once combat commenced was problematic. Workload, at all levels, as well as communications limitations while units are on the move contributed to this situation. On several occasions MEF planners made judgment calls on the movement of fuel, ammunition, food, and water. Overall, we called it right, but it was a challenge. The Marine Corps must analyze the reports required and develop a more robust and efficient method to transmit crucial data to logistics planners supporting the maneuver forces.

Industrial base. Department of Defense (DoD) coordination with the industrial base needs significant improvements regarding critical military unique items that are needed to sustain combat operations. Batteries, replacement engines, drive train components, seals, and rifle and pistol magazines are just a few examples. In some cases, the older the equipment, the more coordination is required. Single source components are another issue that requires close supervision by DoD.

Other Observations

There are other issues that impact logistics of the MEF that I will address briefly.

Reserves. Structure and training of the Reserves are two issues that require close examination. The structure of the Reserves has seen some changes, but the current structure is basically the same as it has been since the Korean War. We need to examine which assets were mobilized for Operations DS/DS and Operation NOBLE EAGLE/OEF/OIF and which ones were not. We need to compare the capability shortfalls that currently exist in the Active Component as well as what that force will look like in 10 years and the missions it may be called upon to execute. It is time for an evolutionary change in the Marine Corps Reserves. Do we need additional line haul assets, HETTs and HETT operators, communications assets and personnel, and personnel to flush out tables of organization and ever-growing liaison officer and staff augment requirements? Training should no longer be limited to monthly weekend drills and a 2-week active duty for training period. Those reserve units that augment active duty staffs must have the flexibility to drill several times a year at a frequency that permits significant interaction with their active duty counterparts.

Coalition support. Many countries are willing to join our effort in the global war on terrorism. Many of them do not possess the logistics and communications capability to be self-sufficient. They require varying ranges of assistance that are tied to different languages in bilateral or alliance agreements with the United States. The effort to coordinate the logistics support to our allies appears to be growing, and the Marine Corps must be prepared to kick in its fair share.

Summary

The topics I have discussed in this article are merely some of the most important issues from a MEF G–4 perspective. They are not all of the observations that were made by the I MEF G–4 staff. There are some that will agree or disagree with my concerns, observations, and recommendations. This is not a disjointed analysis of MEF logistics; it is a snapshot overview of how I view MEF logistics issues. We are still working reveille to taps supporting the MEF forces that are in Iraq, assisting the deployment planning and execution of coalition forces, ongoing retrograde of I MEF forces, transfer of equipment to the special purpose Marine air-ground task force for MPF reconstitution, and closing beddown facilities in Kuwait. Detailed analysis of all issues is what the Marine Corps must accomplish as quickly as possible.

Perspectives from the key logisticians from the Joint Staff, U.S. Central Command, HQMC, MarCent, MarCorSysCom, MatCom, I MEF, and MEF MSCs must all be properly evaluated to ensure that we act upon the lessons learned in a method to timely and effectively improve logistics support to the Operating Forces. We must appropriately apply lessons learned to potential conflicts of the future and not plan for the last war. We must analyze current events in conjunction with the operational planners to determine the most likely scenarios that Marines will face. It is there that we must leverage technology and common sense to support the Marine on the battlefield.

For every logistician of any rank and any Service who contributed to I MEF's success during OIF from in theater or from the continental United States, I salute you. Each of you played a part in making Marine Corps history. It is a privilege and an honor to have served with you, and there is no better way to leave the Corps after nearly 31 years of active duty than to have been part of the mission we have just completed. This quote, that I have used for years, is applicable to the Marine Corps analysis of our logistics successes and challenges that remain—"Not on my watch nor the watch that follows me for I will ensure it is properly trained."

US MC

>*Col Blackledge is the Assistant Chief of Staff, G–4, I MEF.*