**UNITED STATES MARINE CORPS**

3D BATTALION, 7TH MARINES

REGIMENTAL COMBAT TEAM-2

MARINE EXPEDITIONARY BRIGADE-AFGHANISTAN

UNIT 41575

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 In reply refer to:

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From: Commanding Officer Third Battalion, Seventh Marines

To: Commanding Officer Regimental Combat Team Two

Subj: THIRD BATTALION, SEVENTH MARINES OEF 10.1 AFTER ACTION REPORT

1. Originally the battalion was assigned Deleram, Golestan, Buji, Bakwa and Barrows. The battalion headquarters was based in FOB Deleram 1 with a PMT assigned in the town. Patrol Bases Golestan, Buji with OP’s North and South were assigned to India Company. Patrol Bases Bakwa and Barrows assigned to Kilo. Lima Company was designated as the maneuver company for the battalion and operated to the south and east of our TAOR. For the middle part of the deployment the battalion focused efforts in eastern Washir, southern Now Zad and the Musa Qalah Wadi. The remainder of the deployment, the battalion found itself deployed in the Sangin AO, originally occupied by 40 Commando Royal Marines.

2. The first three months of the deployment, steeped in classic COIN operations, included wheat distribution, security patrols, census operations, daily/weekly Shuras and mentoring both ANA and ANP. Lima Company (designated as a maneuver company without a defined company battle space) experienced more kinetics by operating in less mature (COIN) environments to the East. Minimal direct fire engagements were experienced during this period, however almost immediately we encountered IED’s. Lima, Kilo and Weapons Company rotated operations in southern Now Zad and the southern Musa Qalah wadi. The last three months of the deployment were spent in and around Sangin; to include the southernmost portion of the Musa Qalah wadi. The Sangin area of operations was distinctly divided into four areas due to the terrain and vegetation. The southern green zone (SGZ) running from FOB Jackson south and from the Helmand River east to highway 611. The northern green zone (NGZ) extended from FOB Jackson north into the upper Sangin valley. It was bounded on the west by the Helmand River and on the east by highway 611. The populated, urban area to include the Sangin district center ran along highway 611 out to the eastern desert area. This eastern desert area made up the fourth area of operation. This experience was totally different from our first months in theatre. Two words best describe our Sangin mission; expeditionary and kinetic. Combined arms, close combat and patrol base operations are how we waged the fight in and around the AO.

Maneuver

**TOPIC:** **RSO&I CAMP LEATHERNECK**

**DISCUSSION**: RSO&I training was disjointed and uncoordinated aboard Camp Leatherneck. The need to supplement the coordination of each company’s training by the battalion was immediately identified. 3rd Battalion, 4th Marines sent a RSO&I team to Camp Leatherneck comprised of a Captain and Master Sergeant that essentially ran the BZO range (which helped immensely). However, our major problems came in the form of transportation. Lift to and from the CIED Lane and flight line (both located on Camp Bastion) was the leading causes of friction during RSO&I. Trucks and buses were frequently late or non-existent for events leading to delays in training or cancelations of that day’s events. For some of our companies these breakdowns in coordination led to whole units barely making flights into the AO. During that period transportation was solely supported by CLB-6. Coordination between the RCT-2 LNO office and CLB-6 appeared to be broken, which had trickle-down effect on our battalion.

**RECOMMENDATION**: Civilians were awarded a transportation contract and it seems to have resolved most issues. I recommend moving the CIED lane IVO the BZO range to illuminate the need for transportation and a round-robin day of training increasing throughput and reduce overall length of RSO&I. Also agree with RSO&I execution at D2 (RCT-2) which will take an overwhelmed LNO office out of the equation (RSO&I responsibilities). Incoming units must understand the need for an Officer and SNCO/NCO (recommend (2) NCO’s) to arrive with ADVON IOT facilitate coordination and execution of RSO&I. Again, the RCT-2 LNO office is overwhelmed by normal day-to-day operations and does not possess the appropriate staffing (a Cpl currently) to effectively execute RSO&I.

**TOPIC:** **MATV/MRAP VEHICLE OPERATOR ISSUES**

**DISCUSSION**: Due to limited vehicle resources available on 29 Palms and the need for ISS certification on the MRAP (unavailable during our PTP), created an enormous strain on the RCT-2 MT staff and delayed the movement of our battalion’s drivers. RCT-2 MT staff did everything in their power (to include unscheduled night driving courses) to certify as many drivers as the undermanned staff could process. Even through these monumental efforts our drivers initially had numerous issues handling these vehicles both during the day and (even more so) at night. Placing the responsibility on units to train drivers is ridiculous when the vehicles aren’t available until EMV.

**RECOMMENDATION**: A comprehensive study/CCRB of the Marine Corps’ licensing requirements is in order. Beefed-up schools (in regards to vehicles and staff) should be located at each base and a course steeped in off-road and night driving should be a focused and crucial requirement. Licensing in theatre should also be revamped to eradicate the need to license on HMMWV’s (that aren’t authorized out of the wire), taking crucial behind the wheel time away from the more important vehicles (MRAPS, MATV’s and 7-Tons). Mileage requirements (logs) which are virtually never kept in theatre should be abolished and a Marine that is licensed (regardless in CONUS or in Theatre) should not be required to “go back to school” because of not having a log. Units should conduct a thorough look at who they are assigning as drivers and look at an individual’s past experience (was he a farm kid that drove heavy equipment or a city kid that drove a Honda Civic?). SOI should license all Weapons MOS’ and five percent of 0311’s to reduce the strain on units during the PTP. Also, 1.5% ratio of drivers to vehicles should be a minimum requirement for deploying units (based on theatre numbers).

**TOPIC:** **MID-RANGE AND LONG RANGE SHOOTING**

**DISCUSSION**: Over the past several years CMP has led the way in training (PTP requirement) focusing mostly on 100m and closer shooting. This is extremely useful in urban fighting as well as in areas where the fight is close in. However, the need for mid-range (200-300m) and long range (400m-600m) is mandatory. The enemy knows his weapon systems and employs them to their capabilities (based on terrain). In open areas he will engage at the max effective range of the weapon he employs 300m-1700m). Due to this tactic, many Marines are not applying the fundamentals and utilizing their individual and crew serve weapons (MMG’s/HMG’s and mortars) to their capabilities.

RECOMMENDATION: Continue to train CMP but a greater focus on table IV and unknown mid and long range shooting should be executed. Stress shoots and the use of steel at 300m to 600m allows Marines to build confidence in their shooting ability as well as confidence in their weapon system. This confidence was put to the test on numerous engagements in the open desert during our combat experience in Musa Qalah Wadi and areas North of Sangin.

**TOPIC: ROCKET AND MISSILE GUNNERY**

**DISCUSSION**: Every type of ground launched rocket and missile was shot during our deployment. With that said, the allotment of rockets available to a battalion during the PTP is not up to par with what is needed to become proficient, as is evident every EMV. Fortunately, the trainers (BST) for the SABER and Javelin are top notch and prepare the Marines very well.

**RECOMMENDATION**: As the story goes, more rockets would be fantastic; however, the reality is we’ll never have enough rockets nor missiles to train the number of Marines that we think need the work. With that said, the BST for both the SABER and Javelin should be used constantly by Marines to include cross training for individuals for use in theatre (observation).

**TOPIC: SABER SYSTEM**

**DISCUSSION**: Superb system and used extensively during the deployment. The system was not used in a vehicle due to lack of converted MRAPS in theatre. Quite frankly, the system probably would have been dismounted 50% of the time even if the conversion was available due to the terrain and inability of the vehicles to make it to the best terrain for employment. Dismounted use was challenging due to the sheer weight and numerous components in bulky/unwieldy containers. The requirement of Quiet Power is a must and the only way to keep the batteries charged through the use of a vehicle. Dismounting the system required our SABER teams to refine the fighting positions throughout the deployment to enhance crew survivability (one gunner was injured and a SABER TAS destroyed by 12.7mm round). The sight is extraordinary, however, unless employed in an elevated position the gunner will not see through the first tree line limiting the capability dramatically. The Anti-Armor round and the Bunker Buster round were effective against each target we engaged; however, both rounds are not optimal for the engagements of massed enemy personnel in tree lines.

**RECOMMENDATION**: Not having the vehicle upgrades forced us to transport the components (minus the TAS) and missiles in a trailer. The weight of the system and the amount of components that come with it, require at least four or more individuals to move the weapon into position (at times more than 200m from a vehicle onto high ground). The components need to have a man pack system developed, either with backpack frame and/or designing lighter equipment, requiring less effort to move over terrain when dismounted. The batteries are the second biggest problem associated with the system. Moving these large unwieldy batteries from the truck (where they would be charged sometimes hundreds of meters away from the position) was a trying and at times very dangerous. I recommend R&D a solar powered system be developed that would reduce weight/space and generate the power to recharge the batteries at the position. The SABER position was dug using the Machinegun “U” as a guide. Due to back blast concerns the system platform would be elevated and supplemented with sandbags in the front of the position to increase survivability but not restrict fires. The crew (minus gunner) would be in the shoulder deep portion of the hole with the Command Viewing Screen, extra missiles and their personal gear. The position was concealed with cammie utilizing two pieces of large netting that were attached in the center of the position with 550 cord threaded through both nets to hold them in place until the need to fire. Challenges were to emplace the net in a way to contour the slope of the ground. When the time to fire the system was needed, the 550 cord would be pulled out of the netting and the net would be pushed off the sides of the system allowing it to be clear of the missile launch and back blast not exposing the crew members to enemy fire. Seven such positions were constructed over a thirty-five day operation. Each position would be completely constructed by a four man team over eight to ten hours under the cover of darkness and continually improved throughout the time in that location. Positions would require a minimum of 100 sandbags, two 20’x 20’ pieces of camouflage netting and a requisite number of poles and spreaders. Construction of these positions required long handled shovels, e-tools and picks. When the time came to displace, it would take a team an average of two hours to fill in the position and move all the equipment back to the vehicle. The TAS is an exceptional sight; however, the addition of the 24 power magnification to the night sight would be optimal. The rounds used against dismounted area targets were the AA and BB rounds. These rounds created EKIA and EWIA however the development of a HE Anti-personnel round would greatly enhance the lethality and flexibility of the system. Engaging concentrations of enemy forces around a crew-serve weapon (normally in tree lines) were primary targets, as well as long range targets (generally IED emplacers). A HE Anti-Personnel round that would detonate in a 360 degree radius and comprised of shrapnel would generate more EKIA and EWIA in before mentioned situations.

**TOPIC: DISMOUNTING MMG’S AND HMG’S (TRIPODS AND T&E’S (SL-3))**

**DISCUSSION**: SL3 with regards to Tripods and T&E’s were lacking. This had a dramatic effect on our accuracy when engaging targets at over 1000m when dismounted. The Iraq mentality that guns on trucks never get dismounted is not accurate. There is terrain that a vehicle cannot negotiate, but requires a HMG or MMG to occupy. This was done on more than two dozen occasions and is still being done now in PB’s and FOB’s.

**RECOMMENDATION**: SL3 must be required for each HMG and MMG IOT complete the mission.

**TOPIC: MRAPS**

**DISCUSSION**: Equipment that has saved lives, maneuvered in area’s that most tactical vehicles couldn’t. The storage within the open backend can hold a few DOS of food and water easily.

**RECOMMENDATION**: The vehicle doesn’t have a trunk! A tactical vehicle without an enclosed trunk is ridicules. Oshkosh should design a trunk that can be accessed (using doors) from the top, sides, rear and from inside the crew compartment. Quiet the vehicle! For a “tactical” vehicle it’s as loud as an AAV! Move the exhaust pipes to the rear and elevate them (to allow for fording). Move the internal door latches to another location (the natural place to put your arm rests on the door latch). Cut the back door differently to allow for easier entry and exiting (an additional six inch cut at the lower forward portion of the body would allow an individual in full gear to exit and enter the truck easier! The plastic “grab bars” to get in and out of the vehicle are substandard and break easily (seriously, plastic!). The vehicle was designed for quick trips (hour max), not four or twelve or thirty hour hauls! Extending the body (width) to the wheel wells would make more room for the passengers and be a bit more comfortable when dealing with these long hours. Increased width would also provide the gunner more room to maneuver the turret. The rear seat should be lifted four inches to allow for greater leg room for dismounts (leg cramping is common on long patrols). Enclose the turret! After all these years of trying to find the best armored truck we still have an exposed/open turret?! Convert the turret to an AAV style turret. Design a trailer that’s compatible with the truck. The MRAP is a tall vehicle that requires a high trailer (trailers are mandatory for long operations). Match the tow points to those of the seven-ton to allow the use of one type of tow bar. The new tow bar (aluminum) is absolutely worthless! Design a seat that has a four inch cut in the back portion to allow a Camel Back to fit in and allow the occupant to sit comfortably, lower lumbar is a killer on long periods trapped in that seat! Window position on the back doors could be enhanced to allow greater view of the ground 5 meters from the truck. The vehicle is awesome, but the rush job to get it into the fight left a lot to be desired. It absolutely has saved lives, now we need to get the manufacturer to upgrade the vehicle and this time, get it right for the money!

**TOPIC: FOCUS ON THE BASICS**

**DISCUSSION**: Our deployment morphed from COIN (wheat distribution and MedCaps) to full scale kinetic operations utilizing the full gambit of weapon systems (every type of weapon in the battalion’s inventory was used), air (fixed wing and helicopter assets, both for resupply (air drops), lifting troops and close air support). Men lived in fighting holes for over sixty days, fought in corn fields, compounds, tree lines, open desert, high ground and low. When the terrain and enemy situation changed so would the unit TTP’s. However, the foundation for all operations could be traced directly to basic small unit operations (Fire Team and Squad).

**RECOMMENDATION**: Focus on Weapons Company and Weapons Platoon proficiency. We had to “re-build” our Weapons Platoons after our last OIF deployment because they had become another Rifle Platoon. Our Weapons Company Marines had become nothing more than a MAC. Our proficiency within our weapons MOS’ was lacking, however a concerted effort was made to “rebuild” and reinstitute our weapons MOS’ and it paid off! Fire Teams and Squads within the Rifle Platoons must have the time and focus placed on them to learn the basics through live fire evolutions, PEX’s, and Defense Operations (require the Marines to dig in and often, it’s a lost art). If I had it to do again, I’d capitalize on the Platoon and below training and leave the Company level until EMV[[1]](#footnote-1). We did this last PTP, mainly because we executed EMV very early in the schedule; however, I truly believe that proficient small units create more dynamic companies.

**TOPIC: NVG TRAINING**

**DISCUSSION**: TSULC and ISLC are great T3 venues and give their students an opportunity to hone their skills with regard to utilizing Night Vision Goggles. However, the issue still remains that most young Marines are not proficient with regards to using their equipment. Focusing for near and far recognition as well as the ability to move (whether walking or running) with NVG’s is difficult without common knowledge and constant use of the optics.

**RECOMMENDATION**: Night work is critical and mandating the use of NVG’s during those times (through all moon phases) is necessary to build confidence. Also, developing NVG “Obstacle Courses” that work all the basic functions of the equipment over varied terrain (as a timed event) will prove beneficial. Also, CIED Lanes are normally only conducted during the day, conduct at night with NVG’s IOT develop that required theatre skill set.

**TOPIC: DMR VS. MK12**

**DISCUSSION**: The advent of the MK12 within the Infantry Battalion has provided accurate engagement capabilities, however it has not enhanced lethality at longer ranges. The rifle squad is currently limited to a 500m (+/-) effective range. The number of engagements at 600m and beyond (1700m) encountered by this battalion were numerous. The MK12, used against enemy fighters within 600m is lethal and effective, however when the situation warranted shots to 800m (+) no capability existed within the rifle squad to accurately engage the enemy.

**RECOMMENDATION**: The DMR should replace the MK12 as a squad level marksmanship rifle. With this asset the rifle squad will now accurately engage targets beyond 500m, and effectively bridge the gap between platoon and company Weapons Platoon assets (MMG and mortars).

 This deployment was the most dynamic of my career. The “getting back to basics” expeditionary mentality and combined arms did nothing more than re-enforce a more conventional approach (now considered old school) to training. EMV has an excellent package and I truly believe that they are doing it right (very much like the old one, shocking). Units that focus too much on the periphery “nice to haves” of COIN are going to come up short in this AO. Not until this battle space is secure enough for the local population to take the chance to side with us, units must be “classically trained and equipped for battle.” Sangin is not Ramadi 2008 or 2009; it is Ramadi 2005-2006. It will remain a very hostile and violent location until (like in Ramadi); more forces can be moved in to secure it. The basics of fire and maneuver, and fire and close combat are key to taking the fight to our enemy and keeping Marines alive!

**Topic: COLLABORATIVE TOOLS**

**DISCUSSION**: CPOF, BFT, and MiRC are all heavily utilized in the battalion combat operations center (COC). CPOF is the tool that we currently use as our Current Operational Picture (COP). Only 4 of the COC Marines are trained to operate this system (WO, WC, AIRO, S-2, CLIC Marines, and FIRES). It is highly recommended that units arrive with as many trained personnel as possible. Additionally, while CPOF was heavily utilized in the battalion COC, limited data capability at the company level makes it difficult or impossible to employ. C2PC and other systems taught and used at Spartan Resolve and TMIC were not of use for BN level personnel. Systems such as Ventrillo do enable a quick FSR response, but in a BN COC it is just one more thing that could fail in the middle of a fight.

**RECOMMENDATION**: Emphasis should be put on the basics when conducting COC operational training. Power and systems failure is a daily occurrence in the outer FOBs, COPs, and PB’s. Map board and green gear radio training are essential.

**Topic: MEDEVAC PROCEDURES**

**DISCUSSION**: Lines 1,2,3, and 8 will get the bird spinning for an urgent casualty. However, the ZMIST must follow quickly in order to get the bird wheels-up. Many times, the initial report is incorrect.

**RECOMMENDATION**: The initial report should always be double checked. Zap information should be verified before the patient is put on the bird, and again when the patient arrives at his destination. The Leatherneck LNO should check the zap info on the PCR against the patient that actually arrives at the hospital before the PCR is submitted.

**TOPIC: SPECIAL SKILLS**

**DISCUSSION**: Develop a database that categorizes your Marines’ special skills before leaving on deployment.

**RECOMMENDATION**: Mechanics, electricians, paramedics, heat and air specialists, carpenters, generator mechanics, interpreters, and forklift drivers are in short supply, and coordinating for external support can take weeks. 3/7 was able to send some Marines to generator and forklift schools prior to leaving, but we still do not have nearly enough to cover the entire battalion AO.

**TOPIC: BREACHING**

**DISCUSSION:** While moving to objectives and gaining a foothold in different objectives, explosive breaching has allowed the maneuver unit a safe axis of advance into the named area of interest. Ground commanders have used everything from Assault Breaching Vehicle (ABVs), tow behind Mine Clearing Launched Charges (MICLCs), and Anti-Personnel Obstacle Breaching Systems to create a cleared lane for their advance on the enemy positions. All of these systems have paid dividends in creating a cleared lane for the assault and then later allowing for a safe

lane for resupply and causality evacuations. In the current operating environment, it needs to be assumed that all likely avenues of approach are IED’d. The IEDs in these cases need to be treated as nothing more than a minefield or obstacle belt and treated as such. As engineers we are trained to reduce obstacle and minefields to create a mobility corridor that allows the maneuver element unimpeded movement during an assault. All operations should be treated and a scheme of maneuver should be developed to incorporate these principles.

**RECOMMENDATION:** The basic tenets of breaching should be followed when moving in on the objective. Proper suppression, obscuration, and security needs to be achieved to allow for a proper breach. As seen with the success of the ABVs breaches in the Northern Green Zone, when these conditions are set it allows for smoother transition into the assault phase of the operations. Companies were able to achieve proper obscuration using 60mm mortar tubes, while targeting likely and known enemy firing positions. The advantage of using ABVs is that they are able to properly proof and mark the lane for follow on forces. The downfall with the ABV is that is maintenance intensive and very tough to support logistically. Leaders need to be aware of all the logistical support they require from fuel, parts, and resupply. ABVs were initially designed to be used in a dry and desert environment. When used in farmland and wet environments, as with any tracked vehicle, they are not as maneuverable and have a tendency to throw track when operating. When they throw track, this causes an immediate maintenance stand own for up to four hours. This will cause security element to be stagnate on site and lose boots on the ground for the assault. Proper coordination should be done prior to departure to ensure all leaders are aware of the capabilities and limitations of the ABV prior to crossing the LD.

When ABVs were not available, the engineers organic to the battalion were able to launch a MICLC from a tow-behind trailer. This is nothing new to the breaching operations, but since the fielding of the ABV it is less used. Engineers are trained to complete this task during PTP work ups and commanders should be encouraged to use this if ABVs are not available. The only addition for using this method is that heavy equipment is now brought into the operation for proofing, marking, and improving the breach lane. This tactic is more time consuming, but is an acceptable substitute to the ABV. With the introduction of the heavy equipment it also allows for the increased ability to improve the lane. It does however require troops on the ground to properly proof and mark the lane for follow on forces.

APOBs provide a man-portable asset for breaching that can be used at the on scene commander’s discretion. It provides a very small path that will allow for dismounted troops to push through and seize objectives. The only downfall with the APOBs is the metal leftover from the blast. When an engineer moves in to proof the lane, he may receive false positives on his detector that can slow the follow on forces. The other problem is that in tight areas, the APOBs are not the most accurate when launched. If the lay of the line charge is bad, the effects and lane to the objective may not be what the commander is looking to achieve.

Commanders need to ensure they consult the senior engineer on all capabilities and limitations of each breaching asset to ensure they are used properly while creating a lane for the assault element.

**TOPIC: GAP CROSSING**

**DISCUSSION:** While operating in the green zone maneuver elements required the ability to cross both wet and dry gaps that were not passable with military wheeled vehicle. Engineers used a variety of methods to counter these mobility hindrances. Rapidly Employed Bridges (REBs), culverts, improvised bridges, and land bridges have all been emplaced with varying degrees of success to allow maneuver units the ability to emplace heavy machine guns, conduct resupplies, and evacuate causalities.

**RECOMMENDATION**: During the initial planning of operations it is imperative for the senior engineer to conduct a proper IPB with the intelligence section to identify obstacles that will prevent maneuver units mobility while mounted in vehicles. Once they are identified he needs to work with the maneuver commander on what effects he looking to achieve on the area and what support his scheme of maneuver the best. If time is not available for a deliberate crossing, a land bridge is the most suitable to not slow momentum for the assault. Heavy equipment will be necessary to create and land bridge by moving large amounts of earth into the gap to create the crossing point. Following the initial assault the land bridge will need to be removed and a proper crossing, a bridge or culvert, be put in its place in order to allow for the water to continue to flow for local farmers. When culverts are installed they need to be reinforced concrete up to 3 inches thick in order to support the weight of current military vehicles. The best option for crossing gaps in a quick manner is using the REB. The REB is capable of being launched in 15 minutes and will span a gap up to 13.5 meters wide. It is classified as a 55MLC, which will allow everything in the Marines Corps to cross the gap with the exception of an ABV and Abrams tank. REBs are a newly fielded gear by the Marines and all commanders should be made aware of what they can do to increase mobility.

**TOPIC: ROUTE IMPROVEMENT**

**DISCUSSION:** Routes in Afghanistan were not designed to continually support the weight of military wheeled vehicles. With the amount of the driving we continually do on these routes, they become degraded, turning into dust bowls. Route improvement should be done if a route is identified as a major supply route so that they do not become impassable during the wet season.

**RECOMMENDATION:** While conducting route improvement within the green zone, engineers utilized NeoWeb, a product that is emplaced on top of a current road, spread out and then filled that holds the integrity of the road together preventing the moon dust from being created. NeoWeb not only keeps the integrity of the road together it also hinders the emplacement in IEDs on the road. NeoWeb allows the ground to become extremely hard packed puts plastic webbing about every eight inches that does not allow it to be dug in. It is recommended that when key MSRs are identified the route is improved not only to increase mobility but also prevent the emplacement of IEDs.

**TOPIC: MANEUVER AGAINST AN ASYMMETRIC ADVERSARY**

**DISCUSSION:** The Taliban in Afghanistan primarily uses guerilla tactics. The majority of all engagements with the enemy were systematically planned and coordinated, with an emphasis on complex ambushes. The Taliban used extensively the micro terrain and the civilian population. Similar to the Vietcong who thwarted American artillery by staying within danger close ranges, the Taliban stays close to the population in order to defeat our overwhelming fire superiority and separate us from the population. The enemy has extensive freedom of movement due to his knowledge of the local terrain. This also allows him to pick the ground he wants to fight from. He often identifies natural lines of drift and will use or create canalizing terrain to set Improvised Explosive Devices (IED). This is not always as obvious given the complexity of the village and farm field layouts. We have seen stacks of dried poppies specifically laid in field to create choke points for patrols. We have also seen downed power lines and ordinary objects place to direct patrols on to IED’d foot paths or into IEDs placed in doorways, narrow streets, irrigation dikes, and at water crossings. The enemy will try to place its forces in multiple firing points with preplanned egress routes and will often have their weapons pre-staged to avoid coalition surveillance. They will surround these firing points with IED and often use local FP keepers to provide intelligence on the area and act as guides for out of area fighter. Often they will use an unarmed clearing force to interact with coalition patrols in order to delay their advance and give time to other fighters to occupy firing points along the patrols advance or perceived retrograde route. They will also front-lay or back-lay IEDs. In some area we have seen children used as clearing forces to disrupt Coalition Force’s (CF) ambush patrols, spot for Taliban fighters and even initiate pull-string IEDs. The bottom line is the enemy is tactically sound, well rehearsed, and patient. However he can be defeated with tactical patience, controlled aggression, and excellent patrolling tactics.

**RECOMMENDATION:** What worked for us were solid patrolling techniques. In order to mitigate the enemy’s ability to maneuver on our patrols we employed satellite patrolling techniques and leave behind elements. The majority of all patrols were of multiple size (at least half a rifle platoon) augmented with six to eight Afghanistan National Army soldiers. This size allowed us to identify choke points along routes, set in support by fire positions, and conduct satellite patrols that could sustain casualties. Additionally, the size of the patrols allowed us to envelope likely ambush location by gaining depth in both urban and rural environments. The basic principle that everything is an L-shape ambush with a base of fire and a maneuver unit to assault with was strictly adhered to. We treated every operation as if we were fighting in a 360 degree environment. Meaning that during the planning process we always took into consideration ingress and egress routes. With consistent patrolling at least two to four patrols in a single 24 hour period in each platoon’s sector we quickly wore out these routes. Deliberate planned for the picketing of Lines of Communication (LOC) along ingress routes in order to secure a way out of both urban and rural terrain was often done. Additionally on some operations we deliberately seized egress routes early on in order to facilitate re-supply and withdrawal. This took place at all levels from squad to company operations. The majority of platoon and company operations were conducted in a modified V formation. With at least a squad or a platoon providing over watch and rear security. The swarming of forces from several directions allowed us to often times encircle the enemy and control the tempo and allowed us to expose his firing positions.

**TOPIC: BATTLE DAMAGE ASSESSMENT**

**DISCUSSION**: The enemy has an effective casualty evacuation plan. We have witnessed, via air assets, ground evacuation by enemy dismounts of a casualty to a vehicle. We have heard reporting via Radio Battalion that has confirmed the elimination of enemy threats. Several of our attempts to conduct a BDA on foot, even if the area was identified as a firing position, have resulted in no find, not even of shell casings. Even if the area was under observation the entire time, BDA’s were often unsuccessful.

**RECOMMENDATION:** BDAs are not reliable for evaluating the effects of fires unless the results of an engagement are directly observable. If the enemy so much as falls into a canal or behind some cornstalks, any evidence of his presence will most likely be removed prior to the arrival of Marines. Frequently the conduct of a BDA is not justified due to this reality as well as the likelihood that the enemy has placed IED’s in the area from where they were attacking. Per the Tactical Directive, BDA’s are a requirement. Before engaging the enemy, specifically using air assets and indirect fires, a unit must consider whether a ‘boots on ground’ BDA will be feasible.

**TOPIC: POSITION REPORTS (POSREPS)**

**DISCUSSION**: Accurate and timely posreps are critical to clear close air support and indirect fires, and to effectively source reinforcements. However, the use of a ten-digit grid is deceptive when plotting positions, as this gives the position of a single individual in what could be a platoon position. It is possible for a unit to hold its position and give two different posreps if the unit leader has moved from one flank to another. It is also possible for a unit to appear outside of a surface danger area based on a posrep but actually have troops in significant risk of blast effects.

**RECOMMENTAION**: Large units need to describe the troop laydown in addition to a posrep, or provide multiple grids to encompass the entire force. This can be facilitated by equipping subordinate unit leaders with GPS capability. Other methods of reporting positions should also be employed. Grid Reference Guides, talk-ons, and basic land navigation skills will provide a backstop for faulty GPS devices.

**TOPIC: MARKSMANSHIP TRAINING**

**DISCUSSION**: In recent years Close Quarter Battle training has received increased emphasis, but this does not reflect the typical enemy engagement in Afghanistan. Insurgents typically engage from 200 – 500 meters through treelines or from distant rooftops. They also shoot from locations that make target location difficult. The first minute of most firefights is spent trying to determine the location of the enemy.

**RECOMMENDATION**: During workups, increase time spent at the 300 and 500 meter line of the rifle range. Frequent BZO ranges during deployment would sustain the marksmanship and weapon calibration necessary to sustain accuracy at these distances. To prepare for engaging enemy fighters firing from concealed locations, a range could be designed to have a simulated muzzle flash appear from behind concealment, training the eye to locate the flash and training Marines to help each other get on target. Bottom line, marksmanship from 300-500 meters, well within maximum effective range, with T/O weapons was poor and a focused effort needs to be made to continuously train and re-train on simple marksmanship

**TOPIC: DISTRIBUITED OPERATIONS**

**DISCUSSION**: The squad reinforced is the most common size of patrol, with operations sometimes being run by multiple platoons at the same time. At times one patrol would be in contact, receiving and returning fire, while another was conducting a cash-for-work project. When such concurrent actions take place, the squad leader must be prepared to act as a true commander reporting to a platoon COC in order for the company to stay at the appropriate level of involvement.

**RECOMMENDATION**: Platoon-level intelligence and operations cells could directly influence actions of squads and empower platoon commanders during distributed operations. Platoon COCs would provide platoon commanders the opportunity to command and control while keeping the company leadership informed of their decisions and actions. All of this would require focused training for squad leaders and for the Marines who would assume responsibility of intelligence and operations cells at the platoon level.

**TOPIC: RULES OF ENGAGEMENT, HOSTILE INTENT OR ACTION AND POSITIVE ID**

**DISCUSSION**: We faced situations where children would pull engineer stakes from our concertina wire perimeter and Marines on post requested to fire pen flares or pyrotechnics at them. Vehicle commanders have requested to conduct similar actions when people, including children, have approached within 50 meters of vehicles. We have also had Marines observe something that gave them positive identification (PID) of a threat, but rather than engage, Marines would spend so much time describing the situation in order to gain approval for their shots that PID would be lost. This has happened numerous times.

**RECOMMENDATION**: Empower the Marines. Conduct tactical discussion games and have scenario-based talks with junior Marines to prepare them to act as on-scene commanders, because there will be times that a Marine on post is the on-scene commander and is the only one able to make a time-sensitive decision. Develop in them the understanding that their decisions and actions will be supported so long as they describe the incident in detail when the situation allows, and are able to assist in the necessary battle damage assessment.

**TOPIC: DESIGNATED MARKSMEN WITH MK-12s SUPPLEMENTING SNIPERS**

**DISCUSSION:** A common insurgent TTP is to engage from distances greater than 500 meters, or from within compounds or treelines that provide considerable concealment. Firing points are used repeatedly, which enables snipers to identify and remain oriented on likely enemy locations until the enemy exposes himself. However, there are too few snipers to accompany every patrol.

**RECOMMENDATION**: Designated Marksmen can supplement snipers if enough are trained to have one in each squad. The priority for school slots should go to units deploying to Afghanistan in order to train the numbers required to achieve this ratio.

**TOPIC: CHILDREN PLACING IEDs**

**DISCUSSION**: The Marines know that they can neutralize the threat of an individual placing an IED. They know that the enemy uses children to do evil things. They know that they will have only a few seconds to take action if someone is placing an IED. What they do not know is what to do if they see a child placing an IED.

**RECOMMENDATION**: There would be no message more clear to the local people regarding the negative impact of insurgents operating in their area than if we engaged a child placing an IED. The information operations message is clear: insurgents place your children in danger. Your children are exploited by the insurgents to do the work they are afraid to do. We must act in our own defense and in the defense of the children who play in these fields. You must act to prevent the insurgents from exploiting your children and placing them in danger. If you allow the insurgents to place weapons in the hands of your children, you allow the insurgents to turn your children into a threat to the people of Afghanistan.

**TOPIC**: **MOVEMENT THROUGH THE NORTHERN AND SOUTHERN GREEN ZONE**

**DISCUSSION**: In the Northern and Southern Green Zones the company moved through rough terrain comprised of tree lines, fields, canals, and mud compounds. The improvised explosive device (IED) threat often limited formation selection to ranger files since all paths had to be cleared by a metal detector. The large cornfields severely limited visibility and security posture while moving and most tree lines sat along deep irrigation canals. These also posed a threat as the Taliban would emplace IEDs at likely crossing points using the trees to help hide the device. Satellite patrolling and bounding over watch are crucial in denying the Taliban the ability to ambush with IEDs or direct fire. Paths were never used twice and obvious routes/crossing points were avoided at all costs – be prepared for chest deep water.

**RECOMMENDATION**: Satellite patrolling and bounding over watch are crucial in denying the Taliban the ability to ambush with IEDs or direct fire. Paths were never used twice and obvious routes/crossing points were avoided at all costs – be prepared for chest deep water. All movements are led by Marines with metal detectors. Be especially watchful and thorough at canal crossings and look for visual indicators in the tree lines surrounding them.

**TOPIC**: **ENEMY HAND GRENADES**

**DISCUSSION**: The hand grenade was the Taliban’s weapon of choice because of the proximity they could gain prior to engaging and egressing. Patrols were often engaged from over compound walls, patrol bases were engaged from cornfields. They also use slings to hurl grenades from greater distances. The grenades are one of two types: 1) old Soviet military-grade or 2) a water bottle with a time fuse, blasting cap, and HME filler. An audible pop, similar to that of a time fuse, is noticeable approximately five seconds prior to detonation.

**RECOMMENDATION**: When moving through vegetation, designate Marines responsible for spotting incoming grenades; their focus should be corn-stalk high. Avoid moving around or close to compounds unless making deliberate entry. Knock down surrounding vegetation out to throwing distance and keep Marines indoors or under overhangs when not on post.

**TOPIC:** **VEHICLE SECTION SIZE**

**DISCUSSION**: Due the IED threat and strikes, Weapons Company moved to a 5 vehicle section vice the normal 4 vehicle section.

**RECOMMENDATION**: 5 Vehicle sections were instrumental in allowing the company to continue without loss of momentum in combat operations. If a section lost a vehicle due to an IED or break down, the section could rest a crew for 24 hours and get a replacement vehicle in a timely manner and still move in a 4 vehicle section to continue on mission. This also minimized the number of Marines in the vehicle and allowed for greater overall security if required to stay on site.

**TOPIC: DISMOUNTED OPERATIONS**

DISCUSSION: Due to the diverse nature of the terrain throughout the A/O’s, we were repeatedly forced to transition from mounted to dismounted operations. The enemy knows the limitations of our vehicles and will always attack from locations that prevent us from closing. Therefore, every instance of successfully closing with and destroying the enemy forces, concluded with dismounted movement.

**RECOMMENDATION:** CAAT sections require dismounts. Running skeleton crews should not be an option, you will never destroy the enemy. Dismounts need to be added early enough in the PTP so that they can get the certifications (heavy weapons, drivers licenses) to be able to rotate billets when Marines are lost to injury. In all mobile training, fire team level dismounted action needs to be included.

**TOPIC:** **CROSS-TRAINING 81’S IN CAAT AND RIFLE PLATOON TTPS**

**DISCUSSION:** With the 81’s platoon able to man all mortar positions and still a majority of the platoon un-tasked. As a result the platoon began to get tasked to conduct non-traditional missions such as CAAT. We spent minimal time working on CAAT and machine gunnery during our workup, but should have done more. We failed to do more cross-training in both of these fields because we were told specifically to prepare for shooting mortars aboard a COP or a FOB and as a result most of our CAAT training got cancelled. We were only able to get to fire team fire and movement in our work-up and we touched on basic dismounted patrolling as well.

**RECOMMENDATION:** Conduct basic CAAT and machinegun training with the CAAT platoons. Emphasis should be placed on developing proficiency with the selected gunners in the M2, MK-19, and M240B as well as driver licensing and training. I would recommend assigning the 81’s platoon four gun trucks so they can conduct IA drills and driver training while in the rear instead of attempting to constantly borrow CAAT vehicles. Gunners should focus on ADDRACs, unknown distance live fire, and VC/gunner communication. Drivers need to be trained on night driving blacked out as well as with the thermal camera on the MATV. Dismounts need to be trained in metal detector utilization, combat hunter, and basic squad patrolling. VC’s need to work on inter-vehicle communication, reporting, BFT, as well as execution of bump plans.

 Assault Support

**TOPIC: ASSAULT SUPPORT:**

**DISCUSSION**: Organic Marine assault support assets are few in numbers in theater, this leads to stringent prioritization by higher of which requests are supported and which are not. Compounding the problem, the demand is extremely high in theater as there is an extreme IED threat which makes transportation by air of pax and cargo the preferred method of movement. Helmand is a desert like region with significant brown out, this creates difficult operating environments for heavy lift assault support aircraft. The CH-53 and the MV-22 are the two primary USMC platforms in theater and create significant downwash. This has led to tremendous difficulty for aircrews when tasked to perform brownout landings. Often, both models of aircraft will be incapable of landing in certain zones, be it due to aircrew ability, aircraft limitations, or environmental surroundings. This has led to the Wing imposing numerous regulations on what zones can and can’t be landed in during specific times (i.e. day zones only). Additionally, any aircraft that is tasked to land outside of an established FOB can only be granted permission to do so by the Wing. This requires detailed LZ studies with imagery of the proposed landing zone days prior to execution. These requirements have led to a very rigid and inflexible assault support system with little room for last minute changes or adaptability.

**RECOMMENDATION:** First, the dominating large scale problem that stems all other issues is the lack of assets in theater. The current size of ACE assets is not adequate to support the present GCE size. With regards to the requirements the Wing imposes on landing; the decision to land in a particular zone should lie with the aircraft commander or section leader, not higher headquarters. Having an assault support platform that can land to pick up troops or cargo on request, such as a Huey on a preplanned JTAR, would greatly benefit the GCE. This will enable the executor to determine for his or herself whether or not a particular mission is supportable. During dynamic operations, locations and times change fluidly and require air assets to adapt with the same pace. This does not happen currently. Regarding the actual execution of assault support operations; the perception, quite frankly, is that our aircrews are not good at landing in zones. Marines will watch multiple failed landing attempts by USMC aircraft into a given zone, then watch a USAF or UK medevac platform land with little to no difficulty in that same area. The scope of that specific issue is beyond this report, but it greatly affects the Marines being supported. At the Bn level, detailed instructions, planning, and preparation for assault support and LZ operations will better improve success for assault support ops.

 ANSF

**TOPIC: ANSF LOGISTICS**

**DISCUSSION**: Either the Afghan National Army (ANA) or Afghan Uniform Police (AUP) are significantly hampered by their respective logistical / support mechanisms across all (6) functions of logistics. These forces are completely dependent on advisor or partnered units for the coordination of transportation, maintenance, services, health services, supply, and general engineering. As a consequence the transition of security responsibilities to the ANSF will only be prolonged and exacerbated.

**RECOMMENDATION**: There is cause for great concern. The tactical capabilities of the ANSF have been the focus to enable partnered full spectrum COIN operations; however, in the process this has out stripped the underlying logistical capabilities of both the MOD and MOI. The (6) functions of logistics must be treated as the highest priority for training, manning, and resourcing. Without organizational support, the ground units will NEVER be capable of assuming the security responsibilities from ISAF.

**TOPIC: CAREER PROGRESSION AND INCENTIVES**

**DISCUSSION:** There is little incentive for the officers or soldiers of the ANSF. They are over worked and under paid with little incentive to maintain a long term focus. Many use their positions within the ANSF as a means to an end. This is very relevant to the young soldier or new recruit. Uneducated and with little incentive to fully engross themselves in the future of their careers or the security of Afghan, they often labor at soldiering lethargically and rudderless.

**RECOMMENDATION**: Incentives through re-enlistment bonuses, schools, monetary rewards for performance, and meritorious promotion opportunities are necessary. In truth, many of these programs are in place, but they remain incumbent on the partnered unit to energize and leverage. This is unfortunate because all too often the partnered unit is seen as the benefactor and not the ANSF organization. The partnered units must divorce themselves from this process and the ANSF must take full ownership of the program, albeit monitored.

**TOPIC:** **INTERPRETERS**

**DISCUSSION**: While the ETT enjoyed a greater number of interpreters compared to the line companies, it was immediately clear that the quality and quantity of interpreters that is needed in order to successfully communicate with the Afghan soldiers is greater than the need of the companies. The ETT interpreters needed to be educated in all aspect of military training, and military terms, whereas the interpreter for the companies would be mainly used to talk to the locals. Many times during interpretation the mentors found ourselves educating the interpreters on what it is we were trying to convey to our Afghan counterparts. In not understanding the interpreters would communicate what he thought was right and on many occasions it was communicated as something else.

**RECOMMENDATION**: Select a pool of interpreters that have worked with the Advisor teams and keep them in this sort of work in order to enhance the Advisor Teams ability to concentrate on the mission and our counterparts in the ANA. This will facilitate any kind of changeovers between other units.

**TOPIC:** **COMBAT LIFESAVERS AND LIVE TISSUE**

**DISCUSSION**: Invaluable training. This is one of the most important aspects of the PTP. The ANA are quick to respond to a casualty. They lack the ability to treat their own casualties while at the contact scene. They tend to load the casualty in a vehicle and take them to the nearest PB where coalition forces are located for treatment. Every soldier not just the designated “corpsman” needs to be trained to deal with casualties.

Recommendation: Both courses that are afforded to Marines needs to be taught to our ANA counterparts. To have all the soldiers CLS certified would be better for the ANA to deal with any kind of injuries that occur while on the battlefield. To conduct live tissue training would make them that much more proficient in their medical capabilities. Being able to conduct a live tissue course while in the AO would benefit the ANA and also our Marines. The animals are available while in our AO and also we don’t have the same laws for animals that we have back in CONUS which makes it that much easier to conduct a course.

**TOPIC:** **TOURNIQUET TRAINING**

**DISCUSSION**: Invaluable training due to the fact that most IED’s that blow usually has a casualty that needs to be applied a tourniquet. Since the ANA are conducting their own patrols in our current AO. They need to be taught on how to utilize and when to use one. The lack of supplies restricts us from equipping them with one. 1/2/215 received 2 tourniquets per soldier and were given multiple classes on how to use them. 2/3/215 has received minimal training on tourniquets and currently do not have them.

**RECOMMENDATION**: Tourniquet drills should be implemented and each soldier should be issued two tourniquets that are SOP with regards to placement/carry on the individual equipment. Request from supply more tourniquets not only for our Marines but also for our ANA counterparts. On a weekly basis if not monthly basis test out the soldiers to ensure they are still proficient in using them.

**TOPIC: ANA PARTNERSHIP**

**DISCUSSION:** Throughout the deployment we experimented with different types of advisor roles to the ANA. We started off with a 3-man ETT and soon discover that wasn’t enough. We then used a weapons platoon commander with a 12-man team to make an advisor team. Finally we just did away with the ETT and just partnered platoons. The final attempt seemed to work best. The proxy approach of an ETT did not seem to have the same effects as just direct commander to commander relationships. We work best together in a partnered relationship when unit commanders planned and trained together for missions rather than the ANA receiving different training and orders from an ETT. In short we treated them like any other foreign force we have worked with during the deployment. We include them in the planning process early and allowed them to decide on their own troop to task and scheme of maneuver with guidance from the same level commanders. If it was a company operation the planning was conduct between company commander and company commander. There was a certain level of coercion involved, but in the end the plans and support we need for missions were presented from the ANA commander as if they were his ideas. This allowed the ANA to have buy-in in led to a better working relationship.

**Recommendation:** Meet with your counterparts as much as possible. On average I would meet with the ANA company commanders at least four to five times a week. Whichever platoon was living with the ANA that platoon commander met daily with the ANA commander and usually attended dinner every night with the ANA leadership. Come prepared with a plan when conducting operation or weekly patrol planning, but let the ANA commander solve the problems and guide them towards your end state. I never demanded forces or told the ANA commander how to run his company. I just stated what areas we were going to and what problems need to be solved and then subtly guided them towards the support we needed. Additionally, it is important for commanders to be physically seen on operations by the ANA. This alone can force ANA commanders to be more proactive and in the field. Many times the ANA commanders were reluctant go on missions, but knowing there US counterpart was present would usually guilt them into going.

 PMT

**TOPIC: AUP LITERACY**

**DISCUSSION**: Based on AUP recruiting and its educational guidelines, most AUP that complete JSAS training cannot read or write or if they can it is not beyond the third grade level. Due to the inability to read and write the AUP have had to be trained through hands on and lecture methods from the mentor and partnered teams. Upon completion of JSAS Basic 8 training, AUP are given materials to reference in order to accomplish their mission. Many AUP do not understand the importance of their Constitution and Afghan Law, or the principles of what standard they need and are required to uphold. They learn the basics at JSAS but are not able to further grow and develop based on their illiteracy.

**RECOMMENDATION**: Each AUP Station should have a literacy teacher based off tashkil. Weather they are hired locally or brought in from another area there should be so many teachers per AUP based off their tashkil. By providing literacy teacher/s, at each AUP station this will allow the ANP the ability and opportunity to expand their capabilities in reading and writing, which will allow them to better understand their mission and capabilities as policemen. Literacy training and development is the one of the key pieces currently missed in the development of the country’s AUP to grow and better themselves in order to provide better security to their communities.

**TOPIC: AUP TRAINING**

**DISCUSSION**: As an AUP mentor’s, our mission is to teach, coach and mentor the AUP at all levels of development. In many cases the mentors teach the AUP through a translator which translates the mentor’s message to the AUP. This form of instruction makes the training dual and the AUP disinterested in learning then makes the relationship between the mentors and AUP stressful and difficult.

**RECOMMENDATION**: Translators who are assigned to work with Police Mentor Teams (PMTs) should stay working with PMT’s if all possible even if they move to another team. Translators who work and operate with PMTs for a period of time will eventually learn the classes and will possess the ability to teach those classes directly to the AUP without having to translate for the mentor. This approach now makes the teaching of classes more on a personal level Afghan teaching classes to Afghan instead of talking through a third person. It also allows the mentor the ability to stand off to the side and watch and observe the class and training and giving the mentor the ability to step in if he feels is necessary. With the mentoring team having this capability also gives them the ability to have the translator to provide on the spot corrections based off what the translator knows is correct according to the mentors and JSAS.

Intel

Elements of 3rd Battalion, 7th Marines (3/7) began arriving in the Regimental Combat Team (RCT) 2 area of operations (AO) mid-March 2010. Initially, the battalion was assigned to the districts of Delaram, Bakwa and Golestan in the Nimroz and Farah provinces, Afghanistan. The 3/7 battalion headquarters and Police Mentor Team (PMT) was based out of Forward Operating Base (FOB) Delaram and operated primarily out of the Delaram district center (DC) where multiple lines of communication (LOC) converged to include highway 1 (Ring Road). Additionally, India Company was based out of FOB Golestan and patrol base (PB) Buji along highway 522, while Kilo Company was based out of FOB Bakwa and PB Barrows along highway 515. Lima Company was designated as the maneuver company for the battalion and operated to the south and east of the AO to include Khash Rud and Washir districts. In the beginning of July 2010, 3/7 transitioned AO’s to the Sangin district where the remainder of the deployment was spent operating in conjunction with 40th Commando’s (UK Royal Marines).

While in Delaram, Bakwa and Golestan, 3/7 was engaged in traditional Counter-Insurgency (COIN) operations focusing efforts on district development, political and governance issues, rule of law, security and census operations. While Kilo and India Companies were tied to their respective AO’s, Lima Company served as the battalions maneuver element conducting operations designed to disrupt insurgent (INS) activity, drug processing and distribution and assist in providing security to the overall battalion AO. Although 3/7 arrived during the start of the traditionally summer fighting season, sustained kinetic activity was minimal, likely due to the ongoing poppy harvest and the relatively low importance of the area when compared to more fertile and influential districts.

Beginning in July 2010, 3/7 arrived in the Sangin District where the 40th Commando’s had been involved in sustained contact with INS in the area while also conducting ongoing COIN operations further developing the districts political and economic infrastructure. Due to the nature of the terrain, dense population centers and numerous LOC’s connecting adjacent districts and facilitating the movement of enemy force (EF) fighters and supplies, the INS had successfully been able to hinder progress in the district through intense Murder and Intimidation (M&I). Upon 3/7’s arrival, the dynamics changed as coalition force (CF) manpower was essentially doubled in the district facilitating the ability to occupy FOB’s and PB’s while also maneuvering in order to gain and maintain contact with the enemy and restrict their freedom of movement (FOM). The remainder of 3/7’s deployment was spent conducting operations aimed at improving overall security in order to facilitate improvements to governance and the economy.

4. Below are intelligence specific after action (AA) points based on the previous 7 months in support of OEF 10.1:

**TOPIC: BIOMETRICS TRAINING AND EMPLOYMENT**

**DISCUSSION**: Although 3/7 received training on biometrics systems during pre-deployment training, the focus was on how to operate the Biometric Automated Toolset (BAT) and not on the actual employment methods or tactics, techniques and procedures (TTP) during combat operations. This led to wasted enrollment opportunities and a lack of emphasis on biometrics throughout the deployment. Marines from the staff level down to the user did not fully appreciate or understand how and when to conduct targeted enrollments to maximize the quality of data focused on areas of interest based on intelligence and/or significant activity.

**RECOMMENDATION**: It is recommended that during the PTP block that not only Marines who will be operating the BAT system receive training on the equipment, but that small unit leaders and decision makers also receive training focused on employment methods and scenarios. This will lead to a full appreciation of the capabilities and benefits of biometrics in theater. Additionally, during RSO&I while in transit to a units respective AO, a class should be conducted to a targeted audience designed as sustainment training and re-emphasis of the above points regarding employment. While conducting operations, the biometrics FSR should be involved in the planning process under the S-2 function IOT maintain situational awareness of upcoming operations and to provide recommendations on possible enrollment opportunities.

**TOPIC**: **COMPANY LEVEL INTELLIGENCE CELLS (CLIC) TRAINING AND DEVELOPMENT**

**DISCUSSION**: The CLIC’s serve a critical function designed as a conduit between company commanders and the battalion intelligence section providing both with accurate, timely and relevant information for further analysis and/or dissemination. Although the importance of the CLIC’s was recognized during the PTP, standard operating procedures (SOP) were not enforced. Additionally, guidance from the intelligence officer was not disseminated and/or adhered to, leaving the CLIC’s with little direction resulting in inconsistent reporting, product development and intelligence gaps that were not properly addressed.

**RECOMMENDATION**: During the PTP, it is important that SOP’s are detailed out and enforced from the beginning of the training cycle. Additionally, it is the intelligence officer’s responsibility to ensure cooperation from company leadership that qualified and interested individuals are selected to source the CLIC’s and that they remain in that position throughout the PTP and deployment. Standard requirements, formats and timelines for patrol debrief and intelligence products must be adhered to for further analysis and so that situational awareness by the intelligence section is maintained.

**TOPIC:** **INTELLIGENCE SECTION MANPOWER**

DISCUSSION: Upon arriving in Sangin and working with the U.K. 40th Commando’s, it became clear that the current T/O for a U.S. Marine Corps intelligence section is not ideal. After distributing three (3) total analysts to each of the line companies, the intelligence section was left with seven (7) total trained intelligence analysts including the intelligence officer, assistance intelligence officer and intelligence chief. Two (2) of the remaining analysts are designated for COC watch. This resulted in Marines focusing their efforts in support of several lines of operations (LOO), which although capable, did not facilitate the maximum quality of output desired. Due to the kinetic operating environment encountered by 3/7 during the deployment, the intelligence section focused its efforts heavily on enemy forces leaving gaps in human terrain, governance, economics and development, all critical to the overall counter-insurgency (COIN) fight.

**RECOMMENDATION**: Providing additional manpower for a battalion intelligence section that is properly managed, analyst would receive more focused tasks and assignments, ensuring that all elements of COIN are given proper attention. For example, 40th Commando’s had an analyst focused primarily on human terrain development allowing for maximum effort on the subject matter where he solicited the companies for daily feedback on key leader engagements, elders encountered and patrol debriefs and was able to compile them into databases for future reference and development. Meanwhile, other analysts were designated as a liaison for each CLIC focusing their efforts on the companies AO and facilitating the pull/push of information between the battalion intelligence section and companies. Although there are various solutions to the manpower concerns, having additional school trained analysts added to the battalion T/O would allow for specialized assignments and more focused attention to functions necessary for success in a COIN environment.

**TOPIC:** **BATTALION IMAGERY AND TOPOGRAPHIC CAPABILITY**

DISCUSSION: Another observation while working with the 40th Commando’s was that they maintained an imagery/topographic capability at the battalion level. With the distributed nature of the current theater of operations, it is rare that an infantry battalion is co-located with their higher headquarters who currently maintains these capabilities. This leads to unnecessary delays between the submissions of a request and when it can be satisfied as higher headquarters is supporting multiple subordinate commands. Additionally, miscommunication occurs between the requester and provider requiring multiple adjustments to products and/or fully developed products that may no longer be relevant or have utility due to the fluid environment encountered while conducting COIN operations.

**RECOMMENDATION**: If possible, a trained imagery/topographic analysts should be provided to a battalion intelligence section. This would lead to accurate and relevant products specifically tailored to the battalion’s needs in a timely manner. Additionally, the analysts would be able to anticipate the needs of the battalion and companies due to their increased situational awareness.

**TOPIC: COLLECTIONS MANAGEMENT**

**DISCUSSION**: It is imperative that the intelligence officer fully understand the capabilities and limitation of organic, national and theater collections assets. Just as important is the ability to effectively manage these assets to cover critical gaps in a COIN environment. While the capabilities of most collections assets were understood, they were not always utilized to their maximum potential for a variety of reasons. Although company leadership would be briefed on the capabilities of an asset assigned to directly support them, they cannot be reasonably expected to fully understand how to employ the assets to their maximum potential while still manage a company, especially in a kinetic environment. This happens too often. The collection manager is assigned specifically to manage the assets for the battalion and company leadership due to their training and knowledge on the collections assets as well as their ability to communicate with experts in the respective fields.

**RECOMMENDATION:** It is absolutely necessary that the battalion assign a collections manager who serves as such as a primary billet and dedicates full attention to the subject matter. Additionally, it is important that OIC’s and team leaders of a specialized capability are proactive in ensuring that the battalion and companies are getting maximum support. This includes maintaining situational awareness of supported units whether at the Operational Control Element (OCE), HUMINT Exploitation Team (HET) team room or at the higher headquarters. This will ensure that immediate requests are fulfilled in as timely a manner as possible and that supporting elements can anticipate the needs of a command through their understanding of a battalion’s intelligence gaps and requirements. With regards to intelligence, surveillance and reconnaissance (ISR) assets either organic or theater provided, the collections manager needs to maintain awareness of scheduled support and properly plan far enough out while anticipating deviations. By organizing support either to the battalion, intelligence section and/or companies, ISR usage will be optimum and gaps identified. This will also force CLIC’s to analyze and submit named areas of interest (NAI) in order to receive coverage committed to their companies.

**TOPIC: TARGETING**

**DISCUSSION:** The proper utilization of collections assets for targeting purposes is critical when developing and executing kinetic strikes in support of the security LOO. ISR in particular must by tethered to NAI’s and/or TAI’s for efficient and effective use. Often, collections platforms are assigned random tasks or areas to observe or are used primarily as a force protection measure which results in inefficient usage and missed opportunities.

**RECOMMENDATION**: In order to maximize usage of collections assets, pre-established objective areas in the form of NAI’s must be developed and disseminated to all parties involved in the targeting process. Just as important is the commitment of resources in the form of manpower assigned to task and monitor ISR platforms. By assigning a military trained analyst to control and view the ISR feed, they will not only be able to ensure efficient use by focusing on NAI’s and objective areas, they will also have a better understanding of what to look for when observing suspicious individuals or activity. Additionally, with proper direction, organic and theater collections assets will have a better understanding of your specific intelligence requirements and priorities in order to better manage limited resources in support of operations.

**TOPIC: BIOMETRIC AUTOMATED TOOLKIT SYSTEMS (BATS)**

**DISCUSSION:** BATS was system under used by the battalion due to a lack of emphasis put on training and employment.

**RECOMMENDATION:** Ensure sufficient training is completed on BATS system during the PTP to minimize required in-country training on the system. There is a BATS FSR embedded with the battalion that is available for your tasking. Recommend you employ him for sustainment training as often as needed. The current lack of communication infrastructure in Sangin will not support dissemination of data via SIPR net. This has resulted in a lack of immediate results from the submissions of BATS data. However, each entry into the system is building the database for follow-on units. There should be one system at the company level that is dedicated to transporting data to other units.

**TOPIC: SCAN EAGLE, AND PTDS (PERSISTENT THREAT DETECTION SYSTEM)**

**DISCUSSION:** Scan Eagle was the primary ISR platform used by the BN until the introduction of the Persistent Threat Detection System (PTDS). The PTDS blimp is heavily utilized in the area immediately surrounding FOB Sabit Qadam. It has been utilized to positively identify multiple IED emplacers who are then directly targeted using supporting arms. The camera has an extremely long range, but it ‘s fixed position prevents it from getting a 360 degree view of the terrain, and dead space increases as the viewing angle gets closer to level with the horizon. The blimp should be used in combination with Scan Eagle in any situation where it is critical to maintain PID. The PTDS Blimp is a relatively new asset that should be incorporated into the PTP or EMV to allow units to develop TTP’s in offensive and defensive operations. PTDS is accessible through hard line and rover feed, allowing CLOC’s to view the same picture across multiple fixed positions. FSR’s had a good technical understanding of the system, but have little to no understanding of how the balloon is employed as an ISR asset.

**RECOMMENDATION:** That a Marine be positioned in the blimp control room to facilitate communication between maneuver units or the COC and the camera operators.

Ravens proved to be more of a hindrance than a force multiplier during our tour. Terrain, abuse, replacement parts, and FSR availability made them useless.

**TOPIC: STORYBOARDS AND DEBRIEFS**

**DISCUSSION**: The battalion did not have a standard reporting format or timeline for patrol debriefs or storyboards. Each CLIC used a different format and provided different types of information. This limited the effectiveness of information sharing between the CLIC’s as they could not predict the type of information collected from patrols of other companies, and could not expect information to be available according to a schedule.

**RECOMMENDATION**: The S-2 can establish and distribute patrol debrief reporting formats to ensure that all companies gather certain required information and pass it up for distribution. These reports could be developed and employed by the CLIC during training to familiarize them and the patrol leaders with standardized information requirements. Establishing a timeline for storyboards to be distributed would ensure rapid transfer of information between companies and to battalion. Debriefs could be conducted within two hours after a patrol, with a formatted storyboard of significant events distributed within twenty-four hours. A similar concept could be applied to briefs given by the CLIC to units preparing to leave the wire. Input from infantry unit leaders as to the content of these briefs would ensure that the information is relevant and tailored to their needs.

**TOPIC:** **MAPS AND ORIENTATION**

**DISCUSSION:** Maps and lamination were constantly in high demand and short supply. The company frequently crossed the line of departure with only enough maps for platoon commanders and higher; squad leaders had non-laminated maps that degraded quickly or no maps at all.

**RECOMMENDATION:** Absolutely be proactive about procuring maps for upcoming operations. Most, if not all, the maps used are grid reference graphic (GRG). Ideally squad leaders and higher, as well as all observers, have laminated GRGs. The British variants are often more detailed and have numbers for buildings left unmarked on their American counterparts.

**TOPIC: CLIC EMPLOYMENT**

**DISCUSSION:** The notion of having an entity that can collect information and process it into actionable intelligence is defunct. The EMAC principle holds true, and intelligence is most accurate at the squad-platoon level. Generally speaking, company and battalion-level processing of intelligence garnered at the squad or platoon level serves only to convolute and distort the intelligence prior to feeding it back down the chain. **RECOMMENDATION:** A proactive CLIC leader without formal CLIC training will be more effective than the opposite. He should be tied in every time a sigact occurs, and should be pestering the watch-o, XO, etc. for details surrounding the event. While it is not incumbent upon the XO (or whoever the dedicated “Intel” officer is) to keep the CLIC leader involved, he should ensure that the staff is facilitating information flow to the CLIC and not pushing it off as a nuisance, which it can quickly become given the relatively low payoff. The best function the CLIC serves is as an archiving agency. When archived properly, the intelligence can eventually assist in the formulation of trends and patterns over time. The CLIC should also weigh heavily in the non-kinetic operations (shuras, census, etc) as the bulk of non-kinetic operations involve pure archiving. While platoons generally retain biometric processing capability, the core biometric processing knowledge should reside with the CLIC. BAAT FSRs have proved the most helpful, and can be sourced from the AO upon request.

Logistics

**TOPIC: CAMP LEATHERNECK LIAISON OFFICER (LNO) PRE-EXPENDED BIN (PEB)**

**DISCUSSION**: While supporting company and battalion-level operations in Southern Musa Qalah 90 miles away from Camp Delaram, the S-4 received daily rapid requests for Class II, IV and IX items. These items were often urgently needed – placing orders through the Supply System did not fill the requirement in sufficient time. The most frequent movements to the company area of operations originated from Camp Leatherneck, whether via Helicopter Support Teams (HST), recovery missions or MLG resupply convoys.

**RECOMMENDATION**: A PEB was established at the Camp Leatherneck LNO for high-usage items like eye protection, FROG gear, common MRAP/M-ATV repair parts and sandbags. The document number on the order was specifically annotated to designate items for Leatherneck, for example 95102-0125-L001, so the items could be pulled from the RUC-line at the Supply Management Unit (SMU). This rapidly improved support and responsiveness to forward units.

**TOPIC: LNO CELL T/O**

**DISCUSSION**: The LNO at Camp Leatherneck is one of the most critical elements of the unit since it coordinates many essential actions – signing for new gear from the Initial Issue Point (IIP), picking up supplies and delivering them to the flight line for HSTs, receipting for gear from the maintenance cycle and coordinating with supporting units such as CLB, CLR, ESB or 68th CSSB. Its task organization is essential to the success of the S-4 and the unit.

**RECOMMENDATION**: The OIC should be savvy on supply, maintenance and transportation – ideally a 3529 MT Maintenance Chief. In addition, a 3043 Supply Administration Clerk is needed to liaise with the IIP and Marine Corps Logistics Command (MCLC) (Forward) retrograde lot. One 6043 Corpsman is necessary for patient tracking and Bastion Hospital visits. A 3521 MT Mechanic is needed in order to LTI vehicles prior to induction or upon receipt from maintenance and conduct Second Echelon repairs. Finally, a 3531 MT Operator is needed as a 7-Ton operator when moving equipment/supplies around the base and to assist with loading convoys.

**TOPIC: CLC2S**

**DISCUSSION:** Common Logistics Command and Control System (CLC2S) is the standard request module in theater for logistics support. It is used by the unit S-4 to identify support requirements to external units.

**RECOMMENDATION**: CLC2S is a useful tool and should be employed by all S-4 commodities. MT, MMO and S-4 representatives should all have accounts that are supervised by the S-4/S-4A. Requests are vetted by the S-4 prior to submission to higher. However, due to connectivity issues, CLC2S is only feasible for use by the S-4, not companies or other subordinate units.

**TOPIC: RECOVERY OPERATIONS / MAINTENANCE INTEGRATION**

**DISCUSSION**: During company and battalion-level operations in Southern Musa Qu’leh, the unit typically suffered 20-30 improvised explosive device (IED) strike mobility kills against MRAPs/M-ATVs. Though the unit maintenance hub was at Camp Delaram, recovery missions were launched from Camp Leatherneck and similarly recovered there. Very quickly, a significant maintenance issue arose since the unit possessed no second echelon maintenance capability at Camp Leatherneck.

**RECOMMENDATION**: The maintenance cycle must be coordinated directly with recovery efforts. Once a 15-Line for a vehicle mobility kill was submitted, the Motor Transport section was informed and a Second Echelon Equipment Repair Order (ERO) opened immediately. This enabled vehicles to be inducted directly into the Intermediate Maintenance Activity (IMA) from the battlefield and expedited the maintenance cycle. For vehicles requiring Second Echelon maintenance, a unit maintenance detachment was sent to Camp Leatherneck to induct and repair vehicles.

**TOPIC: INTERMEDIATE MAINTENANCE AND MAINTENANCE CONTACT TEAMS**

**DISCUSSION:** Leading up to and during the Battalion movement from one Area of Operation (AO) to another, Intermediate Maintenance (IMA) and Maintenance Contact Teams (MCT) became extremely limited and unavailable. Leading up to the Battalion movement from our initial AO the IMA was shut down forcing all maintenance requiring third Echelon of Maintenance (EOM) and Calibration (Cal) to be back hauled (B/H) to the IMA in Camp Leatherneck (LNK) for repairs and then front hauled (F/H) back to the AO. During movement from one AO to the next all second and third EOM was B/H or Air Support Request (ASR) to LNK with limited or no connectivity. During movement and upon arrival in the new AO MCT’s were not prepared to fill the gap or support Battalion maintenance deficiencies until second EOM and an IMA could be established. The Battalion went without reasonable access to an IMA, or second EOM CT’s, for approximately three months during the movement. As with the initial AO all third EOM had to be B/H or ASR to LNK from the new AO. The distance between the AO’s and LNK, combined with limited bed space shared with supplies, rough terrain, and enemy activity significantly amplified the challenges of repairing gear, receiving parts, and establishing support; considerably limiting Battalion operations and their ability function.

**RECOMMENDATION**: MCT’s, at a minimum, need to plan to regularly push out to support the battalion during the movement timeframe and assist in re-establishing EOM’s at new locations as quickly as possible. To aid this process an IMA detachment, including a Repairable Issue Point (RIP) detachment and SASSY Management Unit (SMU) detachment, needs to be properly prepped to push into place once a central maintenance location has been identified. With an AO comprised of several Forward Operating Bases (FOB), including a couple Patrol Bases (PB) per FOB, high enemy contact, and significant destruction of gear; a fully functioning maintenance hub with an IMA, MCTs, Cal, and regular visits from Field Service Representatives (FSRs) is critical to maintain any kind of operational tempo. The B/H and F/H of gear to LNK for extended periods of time is a serious waste of time, resources, and assets; it compromises accountability, supervision, and operational sustainability due to lack of transportation and distance, and finally creates unnecessary risk to the lives and assets of the Marine Corps.

**TOPIC: POLICIES AND PROCEDURES**

**DISCUSSION:** Due to the expeditionary environment of the Marine Corps and OEF deployments policies and procedures become fundamentally more important. Record jackets and records keeping during the Battalion movement and following proved to be a critical disparity when it came to equipment accountability, preventative and corrective maintenance, annual gauging, and readiness. Before the Battalion movement some commodities stored their record jackets and digital computer records in an ISO container to be shipped with the rest of the Battalion assets. Due to distance, support availability, terrain, and enemy activity it took nearly three months to transport many Battalion assets; to include the stored record jackets. This caused maintenance discrepancies, forced equipment to be safety dead-lined, and dropped readiness for the Battalion. Separately, due to lack of paper and supplies Equipment Repair Orders (ERO’s) and Shopping Lists (ERSOL’s) were created and saved electronically in one or two locations on personal computer accounts. The caused a lack of access and accountability to Responsible Officers (RO’s), it put at risk the loss of data without a solid back up, and for turnover caused a complete lack of supervision and awareness of equipment inducted into maintenance for incoming maintenance personnel.

**RECOMMENDATION**: Record jackets need to be kept in a more mobile environment, during movement, and spread over a few locations to mitigate the chances of losing all records in a single incident. Electronic record keeping is certainly to be expected in an expeditionary environment, however, records need to be kept in several locations for back up and accessible to individuals who may require access; taking into consideration the nature and operational security (OPSEC) needs of such records and who may access them.

 General engineering

**TOPIC: GENERATOR OPERATION AND MAINTENANCE**

**DISCUSSION:**  Due to the tendency of the US military to rely on civilian contractors for electrical needs, the 1141 and 1442 field has suffered setback in the development of a critical skill set. This has also led to the decrease in the amount of available green gear in theatre.

**RECOMMENDATION:** By T/O each engineer platoon rate one 1141, generator operator, and 1142, generator mechanic. Engineer battalions usually assign junior Marines to fill these billets to gain experience. By doing this, they are not setting up these Marines for success on the battlefield. Junior Marines require guidance from NCOs and SNCOs to be able to learn their job and execute different mission sets. With the battalion operating solely of green gear, one junior Marine and one NCO are not able to properly set up a power grid for nine different positions and maintain over (100) pieces of gear. The engineer battalions need to ensure the success of the Marines and put a detachment headed by a SNCO Utilities, NCO, and (3) junior Marines with each battalion in order to ensure the readiness of the equipment. Combat Engineer Officers are also not afforded the proper introduction to generator operation and maintenance to effectively advise the supported battalion commander on the employment of the gear. More training in maintenance and operation of utilities equipment needs to be provided to junior officers in order to prevent them from ill advising the supported commander.

**TOPIC: HEAVY EQUIPMENT**

**DISCUSSION:** Heavy Equipment is a combat multiplier and adds to the efficiency of force protection and survivability operations. Due to the lack of organic assets, heavy equipment is often not able to be moved around the battlefield in a timely manner.

**RECOMMENDATION:** Heavy equipment is a nice to have, and adds to the efficiency and productivity of different missions. Not having heavy equipment on hand is not an excuse not accomplishing the mission. Every Marine is issued an E-tool and may have to use it to ensure he is protected from the enemy.

 Medical

The first half of our deployment could be considered “standard” in regards to the expected daily operations and inter-workings of the battalion’s medical assets. With the exception of Lima Company, our battalion aid stations were operating from hard-structures located at established FOBs. We had a wide variety of medical supplies passed down from previous battalions. The majority of our injuries were non-battle in nature and consistent with the number of Marines and environment in-which they were operating.

When the battalion moved east into Sangin, the kinetic injuries increased exponentially. Medical’s ability to effectively communicate, resupply, and track patients proved to be very challenging. Despite these challenges, our individual corpsmen did an amazing job treating numerous life-threatening injuries under the intense pressure of combat operations. Our investment in pre-deployment medical and trauma training paid large dividends and undoubtedly saved a lot of lives!

**TOPIC: AIR MEDEVACS**

**DISCUSSION**: Not enough great things can be said about the air-support we received for casualty extraction from the Pedro squadron. They proved to be fearless and effective, landing in any conditions to extract our injured. Their timeliness provided role III support well within the “golden hour.”

**RECOMMENDATION**: I wish that we would have been able to spread the word about the Medical Emergency Response Team (MERT) and their capabilities more effectively to our battalion. MERT is dispatched if specifically requested, or if the injury sounds life-threatening based upon the details within the initial 9-line/MIST report. They provide a faster helicopter, ER doctor or anesthesiologist, as well as blood products, and intubation ability in-flight. While we continually improved the details of our 9-lines to more accurately reflect the severity of our casualties, there were only a couple of instances in which we specifically requested the MERT team for critically injured patients at the time of the initial MEDEVAC request.

**TOPIC: GROUND CASEVACS**

**DISCUSSION**: We had a challenging time transporting casualties by ground. The IED threat made it impossible to transport a patient from the point of injury to a FOB without the fear of further injury and delay in definitive medical treatment. Unless the injury occurred very close to a FOB, we did not transport casualties by ground. While headquartered in Deleram, our battalion had 2 MAXPRO Dash ambulances. In my opinion they provided little more than a vehicle to store medical supplies in. They did not have independent suspension, which made them unable to traverse the terrain within our AO, and thus we did not take them into Sangin. Loading patients was cumbersome and required all involved parties to have “done it before.” The ambulance door would only close if the patient’s litter had collapsible handles. The ride was extremely rough. You could not in good conscious transport a litter patient.

**RECOMMENDATION**: It is absolutely necessary to have a dedicated medical MRAP (preferably 6x) with independent suspension for use by the medical providers during ground operations. It allows for a “mobile-BAS” where the provider is not forced to work on the ground out of his medical bag. If the medical officers and IDC’s do not have a vehicle that is setup with their medical equipment with enough space required to treat and transport their patients “safely,” they are in my opinion acting only as “high-priced corpsmen.” Our medical MRAPs were invaluable during long-term ground operations in which there were no available Battalion Aid Stations for patient evaluation and treatment. Each battalion should be equipped with 3 6x MRAP ambulances with independent suspension.

**TOPIC: MEDICAL SUPPLIES**

**DISCUSSION**: Medical re-supply from MEDLOG proved to be very slow and unreliable. Once an order was placed by our battalion, it took a minimum of 6-8 weeks to start seeing supplies. The supplies that did get delivered were often not correct, or not of the quantity requested. One major shortfall was the inability to track a medical shipment once it was delivered from MEDLOG to the flight-line. All we could find out from MEDLOG was that the “order has been processed,” but it’s current location or expected delivery date was not available. MEDLOG had to move locations 3 times during our deployment which undoubtedly made it difficult for them to be timely with their processing. I have noticed significant improvement with MEDLOG in the last 45 days, and am confident that 3/5 will have excellent support from MEDLOG for the duration of their deployment.

**RECOMMENDATION**: It is recommended that future units engage their Leatherneck LNO staff with the folks at MEDLOG to personally procure orders. Supplies should then be manifested by the battalion with their regularly scheduled log-trains, thus bypassing the “flight-line” delays. This will improve order accuracy, accountability, and improve the timeliness of final delivery.

**TOPIC: PATIENT TRACKING**

**DISCUSSION**: Tracking of casualties needs to be a battalion-wide focus in which no detail is too small to escape close attention. We kept a corpsman at Leatherneck for the sole-purpose of tracking patients, and that ended up being a vital necessity. Aside from providing the Battalion Surgeon with a daily spreadsheet containing the location and status of all current casualties, he took ownership of all Leatherneck/Bastion patients insuring accountability and compliance with medical follow-up.

We had a hard time communicating medical information between our corpsmen, battalion staff, and medical providers. This was challenging for several reasons. We did not have solid medical reporting procedures established and in place across the board before we entered Sangin. Thus, we were playing “catch-up” and trying to find a way to effectively communicate timely, relevant, and accurate information without really being able to all sit down together and come up with a game plan. It was not until the last 60 days of our deployment that we really developed a system that seemed to fill most of the gaps. We were also forced to adapt to new reporting guidelines from Division towards the end of our deployment. It took several weeks to change the system we had in place to comply with the new information that was required.

**RECOMMENDATION**: I would urge future battalions to work out an arrangement that allows for daily communication between providers and “on-the-ground” corpsmen. We have a BFT setup in our main BAS. Having one at each BAS would be beneficial. Also, it is crucial that companies relay information to the BAS if they have a relevant update in regards to a patient. LNO or BAS corpsmen “in-the-rear” must help update CONUS patients. Because of the number of patients, time-zone difference, and communication/personnel shortfalls that exist within Afghanistan, it has proven very difficult to receive accurate information on those patients in CONUS.

**TOPIC: CONCUSSION REPORTING AND MANAGEMENT**

**DISCUSSION:** Although our battalion knew that we would face an IED threat, I do not feel that we were prepared for the magnitude of injuries, duty restrictions, administrative reporting, and other operational impacts that have resulted. The Topic continues to have increasing scrutiny at the Division/MEF level that has mandated more specific and laborious reporting requirements for the BAS and S-3. I am not going to discuss the specifics of how patients are assessed and treated, but suffice it to say that all medical personnel are evaluating patients based on theatre-wide algorithms that take the “guess-work” out of the patient assessment and treatment. This system has standardized symptom management and patient evacuation decisions across all levels of medical care. We have found when companies comply with the duty restrictions and rest periods mandated by MEF and recommended by their medical providers/corpsmen, patients recover much quicker, and combat power is preserved. It was very difficult for us to identify at the battalion level each Marine/Sailor involved in an IED/concussive event and their medical status at the time of injury. We did not have solid reporting procedures in place for this, and our efforts were complicated by ever-changing reporting requirements. For several reasons, it was difficult to spread and enforce the reporting requirements down to the small unit level.

**RECOMMENDATION:** It is imperative that future battalions establish solid reporting procedures across all war fighting functions that encompass all MEF concussion reporting requirements. Similar to the requirement for completing a SALUTE or SALTA report, a standardized “concussion” reporting template that could be sent via BFT, radio, email, etc should be a requirement. This would aim for 100% situational awareness in regards blast exposures and any potential injuries. Aside from helping immensely with MEF reporting requirements, standardized and timely reporting requirements would ultimately help insure proper adherence to the treatment algorithms. End state would be more accurate and relevant information for the Battalion Commander in regards to the health and operational ability of his fighting force.

**TOPIC: PREVENTIVE MEDICINE**

**DISCUSSION**: Because of the expeditionary nature of our combat operations and the multitude of illnesses that commonly accompany such living conditions in this region of the world, I expected a much higher prevalence of illness than we actually sustained. There were several instances of isolated or small outbreaks of viral-gastroenteritis. We had no documented cases of Malaria or other “tropical” illnesses. Compliance with the Malaria prophylaxis was likely less than 50% based upon the amount of Doxycycline and Mefloquine that dispensed from the BAS. Water supply for dismounted patrols was often from local wells or water-ways. Bottled water was available for drinking on all FOBs. There were rodents on the FOBs, but I suspect their populations were kept to a minimum by the feral cats on base. Despite having a few cats and dogs on the FOBs, we did not have any instances of animal bites or other associated medical problems. Instead, they seemed to serve as much appreciated morale boosters.

**RECOMMENDATION**: It is recommended that FOBs continue to improve the amounts of urine-tubes, hand washing stations, and “wag-bag” huts aboard outlying FOBs. As the cold and rainy weather approaches, warm showers, laundry drying capability, and warm living quarters should be sought. Future burn-pits should be placed so that the prevailing winds do not blow the smoke into living/work spaces. I would also recommend that each FOB provide a climate-controlled tent to serve as an isolation area for all personnel diagnosed with vomiting, diarrhea, or other easily spread illnesses. This technique currently practiced by the British Marines, will help to mitigate future illness outbreaks.

**TOPIC: MEDEVAC**

**DISCUSSION**: Medevac support throughout this Battalions deployment has been supported exclusively by USAF and UK air crews. Overall, the support has been timely and well executed. Actions by Marines on the deck contribute greatly to how well the overall execution of the medevac itself will go. Our current area of operations demands that medevac aircraft land in areas with high small arms threat; this requires a detailed medevac plan and multiple coordinating efforts at both the Bn and Company level to ensure safe and expeditious execution.

**RECOMMENDATION**: Everyone from the Bn Air Officer to the LCpl providing zone security plays a role in the execution of the medevac. The primary means of relaying medevac info is still MiRC. The Bn COC will receive information piecemeal from the Company and expedite the reporting process as much as possible. From there, the game plan is established on what will happen and who is responsible for what duties. The Company FiST team often executes smoke missions from either 60 or 81mm mortars in conjunction with the landing for either deception or concealment for the aircraft. The controlling FAC assumes mark and control of the medevac escort platform and briefs the situation update to the aircrews. The unit on deck will provide zone security for the aircraft and also ITG for the medevac to land. All efforts are coordinated with the Corpsman on scene’s assessment of the patient’s condition and where and if he can move. We found success in pre planning multiple medevac templates; for example, template #1: the patient is ground moved from the point of injury to the nearest FOB, template #2: the patient cannot be moved and a point of injury landing will be conducted. In our AO, we have the benefit of usually being able to move the patient from the POI back to one of our more established FOB’s for treatment and pickup. However we have also been forced to conduct numerous POI medevacs with significantly higher risk to all parties. In both cases, a significant amount of coordination needs to take place and roles and responsibilities need to be known right down to the individual popping smoke for the aircraft. Training and prior planning, as always, significantly improve chances for successful execution. Frequency de-confliction, reducing the threat in zone, smoke plans, gun target line de-con, and CAS are prevalent during most medevac missions. Assuming that there will be a medevac in conjunction with a TIC and basing contingency planning on that scenario will provide the best results.

**TOPIC: MEDICAL EVACUATIONS**

**DISCUSSION**: The facilitation of medical evacuations varies with each situation but all Marines should be familiar with the procedures.

**RECOMMENDATION**: Emphasize that if there is ever an Urgent MEDEVAC just the basic information (Lines 1-3, 8, and MIST) need to be sent in order for the helicopter to start spinning. When in a kinetic environment or in the Sangin Green Zone, a smoke screen may be necessary for obscuration, so plan for one. Incorporate fire support agencies and de-confliction into MEDEVAC drills. Sometimes a safer and faster option to air may be to ground CASEVAC a patient to a secured landing zone in a FOB. Plan to utilize all options and choose the one that makes the most sense based on threat and severity of injury. Track weather at all airfields from where MEDEVAC helicopters will be sourced and then plan appropriately according to their travel time.

**TOPIC: COMBAT LIFESAVERS AND LIVE TISSUE**

**DISCUSSION:** Invaluable training. This is one of the most important aspects of the PTP. The Live Tissue training afforded Marines the opportunity to get their “hands bloody” prior to combat operations and giving them a sense of the gruesome yet survivable wounds that a body can sustain. The confidence our Marines gained dealing with “combat wounds” prior to the deployment was high. Now that kinetic operations have encompassed the last few months, their capabilities are on par with their platoon corpsman.

**RECOMMENDATION:** These two courses must be flooded with Marines. At a minimum, one combat lifesaver must be flooded with live tissue training per fireteam. Increase class seats and frequency of courses.

**TOPIC:** **TOURNIQUET TRAINING**

**DISCUSSION:** Due to the IED composition/make up of these devices, the battalion has experienced numerous amputations of limbs (including double amputations). We initially were issued one tourniquet that was designed with Velcro and a plastic stick. Prior to our push to the East (Musa Qalah Wadi) we issued a new tourniquet made with a screw fastener and a plastic stick. We trained with these extensively prior to our operation and I’m convinced it saved lives.

**RECOMMENDATION**: Tourniquet drills should be implemented and each Marine should be issued two tourniquets that are SOP with regards to placement/carry on the individual equipment. Our battalion SOP is to have one on the non-firing shoulder and one located in the IFAC. This has proven to aid in the quick employment of the device and ultimately save a life.

**TOPIC: CASUALTY EVACUATION (CASE FOR FOUR-WHEELERS WITH TRAILERS)**

**DISCUSSION:** Due to all the equipment we wear when a Marine is injured, it takes a fire team (minimum) to evacuate him to the nearest extract point, CCP etc. The CFT (Combat Fitness Test) is inadequate and not to mention ridiculous (another topic) in regards to “testing” an individual’s ability (in a simulated “combat” scenario around some cones in boots and uts)to fireman carry a casualty to “safety” (laughable)!

**RECOMMENDATION:** The quickest and easiest method by means of moving casualties requiring only two individuals is the four-wheeler w/trailer. The four-wheeler is quicker, more maneuverable and safer than four men carrying a casualty hundreds of meters through rough terrain to a CCP. A rifle company should have (2) four-wheelers each with trailers for resupply and CASEVAC.

**TOPIC: MEDICAL EVACUATIONS (MEDEVACS)**

**DISCUSSION:** Urgent MEDEVACs resulting from battle injuries are complicated enough in relatively open desert terrain, where there is freedom of movement and the ability to pick a landing zone (LZ) with stand-off from the conflict area. In the Sangin area, this is rarely possible, if ever.

**RECOMMENDATION:** There are two basic ways to handle an urgent MEDEVAC in the Sangin area - either the patient can be picked up at the point of injury (POI), or they can be transported via ground to one of the forward operating bases (FOBs) while the aircraft is en route, and loaded onto the helicopter from the relative safety of a prepared LZ.

POI MEDEVACs should be a last resort, however depending on the distance from the FOB, severity of condition, and number of patients, they may be necessary at times. This has been conducted in the Green Zone on multiple occasions, but never into the dense urban sprawl. In the green zone, the best possible LZ is selected and swept by engineers and other Marines for IEDs, then cordoned off with a 360 degree security. Standoff should be maximized; however, terrain often limits the diameter to 200 meters or less. Typically, it’s best to conduct a continuous or non-standard smoke mission to screen between the LZ and the most likely source of enemy contact. Also, depending on how kinetic the environment is at the time, it may be necessary to conduct a deliberate CAS attack on the enemy, or at least a suppressive gun run into an empty field adjacent the last known enemy position, prior to bringing in the MEDEVAC aircraft. Nighttime POIs are far less dangerous in terms of the aircraft taking enemy fire, however it may be more difficult for the pilot to physically land, particularly if there are brown-out conditions present.

The much preferred course of action is a ground MEDEVAC to one of the FOBs, followed by an air MEDEVAC from the FOB. In order for this to work, the ground MEDEVAC route needs to be preplanned and as secure as possible. Aid and litter teams can transport, in relays if necessary, the casualty to the MEDEVAC vehicle, which then shuttle him to the FOB. In the Green Zone, both MRAPs and 4x4 ATVs towing a trailer with the litter strapped to it have been used as MEDEVAC platforms; the latter has a huge advantage in mobility, but obvious limitations in survivability were they to strike an IED. Even from the FOBs, there is a significant anti-air threat, so the smoke and suppressive gun runs are at times still necessary.

 Transportation

**TOPIC: VEHICLE & EQUIPMENT FAMILIARIZATION**

**DISCUSSION:** Prior to the deployment there was very little training and time spent with the vehicles and equipment that are routinely used in theater. At the time units did not rate to own MRAPs, MATVs or mine rollers for training purposes. Licensing courses give the minimal time required to be able to operate the equipment and that is done outside of a tactical training environment. All other tactical courses utilize HMMWVs in order to teach how to operate over different terrain and how to engage the enemy. This led to a high learning curve and vehicle and mine roller mishaps leading to broken assets due to a lack of experience and understanding on the proper operation of these assets.

**RECOMMENDATION:** Understanding that the main focus for new equipment is for the operational units in theater, there should be more availability to train on these vehicles in CONUS. At the very least when units go through their final training evaluation at EMV these assets should be made available to become familiarized and comfortable with the operation of these vehicles. Being that EMV is supposed to be as realistic and up to date as possible it would only make sense to operate with the same equipment as the units in theater, creating a more seamless transition when units deploy. To go along with that, there should also be more intensive off road training conducted in order to know the full capabilities of these vehicles. While 29 Palms looks like Afghanistan it does not naturally offer the same off road terrain burdens as seen in theater. Being able to utilize the same vehicles in similar terrain will greatly increase the knowledge base of every operator subjected to the training.

**TOPIC: WRECKER OPERATORS**

**DISCUSSION:** Wrecker operators are an extremely valuable asset in theater and heavily used. They are tasked constantly to perform a number of different operations requiring the wrecker and its capabilities. The attached truck platoon arrived with two wrecker operators and the organic Motor Transport section arrived with one operator. Even with these numbers the operators were consistently tasked out and remained extremely busy.

**RECOMMENDATION:** I would recommend each section, Truck Attachment and organic Motor-T arrive in theater with two wrecker operators each. This will allow these Marines to cycle through the numerous operations that they are called upon to conduct, with them all taking their time to operate the wrecker. Also, in the event of IED strikes or other injuries it ensures that there are still Marines available and capable of handling the tasks. I would also recommend that once the operators graduate and are licensed as wrecker operators they continue training with their unit in order to gain the knowledge and experience required to operate the wrecker in theater.

**TOPIC: TACTICAL CONVOY BILLETS**

**DISCUSSION:** The number one threat to any convoy in theater is IED strikes. Once a vehicle is involved in an IED strike the Marines in these vehicles are also affected. Each Marine plays a key role in one way or another in order to complete that mission.

**RECOMMENDATION:** All units and sections should ensure that all Marines that plan to operate in convoys are rotated through different billets and thoroughly know each others’ jobs. Once a vehicle hits an IED the Marines in the vehicle are required a “rest period” to ensure there are no lasting effects. Therefore, their fellow Marines need to be able to step in and continue operations in the same manner. This includes everyone from drivers, vehicle commanders, gunners, navigators and V-sweep team members. The attached truck platoon has the time and ability to conduct tactical convoy training and to become very familiar with the IED environment prior to a deployment. Unfortunately the organic Motor-T section does not have the same privilege while in CONUS. The majority of their time is spent supporting other sections of the battalion and are left with very little time for training and schools. It would be in the best interest of the Marines and the battalion to invest more training time on the Motor-T Marines. Allow them to take Counter IED courses and conduct tactical convoy training in the field. The more knowledgeable the Marines are on tactical convoy billets the more they will understand the operational requirements and processes every time they are on a convoy. This will also allow for a more cohesive relationship between the attached truck Marines and the organic Motor-T section as well as ensure the Marines are as prepared as possible for the upcoming deployment.

**TOPIC: ROUTE SECURITY**

**DISCUSSION:** The first half of the deployment was spent in the Delaram area, traveling to the Bakwa and Buji areas. The IED threat in the AO was minimal and the area offered the ability to change convoy routes due to the amount of open desert space. Once we entered the Sangin AO all of this changed. For one thing the AO is much more populated and is much smaller in area which creates a problem in changing up the routes we take to get to certain FOBs and PBs. Because of villages and the terrain the convoys have continuously driven through the same general areas repeatedly. It only takes a couple of trips through an area before the enemy catches on and begins to set up IED belts in these areas. Because of this we have lost numerous vehicles and mine rollers which makes transporting supplies and cargo a difficult task around the AO.

**RECOMMENDATION:** In order to continue offensive operations there has to be a change to the resupply routes. Soon the ability to drive between certain FOBs is going to cease. A hard look should be taken at creating a secure route in order to ensure the success of logistical movements. Also, more emphasis placed on conducting CDS drops and HSTs to these outlying FOBs will help ensure they are getting the supplies they require.

 Services

**TOPIC:** **FOOD SERVICE EQUIPMENT MAINTENANCE**

**DISCUSSION:** The ability to feed the battalion became extremely complicated once we left Deleram. We relied heavily on our Field Messman to feed the entire battalion along with the British 40 Commandos and any attachments. The equipment has far exceeded its capacity for the last two months putting a huge strain on the equipment. The personnel had not been trained in proper maintenance or maintenance management procedures which led to poor equipment statuses and lack of proper SL-3 over several deployments with the equipment not being maintained properly. This greatly inhibited the ability to feed the battalion better quality food. The lack of higher echelon support also made this a difficult task. Once the equipment is beyond the capable maintenance of the Marines at the battalion the only way to source more is from redistribution. Field Mess is not set up for success with higher support or education to prepare for an expeditionary environment.

**RECOMMENDATION:** The Field Messman need to be better educated on proper maintenance and maintenance management procedures. For the most part none of them know anything about maintenance or how it works which led to unnecessary delays for appropriate action to be taken to get repair parts. During the Pre-deployment Training Program cooks only attach to battalions for a few exercises. Working in the chow hall does not prepare a Field Messman to run a dining facility in the field. The Field Messman are not set up for success with higher support or education.

**TOPIC:** **FOOD STORAGE**

**DISCUSSION:** There is very little priority put on the need to store Class I properly. When 3d Battalion, 7th Marines displaced from Deleram to Sangin there was nothing established to store the chow needed to store Class I appropriately. Currently we are putting the chow on pallets on the deck to get the chow off the ground but there is no overhead cover. This will become a serious problem when the weather changes and the rain begins. The chow will not hold up for long without proper storage.

**RECOMMENDATION:** The requests have been put in through Engineers for the materials needed to construct storage tents in order to protect the chow from the weather. Maintaining the battalion class I lot will take time, effort, and some creativity in order to keep the chow protected from the elements and safe for human consumption.

**TOPIC: MESSMEN**

**DISCUSSION:** Companies expected the cooks to be a one stop shop for personnel to prepare chow and feed entire companies reinforced. This is not the case and the cooks need support from the companies in order to accommodate the number of people. By the order the ratio is 1 messman to every 75 Marines being fed. In most cases just 2 messman to augment the cooks at chow time would suffice but they often did not even receive that much support with the high demand from operations and posts to stand.

**RECOMMENDATION:** Every Company needs to have Marines sacrifice their time to support the cooks in order to help them prepare a good meal for their Company and keep things sanitary and flowing in a quick manner.

**TOPIC: ClASS I DELIVERY**

**DISCUSSION:** The primary form for delivery of class I has been the Containerized Drop Systems (CDS). The current set up only has one Drop Zone (DZ) set up a FOB Nolay. This ties a lot of our bed space to class I pushing out to the Company positions. Also some of the chow and water does not survive the drops and recoveries well. When Heavy Equipment (HE) support us unavailable the primary source is completely cut off. In that event you lose valuable bed space to class I from resupplies Combat Logistics Battalion 2 brings to Nolay. Another problem is that several types of chow, mainly the Unitized Group Ration (UGR) Heat and Serve rations do not survive CDS well. The portions tend to break inside and this will not be discovered until the unit opens the boxes to find rotten chow.

RECOMMEND: CDS delivery for UGR Heat and Serves should be done via ground. UGR-E’s, Meals Ready to Eat, and First Strike Rations survive the drops well and can be relied on after the drops and recovery to remain in good condition. I recommend focusing ground resupply on enhancements, UGR Heat and Serves, and water.

 Supply

**TOPIC: AMMO EXPENDITURES IN A COMBAT ZONE**

**DISCUSSION:** Higher headquarters is attempting to mitigate the stock piling of ammunition (common in Iraq which led to mountains of ammunition that was never shot and most became grade 3 because of improper storage and handling). With this understanding higher headquarters has levied strict guidelines regarding “combat loads” (per weapon) and pay close attention to the MUREP. Higher Headquarters will provide additional ammunition if given a reasonable justification for the plus-up.

**RECOMMENDATION**: Ensure companies realize that without accurate and timely expenditures forwarded to higher, they will not receive ammunition. At the earliest opportunity, Company Gunnies must provide ammunition expenditure reports after each engagement and training evolution IOT replenish stocks. Cross-talk between the COC and ALOC when engagements occur should be standard to push the companies for expenditures at their earliest opportunity. This will allow for timely internal redistribution (within the battalion) if necessary, as well as meet the requirements by higher.

**TOPIC: GEAR ACCOUNTABILITY**

**DISCUSSION:** Deployed account gear sets are about three times as large as a CONUS accounts. In addition to the massive gear set, deployed battalions are engaged in kinetic activity with gear constantly on the move and being destroyed. This makes gear tracking extremely difficult the using unit. Monthly Consolidated Memorandum Receipts (CMRs) are mandated monthly to assist in the gear accountability. With the companies and commodities focusing on the Battalion’s combat mission combined with not all gear being centrally located, it prevents them from getting a 100% accountability of all TAMCN items required.

**RECOMMENDATION:** Monthly CMR’s reconciliations should be factored into combat operations. Maintenance/Accountability stand downs are great opportunities and extremely recommended. Timelines during these “tactical pauses” need to be established and meet by both the companies/commodities and Supply. Supply accurate and timely turnaround of all discrepancies is vital to the completion of all updates during reconciliations, in order to provide the RO’s with the best starting point for the next round of monthly reconciliations. Vehicles and radios need to be tracked in much more details; this can/should be accomplished by the subject matter expert for each. All gear transfers in/out of the Battalion and internal to the Battalion should only be conducted and processed via the Battalion supply shop.

TOPIC: Gear Requisitions

**DISCUSSION:** All requisitions for deployed units are processed through the SASSY Management Unit (SMU), open purchases, and contracts. Due to the distance between the Battalion and the SMU, combined with the restricted bed space per combat train, supplies arrive in limited quantities. Starting at the lowest level, the Supply shop has struggled to keep up with the high legitimate demands from the Battalion. The process for gear acquisition that was practiced caused items to slip of the radar or when arrive not meet the intended criteria. Supply gear request would arrive in the form of emails, phone conversations, scratch paper, and meetings from an array of personnel.

**RECOMMENDATION**: Line of communications needs to be direct between supply and line companies, company Gunnery Sergeant. One standardized format needs to be used for all gear submission requests. These gear request sheets need to be as detailed as possible with the indented use mentioned, to allow Supply to substitute any item not in stock. In addition, accurate quantities need to be included. This will allow Supply to manage and track all gear requests via spreadsheet/tracker that is updated daily. With this accurate way of tracking gear request, Supply can accurately brief the status of critical items daily/weekly to the Battalion S-4 and the Battalion Command. Supply needs to maintain a reorder baseline for all items and submit for the stock replenishments on a regular cyclic basis. All open purchases and contracts need to be keep as a last resort. The processes to submit, order, and receive any gear procured through these methods are subject to a higher level of scrutiny and difficulty. The time invested into creating these purchase packages and the time for the items to arrive to the using unit, is so extensive that the requirement for a particular item is no longer valid.

**TOPIC: PERSONAL EFFECTS**

**DISCUSSION:** As a deployed combat battalion, the quantities of Personal Effects cases caused this to become a Marine’s full time job. Keeping track of all Marines injured and evacuated from OCONUS, was hard to manage. The timely manner that Supply was informed of a personal effect case and the ability to get the gear to Supply as well as to Leatherneck caused many delays.

**RECOMMENDATION:** Companies need to have the urgency to push proper inventoried cases to Supply. All gear needs to be collected in a first attempt. Only legitimate cases were the Marine is returning to CONUS need to be inventoried to prevent Marines gear for being assumed by the Supply system and having to draw all new gear before getting back to the fight. Transportation of actual cases needs to be expedited. Due to the Battalions location and schedule of combat trains, personal effect cases tend to pill up. The use of air assets and sending a few cases to Leatherneck each week will eliminate this issue. To better track all personal effects cases, Supply needs to utilize a Personal Effects “Tracker” that needs to be briefed weekly to highlight any areas of concern that may require attention. In addition, Supply needs to reconcile weekly with the S-1 and all Personal Casualty Reports (PCR) to get the accurate number of cases open or needed.

**TOPIC: PROTECTING GROUND LINES OF COMMUNICATION**

**DISCUSSION:** While fighting in an asymmetric environment one of the most widely used Taliban tactic was the attacking of our re-supply routes and the attempt to cut off our lines of communications. They would attempt to do this by back-laying IED, surrounding us, and by conducting sniping and ambushes along our lines.

**RECOMMENDATION:** All of our operations into the green zone or into urban environments started with our ability to clear and hold a line of communication. During the planning process we would identify primary and alternate LOCs to be established. This went hand in hand with our C-IED plan and our technique of swarming likely firing points and cutting angles. Once the LOC was established we would picket them using vehicles and with a reserve multiple. This was man power intensive but became pivotal when forced to ground MEDEVAC casualties during engagements.

**TOPIC: BATTERY RE-SUPPLY**

**DISCUSSION:** One of the most limiting factors and planning consideration we had to deal with was battery re-supply for the PRC-152 and the THOR system. The PRC-152 average battery life in the heat of Afghan summer was about 6 hours. The average THOR system would burn through two 5590 batteries every two to four hours. Throughout sustained operations we had to incorporate a robust battery logistics plan the consisted of rotating PRC-152 rechargeable and pushing 5590 batteries forward to all patrols. This reason alone tied us to LOCs and limited our ability to push further into enemy territories for extended periods of time.

**RECOMMENDATION:** The Marine Corps needs to invest in a 5590 battery adaptor for the PRC-152. When this adapter was added to the PRC-148 it increased it usage to about 48 to 72 hours on one 5590 battery. The THOR system needs overhaul the battery life is impractical.

**TOPIC: MAINTAINING POWER VIA GENERATOR**

**DISCUSSION**: With no Generator Mechanic or electrician, it is difficult to conduct maintenance on generators. This results in frequent loss of power to the Combat Operations Center, Battalion Aid Station, and food storage units. The efforts to restore power often produce temporary results that must then be augmented by more work from a technician than would have been necessary if a technician were on site initially.

**RECOMMENDATION**: Ensure that each Company has an attached Generator Mechanic or electrician if they have at least one generator providing power or if there is a shortage of generator mechanics or electricians, S-4 and/or engineers should have a battle rhythm plan that ensures each FOB and PB can receive the mechanic or electrician for PM’s and maintenance even when the generator is up and operational.

**TOPIC: DAMAGE TO ITEMS SUCH AS UNIFORMS, EYE PROTECTION AND SOCKS**

**DISCUSSION**: Commonly destroyed items frequently required multiple requests to receive.

**RECOMMENDATION:** Items such as uniforms could be provided in anticipation of their destruction due to use. Surplus gear that is destroyed due to simply being “surplus” midway through the deployment could more likely be saved for redistribution. Required uniform items such as socks, which are commonly worn out, could be shipped to forward locations whether requested or not, with the knowledge that clean socks ensures better hygiene, leading to greater combat effectiveness.

**TOPIC: PREVENTATIVE VEHICLE MAINTENANACE / REPAIR**

**DISCUSSION**: The items required to conduct routine maintenance on vehicles are not provided in accordance with a timeline that enables vehicles to remain operable. This results in a loss of mobility due to avoidable wear and tear.

**RECOMMENDATION**: Certain items such as fluids will be needed to conduct vehicle maintenance, so it is reasonable to provide them in advance of need. Parts needed to conduct vehicle repair are sometimes available from vehicles that are damaged due to IEDs or other causes, but the process to trade parts from one vehicle to another often prevents mechanics from taking actions to maintain functional vehicles.

**TOPIC: FORCE PROTECTION MATERIAL AVAILABILITY**

**DISCUSSION**: Acquiring materials to conduct force protection enhancements took much longer than necessary based on the process of requesting items and then awaiting their delivery.

**RECOMMENDATION**: The need for force protection supplies such as concertina wire, Hesco barriers, and sandbags should be expected. The push of such supplies to forward elements should be automatic. A request should not be needed to initiate this action, as it is essentially a priority of work for the S-4 to conduct in support of units establishing a defense. Necessary items needs to be staged at battalion so that they are readily available, and Company Gunnery Sergeants can request items such as these in advance of any operation.

**TOPIC:** **MATV/MRAP VEHICLE OPERATOR ISSUES**

**DISCUSSION:** Due to limited vehicle resources available on 29 Palms and the need for ISS certification on the MRAP (unavailable during our PTP), created an enormous strain on the RCT-2 MT staff and delayed the movement of our battalion’s drivers. RCT-2 MT staff did everything in their power (to include unscheduled night driving courses) to certify as many drivers as the undermanned staff could process. This also affected the Company when they needed more drivers and were unable to get a course scheduled as it was only offered to incoming units and to ask a unit to lose a Marines for 4 weeks to get licensed is excessive in theater. Placing the responsibility on units to train drivers is ridiculous when the vehicles aren’t available until EMV.

**RECOMMENDATION**: Schools (in regards to vehicles and staff) should be located at each base and a course steeped in off-road and night driving should be a focused and crucial requirement. Licensing in theatre should also be revamped to eradicate the need to license on HMMWV’s (that aren’t authorized out of the wire), taking crucial behind the wheel time away from the more important vehicles (MRAPS, MATV’s and 7-Tons). There should be a two week drivers course tailored just for MRAP/MATV and be offered throughout the deployment, combat replacements do not come licensed and it becomes a huge challenge to source these drivers. Mileage requirements (logs) which are virtually never kept in theatre should be abolished and a Marine that is licensed (regardless in CONUS or in Theatre) should not be required to “go back to school” because of not having a log. Also, 1.5 to 1 ratio of drivers to vehicles should be a minimum requirement for deploying units (based on theatre numbers).

**TOPIC**: **MINE ROLLERS/MATVs**

**DISCUSSION:** Due to limited vehicle resources available it was a constant struggle to source a mine roller per section. In addition, the MATV mine roller combination while effective resulted in a majority of mobility kills as opposed to the MRAP which rarely was damaged after a mine roller strike.

**RECOMMENDATION:** Mine rollers need to a key component of any vehicle section and at least two per section should be sourced, it has saved numerous vehicles and reduced the direct exposure of IED blasts on Marines with the offset they create. In the case of the MATV its front end has got to be armored or plated as nearly each time a mine roller struck an IED the vehicle was a mobility kill due to fragmentation piercing the radiator or cooling reservoirs, a simple shield on the grate would fix this problem.

**TOPIC**: **LIMITATIONS OF MATV’s**

**DISCUSSION:** MATV’s are a great addition. They return the offensive nature to mobile operations. They do have a few critical limitations. The first is ability to load a non-ambulatory casualty. Early on we realized that loading a casualty into an MATV is damn near impossible. All stretchers are too long to fit in the back and the vehicle is so high that loading a large casualty requires significant manpower. The second is storage space/ access to ammunition. If you have a Mk-19 mounted on an MATV and get into a significant firefight, count on Marines having to run to the back and climb into the back(difficult in itself) in order to conduct a re-load.

**RECOMMENDATION:** Go with a mixed vehicle load of MRAP’s and MATV’s.

Fires

**TOPIC: ADJACENT UNITS**

**DISCUSSION:** Operating in Sangin District we were co-located with British and Georgian forces. The British AO consisted more or less of the District center. Our AO surrounded theirs on the East, West and North. Once the Georgians arrived they took control our AO on the west side of the Helmand. Because of this we had integrated our fires desks through black gear and VHF/UHF communications.

**RECOMMENDATION**: All Goal posts, hot walls, fire missions, and CAS missions must be coordinated between the two fires desks and 31st Georgian ANGLCO. Furthermore we routinely passed off aircraft between 40 CDO, 31 GEO and 3/7 depending on who had the most need at the time. This system worked quite well and was mutually beneficial as we were able to get more air and ISR when we shared assets. Oftentimes, we ran split sections with one aircraft supporting 3/7 and the other supporting 40 CDO. It was very fluid and adaptive to different situations.

**TOPIC: FIRE SUPPORT COORDINATION- AFATDS VS MIRC**

**DISCUSSION:** We are currently required to submit an AFATDS CFF, PSS-SOF image, and MiRC CFF for each HIMARS mission. In my opinion the AFATDS requirement is redundant. Utilizing the AFATDS adds anywhere from four to eight minutes onto the processing time and decreases responsiveness. It also adds no additional accuracy to the process, as the firing unit is required to receive the CFF and posts the MTO in MiRC. Furthermore, to obtain approval, MiRC responses to questions such as PID confirmation, presence of civilians, and ability to maneuver are still required. In an operating environment where artillery fires are used 99% of the time in a TIC situation this is unacceptable; especially when an equally safe, equally accurate, and more responsive alternative is available. Passing CFF and executing fire missions over MiRC is no new concept, it merely transfers TTPs used for voice communications over to digital communications. In sum, utilizing both the AFATDS and the MiRC for fires coordination is unnecessary and mixes Digital and Voice TTPs.

**RECOMMENDATION:** In an ideal world we would utilize only the AFATDS.  However, because the operating environment requires more information than the AFATDS has the capability to pass, MiRC should be the system of choice for coordination. Following MiRC should be voice, via any means, and MiRC as a last resort as it cannot pass information required for approval. Once the Battery works up the mission they will post the MTO as well as send an information copy of the mission to Division, RCT, and the Battalion FSCC in AFATDS.

**TOPIC: HIMARS**

**DISCUSSION:** As a result of the above dialogue regarding MiRC and AFATDS, we were able to make changes to TTPs that significantly reduced HIMARS processing time. When we first arrived the coordination of the mission went as follows: the Company FiST passed PID, target location, and method of engagement to the FSCC, the FSCC would request the GP Hot, pulls the target up in PSS-SOF for refinement, and submitted the mission via PSS-SOF, MiRC CFF, and AFATDS to RCT for verification of all ROE criteria and data. RCT then sent the data to division who sent it to the Battery. If we then needed to alter a HIMARS mission in any way, either due to changing enemy situation or following negative effects on the first round, we were required to submit an entirely new mission.

 We made the point that although changing target location for a re-attack was not the ideal situation, it needed to be planned for so that the Marines on the ground could get the support they need. We should not have to resubmit the entire mission via AFATDS in order to adjust the target location or fuse setting, which is unresponsive. It is more practical to submit a correction to the MiRC CFF and have the Battery make the correction. We would also have to submit a new PSS-SOF grid, and the Battery would verify via MiRC the target location, elevation, and fuse setting. This ensured we were all on the same page and gives two independently verified checks that the grid is correct. The battery was initially uncomfortable with this as it was not in their SOPs. However, after war-gaming situations and conducting dry fires, we were eventually able to incorporate these TTPs into operations.

**RECOMMENDATION**: HIMARS missions are more timely utilizing the TTPs described above, as well as the following TTPs. First request a pre-established Goalpost to go hot immediately upon a unit receiving sustained and effective contact, even you do not yet have a CFF or target location from the FiST. The Goalpost is usually the limiting factor in executing a HIMARS target, so this TTP can significantly reduce processing time. Then process the target as described above. If the target location changed submit a Correction to Line 1 (and lines 2 and 3 if necessary) of the HIMARS CFF and PSS-SOF imagery. The battery will take this grid, sent it to the launcher, and then came back via MiRC with “Ready 41SPR 12345 67890 / ELEV 910” This method allows target prosecuting in a fraction of the time required by the old TTPs.

**TOPIC: AIRSPACE DECONFLICTION**

**DISCUSSION**: In the first few months following our arrival, the idea of the DASC controlling all airspace was thrown around. The DASC was concerned that because Battalion Areas of Operation were so large the Air Officer did not always have the ability to talk to aircraft traversing remote parts of the AO. However, this system would have meant that the Battalion Air Officer would not be in control of the airspace in our Area of Operations. For obvious reasons, this poses significant challenges in regards to clearance of fires, and was protested accordingly.

**RECOMMENDATION**: Ultimately, the solution was to maintain the Air O’s control of the airspace in the Bn AO from surface to 14,000 feet. The DASC could still route aircraft through our battlespace, they just have to notify the Air O and the aircraft checks in prior to passing through.

 This system works very well, however there was another situation, at the far eastern edge of our initial AO. That posed a problem for airspace deconfliction. The Battalion AO was approximately 200km wide. Deleram and our main area of influence was on the western half of the AO. On the eastern side of the AO was western Washir, southern Musa Qalah, and southern Now Zad Districts. This area, which is bordered by the Helmand River on the east and TF Helmand to the south, is approximately 40 km northwest of Leatherneck. Because all airspace deconfliction was done by the Killbox/Keypad template, this portion of our AO was actually in Task Force Helmand airspace. This is because the Killboxes are square, while the AOs are not. Until the MEF took over RC-SW we were required to push up all fires in that airspace for coordination with TF Helmand, to include 60mm mortars. The workaround was to create a temporary Restricted Operating Zone in the TF Helmand airspace so that we could clear fires on our own. This streamlined the process until MEF took over RC-SW.

**DISCUSSION**: Sharing airspace ownership with adjacent units, and expeditious airspace allocation. Once in the Sangin AO, new challenges arose in regards to airspace de confliction. Our Companies were in extremely close proximity to our adjacent unit. It was not uncommon to have multiple units in contact at the same time from both Bn’s with air on station at the same time supporting both Bn’s separately but in the same piece of sky. The result was a CAS stack with multiple aircraft working for two separate Battalions on multiple nets. The DASC literally could not keep up with the pace of both units operating inside the same keypad.

**RECOMMENDATION**: To combat this, the DASC would delegate airspace authority to both units over our respective battle spaces and allow each Bn’s air officer to locally de confliction between assets. This puts the ownership of de confliction with the supported unit and alleviates the DASC, who is not at all read into the tactical situation, from having to de conflict assets. This was above and beyond the best way to operate, and much more in keeping with the traditional fires/air practices that we train for. Bn Air Officers in charge of de conflicting the airspace over their Bn’s respective battle space. Our particular situation involved two Bn’s having to closely follow and communicate each other’s fires and de conflict at the Bn level. Air Officer and FSCC coordination and communication between Bn’s allowed near simultaneous CAS engagements for two separate units in close proximity to one another. With constant communication flow between our Bn and our adjacent Bn, we were able to quickly re task CAS platforms to the unit that was most in need and essentially share assets between Bn’s, thereby maximizing asset utilization. Local de confliction of assets at the Bn level allows flexibility to change altitude blocks for CAS platforms, fast de confliction of gun target lines, expeditious CAS/fires engagements.

**TOPIC: MORTARS**

**DISCUSSION**: Mortars were our workhorse indirect asset, as most of our missions were 120mm or 81mm mortar missions. The vast majority of missions were illumination and smoke missions, however we prosecuted HE missions on multiple occasions as well. Mortars worked very well for illumination and smoke. Mortars were typically only used for HE if the enemy is in the open and target location via PSS-SOF for precision munitions is difficult to achieve, or if the situation requires immediate fire support and the commander is willing to take some risk regarding accuracy.

**RECOMMENDATION**: If possible (time and resource permitting) utilize either precision air delivered ordinance, HIMARS or Artillery Assets instead of Mortars, especially in a full on Urban Environment. However, if timeliness is an issue, if the target is mobile, and/or the target is in an area with low CDE concern (i.e. a field or tree line) prosecute with mortars. If targeting a compound in defense mortars may be used but should only be done as a last resort. In other words, weaponeering is key and the expediency of fires is your driving factor of whether or not to assume risk based on the situation on the deck.

**TOPIC: CANNON ARTILLERY**

**DISCUSSION**: 1/11 BRAVO Battery was in position to support 3/7 during our last month in country. It took some pressure initially from the FSCC to use artillery, particularly Excalibur rounds, on targets instead of using HIMARS. However, after our first Excalibur mission struck its intended target dead on with good effects, the companies have become must more comfortable with its employment, and have employed it often.

At the beginning of the deployment Excalibur approval was at the RCT level, and the approval process was the same as HIMARS. RCT-2 ultimately changed the approval policy and delegated it down to the Battalion level. The process worked as follows: we would request the hot wall hot through RCT-2 and send the CFF to the battery, the RCT’s only role is to get the hotwall hot, and then the Battalion tracks, clears, and approves the mission. Because we know that Excal will always exceed 14,000 ft MSL we would request the hotwall hot preemptively, much like a HIMARS goalpost, as it typically was the limiting factor. This ultimately became an issue after we left Hot walls HOT for lengthy periods of time due to enemy combatants in the area of friendly forces. Eventually, RCT sent a one hour time limit for how long a battalion can keep a hotwall hot at a time.

**RECOMMENDATION**: The current procedures for the use of cannon artillery are ideal. The only problem is MiRC connectivity, which can be solved by maintaining VHF communications with the Battery over the Artillery COF Net. Through utilization of MiRC and VHF communications artillery missions can be prosecuted doctrinally to the extent possible under theater ROEs. Excalibur is an extremely accurate PGM that can be employed around the clock with Battalion level approval, and for this reason it is very useful. Also, at the ranges (10-14km) that we typically prosecute artillery missions M795 High Explosive rounds are very accurate, with 82% of rounds impacting within 50m of the target location.

**TOPIC: PERSISTENT THREAT DETECTION SYSTEM (PTDS)**

**DISCUSSION**: The PTDS (Aerostat) is a LockHeed Martin system operated by civilians. It is a force multiplier as it can be used to scan large areas of terrain. It is basically a large balloon tethered to a mooring platform that is accompanied by a ground control station. The Aerostat is equipped with both visual and audio surveillance technology and can relay near real time full motion video floating 3500 ft MSL above FOB Sabit Qadam (Jackson). It has the capability to scan areas of up to 8 clicks, and provides day/night 360 degree detection, surveillance, monitoring, and target location. The 3/7 COC has a monitor that feeds near real-time video from the camera on the Aerostat. When we want them to focus in on something particular or go to a certain target location, the S-2 Clerk picks up an installed landline and calls them.

We have utilized the Aerostat for many different scenarios to gain PID with the enemy and to gain situational awareness of the battlefield. When we first arrived in Sangin, we had to share the Aerostat and its usage with the British 40 CDO. The understanding was that when Scan Eagle came on station, the 40 CDO would take the Aerostat. If either side had a TIC, the Aerostat would be directed to that location. Generally speaking, the Aerostat has been a huge advantage for Fire Support. As it has a target grid on the bottom right hand corner of the monitor that it feeds the COC, the Fires section can quickly gain a general target grid and plot that grid on PSS-SOF to do highly accurate and quick imagery analysis for a more precise ten digit target grid.

 Some of the issues we have encountered with the PTDS stem from the operators being civilian contractors. The civilians seem to lack a general understanding of what we are looking for while scanning areas. More often than not, we have to tell them to either zoom in, zoom out, or to scan a certain area. For example, if we told the Aerostat to monitor a certain patrol full of Marines, they would zoom in on the Marines and not scan the general area for combatants or threats.

 One of the huge capabilities of the Aerostat is that they are able to zoom in on an Afghan Civilian for near facial recognition. While we have tracked enemy combatants, the blimp has been able to zoom in on several occasions to get PID on a certain JPEL. Again, one of the downfalls to this feature is the civilian contractor themselves. While they are tracking a moving target, they more often than not will be zoomed in so close to the target that getting any type of fire support imagery analysis is impossible. We then have to ask them to zoom out so we can conduct target correlation and pull a grid.

**RECOMMENDATION**: There needs to be a Marine posted at the PTDS center. The Marine on duty should have a good general understanding of what the FSCC, and the COC is looking for and how the target correlation process works. This would improve the time for target location greatly.

**TOPIC: FiST/FSCC COMMUNICATION**

**DISCUSSION**: In our current AO, we have the ability to communicate via VHF comms with all our FiSTs and organic fire support assets. However, the smaller battlespace still does not allow the FiST to easily dismount and establish communications off of a 10-foot whip. We emplaced relay sites in the AO that have improved comms but still not to the level that the FiSTs require. Comm was constantly and issue in order to coordinate fires, review game plans, and confirm friendly and enemy locations.

**RECOMMENDATION**: Essentially, we have established mini-FSCCs in each company. The FiST teams typically work out of the FOBs or Forward COCs with amped radio capabilities. This allows them to maintain good comms with the FSCC in order to coordinate assets to destroy the enemy. For target location, the FiSTs relied heavily on their Joint Fires, Artillery, and Mortar Observers. With observers attached to the units in the fight, the FiSTs were able to effectively coordinate game plans and assets to support ground maneuver. The FiST was made up of the FiST leader and the Forward Air Controller. Pushing the observers out, the 2-man FiST would be the collaborators and coordinators for the ground units. The FiST would then push the target location and game plan up to the FSCC IOT request additional assets if required.

**TOPIC: FSCC MANPOWER**

**DISCUSSION**: When in Deleram, we had a full FSCC, to include an Arty LNO det, (2) mortar reps, FSC and (A)FSC, and the Air O with (2) radio operators. At the time, with low activity, it was a waste of manpower. When we moved to Sangin and Weapons Company had to be able to MAC, we cut the manpower to the Arty LNO, Arty Chief, (A)FSC, Air O and one radio operator. While it was manageable, it was difficult to manage all the assets at once. While the Arty LNO coordinated HIMARs or Excal and the Air O talked to the aircraft, the FSC had to manage the mortars, which made it difficult to still oversee the other fires and ensure we had deconfliction and everyone was on the same page, to include the Battalion Commander.

**RECOMMENDATION**: Analyze and constantly adapt your manpower to your needs. In Deleram, we could have gone down to a skeleton crew for manpower in the COC based on the low kinetics of the area. In Sangin, we needed a full FSCC to run 24 hour operations. However, a full FSCC means pulling manpower from Weapons Company and the MAC. So there needs to be a balance between the two responsibilities and, as much as possible, the battalion needs to forecast the mission set that they expect to utilize in the AO. So far in Sangin, the MAC has done one operation lasting only a week. Other than that, CAAT platoons have been reporting directly to battalion and the mortars report directly to the FSCC.

**TOPIC: TARGET ACQUISITION AND REFINEMENT**

**DISCUSSION**: GRGs are an excellent asset for maneuver elements. It allows them to quickly plot out positions for both friendly and enemy forces. However, in a war where precision-guided munitions are critical and we have to hit a specific point, the GRGs only get us in vicinity of the target. Most of the compound numbers on the GRGs identify compounds with a wall sounding it, a courtyard, and anywhere from 3-5 buildings inside. Many times, company FiSTs would request fires for a compound and then get off the net. This was not enough for the FSCC to provide accurate and timely fires for targets. The GRG is great to get us in the area, but there needs to be a talk-on to the specific building or compound wall that the enemy is located at, and sometimes which side of the building depending on the size. When the Marines are in the fight, they give a quick location and return to the fight, but the FOs need to continue to refine the target location to the FiST so that they can either generate the refined 10-digit grid themselves or talk the FSCC onto the point in order to bring fires down on the enemy.

**RECOMMENDATION**: This needs to be a battle drill between the FOs and the FiST. When a squad has an FO attached, or whoever they assign to be their fires coordinator, they need to keep that Marine in a position to observe the enemy position but their weapon in the fight is the radio. They need to understand that when they want fires, they need to be talking to their FiST and identifying more than just a GRG reference. It can be as simple as “Compound 1 in Sector A1A, north-south running building on the west side of the compound, target the southern portion of the building.” From there, the FiST and FSCC can look at the compound, identify the specific point, refine the grid, and prosecute the target.

**TOPIC: FIRES APPROVAL**

**DISCUSSION**: When we moved to Sangin, the (A)FSC took over as the primary FSC for the battalion. As a First Lieutenant, he did not have fires approval for the battalion. The battalion Ops O, XO, or Battalion Commander would have to give the command to fire in order to engage a target. In order for approval, Company Commanders had to relay the game plan via Bn TAC 1 as well as the FSC Net in order to ensure maneuver and fires were collaborating and tracking the same picture. This led to a lag in fires many times and redundant passing of fires game plans on the maneuvers net, which is non doctrinal. This was not without reason though. On numerous occasions, conflicting game plans for fires were passed by the Company Commander and the Company FiST. This method guaranteed that the Company level fires plan was in keeping with the Company Commanders goal, however, it does not facilitate quick fires approval and requires additional communication from the Company to the Bn. Additionally, there were times when POSREPs were called into question and the FiST was not completely tracking the maneuver elements that it was supporting. This further reinforced the need to continue this method of fires approval.

**RECOMMENDATION**: It is the responsibility of the FiST to coordinate with the FSCC in order to support maneuver. The FiST is responsible for deconflicting fires with ground maneuver and briefing his company commander on the game plan. From there, the FSCC is responsible for ensuring that the mission meets the ROEs and criteria for engagement and that there is proper deconfliction between ground forces, air, and maneuver. Dynamic targets and offensive fires require Battalion Commander and higher approval, but in regards to self-defense, it is the FSC’s duty to ensure that the fires are safe and are in keeping with the Laws of War, Tactical Directive, and ROEs.

**TOPIC: SYSTEMS TRAINING**

**DISCUSSION**: Intensive systems training to cover mIRC, PSS-SOF, C2PC and CPOF needs to be conducted prior to deployment. Systems utilized in COC operations such as PSS-SOF require certification before use in country.

**RECOMMENDATION**: More in depth training with systems familiarization and training should have been conducted with MISTC. Ensure all Marines that will utilize PSS-SOF (FSCC Watch Clerks) are up to date with certification. Certification should be conducted as soon as possible to allow integration into pre-deployment training.

**TOPIC: SYSTEMS INTEGRATION**

**DISCUSSION**: Fire Support Rehearsals from Sensor to Shooter with C2 systems need to be conducted prior to deployment. Following systems training, and prior to deployment sensor to shooter Fire Support rehearsals utilizing C2 systems were not conducted. Our first 81’s Illum mission did not go as smoothly as it could have. Mortar aim points were sent in vice a target grid.

**RECOMMENDATION**: Prior to future deployments conduct rehearsals that are realistic as possible, utilizing real world scenarios and the COC setup and systems that is expected to be used on the deployment.

**TOPIC: CLOSE AIR SUPPORT**

**DISCUSSION**: Multiple platforms and weapons systems were utilized for CAS throughout the deployment. Above and beyond, type 2 control was the dominant type of control in most situations. Additionally, precision guided munitions or gun runs were the predominant weapons of choice. This led to multiple lessons learned as far as weapons effectiveness and proper weaponeering.

**RECOMMENDATION**: First off, type 2 control is only as valid and effective as the source that is deriving your target location. We saw, and leveraged, great success with Joint Fires Observers (JFO’s) with maneuver units relaying target location over the TAD net to the Company FAC and the aircraft real time. Additionally, the use of ROVER or Videoscout downlink for CAS platforms greatly increased and facilitated the use of type 2 control. The Videoscout was above and beyond the most important tool to our FAC’s. With these two tools, the Company FAC would be able to correlate target location off a JFO target paint and accurately talk on the CAS platform to the correct area for a bomb on target CAS mission. Additionally, the Bn FSCC could follow along with the correlation, which led to minimal doubt about what target was intended to be engaged. This added a significantly increased comfort factor for the Bn FSCC and facilitated fires approval. Type 1 control was utilized successfully several times as well and remains valid. Type 1 control often meant that the FAC was on patrol with the unit in contact and prohibited him from having downlink capability. Type 3 control was never requested, although certainly remains a valid method. There were numerous occasions where units were taking contact from multiple areas and type 3 could have been utilized. This method of control would require very specific restrictions and would likely involve a delay in fires approval, however the benefits gained could certainly make it worth executing. Type 3 engagement windows with gun runs can minimize the need for excessive re-attack approvals and likely maximize effects with more ordnance being delivered over multiple attacks.

Target location is the single most difficult factor we have experienced with executing CAS missions. JFO’s, squad leaders, designated rifleman, or anyone else in position to provide accurate target location should be read into what assets are on station and how to effect target correlation. This can mean coming up the TAD net directly with the aircraft or relaying back to the Company FAC/JTAC on Co TAC. In all cases, it involves using a radio and relaying the situation to someone and communicating updates to the situation. Training these individuals early and exposing them to CAS prior to coming into theater will pay dividends.

In regards to weaponeering; we, as a Bn, almost always attempted to utilize the lowest collateral weapon from the aircraft. Our direction was to eliminate the target with no civilian casualties or damage to nearby structures. Frequently, we would engage enemy in tree lines near or adjacent to structures within 300m or less of friendly forces. Gun runs with fixed and rotor wing platforms following the axis of tree lines were frequent and effective for the most part. The gun run was usually driven by the low CDE requirements and the minimized risk to surrounding compounds and personnel. Often, tree lines were attacked with 20mm with unknown and likely little effects. Precision munitions were utilized on everything from tree lines and compounds to personnel in the open. Results also varied, but generally speaking, results and BDA were positive. LGB’s with a delayed fuse has been an effective weapon for compounds and areas where there is a need to minimize collateral damage. JDAM’s have been utilized on compounds with near perfect results, but a higher volume of collateral effects on surrounding compounds. Whenever possible, a game plan that involves PGM’s and some type of follow employment option, be it guns or additional bombs, should be considered. We have employed LGB munitions on positions only to have the target survive the strike and egress the area because no follow on attack was briefed or approved. Follow on attacks should be at the least planned for and briefed if needed.

**TOPIC: ASSAULT SUPPORT:**

**DISCUSSION**: Organic Marine assault support assets are few in numbers in theater, this leads to stringent prioritization by higher of which requests are supported and which are not. Compounding the problem, the demand is extremely high in theater as there is an extreme IED threat which makes transportation by air of pax and cargo the preferred method of movement. Helmand is a desert like region with significant brown out, this creates difficult operating environments for heavy lift assault support aircraft. The CH-53 and the MV-22 are the two primary USMC platforms in theater and create significant downwash. This has led to tremendous difficulty for aircrews when tasked to perform brownout landings. Often, both models of aircraft will be incapable of landing in certain zones, be it due to aircrew ability, aircraft limitations, or environmental surroundings. This has led to the Wing imposing numerous regulations on what zones can and can’t be landed in during specific times (i.e. day zones only). Additionally, any aircraft that is tasked to land outside of an established FOB can only be granted permission to do so by the Wing. This requires detailed LZ studies with imagery of the proposed landing zone days prior to execution. These requirements have led to a very rigid and inflexible assault support system with little room for last minute changes or adaptability.

**RECOMMENDATION**: First, the dominating large scale problem that stems all other issues is the lack of assets in theater. The current size of ACE assets is not adequate to support the present GCE size. With regards to the requirements the Wing imposes on landing; the decision to land in a particular zone should lie with the aircraft commander or section leader, not higher headquarters. Having an assault support platform that can land to pick up troops or cargo on request, such as a Huey on a preplanned JTAR, would greatly benefit the GCE. This will enable the executor to determine for his or herself whether or not a particular mission is supportable. During dynamic operations, locations and times change fluidly and require air assets to adapt with the same pace. This does not happen currently. Regarding the actual execution of assault support operations; the perception, quite frankly, is that our aircrews are not good at landing in zones. Marines will watch multiple failed landing attempts by USMC aircraft into a given zone, then watch a USAF or UK medevac platform land with little to no difficulty in that same area. The scope of that specific issue is beyond this report, but it greatly affects the Marines being supported. At the Bn level, detailed instructions, planning, and preparation for assault support and LZ operations will better improve success for assault support ops.

**TOPIC: JTAR PROCESS**

**DISCUSSION**: JTARs are primarily sourced via preplanned or priority requests. For preplanned JTARs, the required submission timeline is 72 hours prior to execution. Priority JTARs can be submitted as a case to case basis as the situation evolves throughout the day. Pre planned JTARs will be sourced or not sourced depending on the priority assigned by higher. Additionally, because the submission is 72 hours out, the JTAR becomes more or less a placeholder for support. You may not know exactly what that request will be used for, but make the most educated guess you can.

**RECOMMENDATION**: The preplanned JTAR should be as specific as you can possibly make it. Air to ground integration should at least be attempted, even if the time requested is not precisely what was requested or planned for. The option should be made available to Company Commander to link patrols to that TOS or incorporate that planned air as much as possible. FACs should be involved in writing JTARs for their battle space with specific goals set forth by their ground force commander. Priority JTARs are requested through the DASC by the Air Officer in the event that no preplanned air is available, but the need arises for CAS assets. Nearly all of our major engagements using aircraft have been provided by requesting priority JTARs. Keeping in mind that pri JTARs pull assets from other units being supported, we only request them when there is a legitimate need. We have experienced little difficulty with keeping pri JTARs open and keeping assets on station when the need is there. The key is continuous communication with higher informing them of the situation as it develops in order to facilitate follow on assets.

**TOPIC: FIST PROCEDURES AND POSITION OF THE FORWARD OBSERVERS**

**DISCUSSION:** Throughout the deployment we kept the entire Fire Support Team (FiST) together as much as possible. Additionally, we positioned the artillery scout and 81s Forward Observer (FO) with the line platoons. Each FO and the FiST were equipped with a Vector Dagger or Keyhole system to get refined grids. Our FiST primarily worked from a vehicle either inside or from and elevated position with power running from the vehicle. This allowed the FiST to have solid handshakes with the rover feed for clearance of air and allowed the artillery FO to use Precision Strike Suite Special Operation Force (PSS-SOF) in order to refine grids for HIMARS and Excalibur shots. The FiST team acted as the company Fire Support Coordination Center (FSCC) and was able to conduct Type I and Type II CAS. Additionally, the FiST used the same traditional FiST procedures taught at CAX and orchestrated fires in the same manner.

**RECOMMENDATION:** Although it is tempting as a CO to take the FiST with you on the move the procedure that worked best for us was allowing the FiST to move independently or to use technology as their eyes forward. Additionally, having the FiST leader on company TAC at all times allowed him to build his situational awareness and receive tasks for fires. The FiSTs reliance on the Rover downlink and PSS-OFF can be reduced with high quality, small scale imagery, facilitating JTAC to Aircraft talk-ons, or Arty FO to FSC talk on so that PSS-OFF can be used at the Battalion level to coordinate HIMARs or Excalibur precision indirect fires.

**TOPIC: DIRECT FIRES AND HEAVY MACHINEGUNS**

**DISCUSSION:** MK-19 and M2 50Cal were used extensively throughout the deployment in ground mounted traditional roles. During all of our operations in both urban and rural environments we used HMG to provide overwhelming fires. Often times this meant shuttling the guns and ammo via foot several kilometers but the pay off of fires was worth the pain. This was only possible with secured LOCs. We usually carried two MK-19s and two M2 50 Cal in the back of our mobile sections vehicles in order to hand off to dismounts once terrain was seized.

**RECOMMENDATION:** More cross training needs to be conducted between rifleman and machinegun gunners.

**TOPIC: ILLUMINATION AS A DETERRENT**

**DISCUSSION**: Maneuver elements often tried to use illumination scheduled at random times to deter or expose insurgents.

**RECOMMENDATION**: Illumination does not deter for any longer than the round is in the air, and only exposes insurgents if they are in the area. Scheduling illumination hoping to catch an insurgent wastes rounds. It is better to plan for illumination as an on-call fire mission in support of troops prepared to engage a threat, and to use IR rounds instead of visible illumination. Due to the proximity of friendly forces and insurgents, it is common for visible illumination to expose our troops as well as the enemy.

**TOPIC: POSITIONING OF FIRES SUPPORT TEAMS (FIST) ELEMETNTS WITH REGARDS TO COMMUNICATION**

**DISCUSSION**: The FST leader and Forward Air Controller (FAC) must be able to communicate with their respective agencies via radio. This eliminates the need for a radio relay to external support agencies. On more than one occasion the Kilo FST leader relayed through another element to higher, and at one point it was necessary for the Kilo FST to relay for India’s. These situations lead to delays that put Marines at risk.

**RECOMMENDATION**: Having the FST leader or FAC forward beyond their ability to communicate directly with external agencies decreases their effectiveness to the point where they no longer support maneuver. Kilo has established its FST on a hilltop, and this was effective. It has kept the FST leader and FAC in the same vehicle, equipped with multiple radios, and this was effective. It has established the FST in a COC, and this was effective. All of the times when FST effectiveness was degraded occurred when dismounted, due to a breakdown in communication with external agencies caused by the limitations of communication equipment.

**TOPIC: LIGHWEIGHT COUNTER MORTAR RADAR (LCMR) EFFECTIVENESS**

**DISCUSSION**: Following LCMR enemy mortar site detections to a Point of Origin (POO) is so unlikely that there is little point in sending maneuver elements anywhere based on LCMR feedback alone. Collateral damage considerations and a lack of observation of impacts prohibit us from targeting an LCMR-driven POO with indirect fire, and the ability of the enemy to detect approaching troops will allow them to displace before maneuver elements arrive.

**RECOMMENDATION**: Air is the only effective method for locating and destroying a POO site. Immediately request air when receiving indirect fire, and hope the rounds come in long enough for air to arrive.

**TOPIC: SIDE EFFECTS OF ELECTRONIC COUNTERMEASERUS (ECMs)**

**DISCUSSION**: The use of ECMs have been found to severely degrade communications and the ability to receive a clear downlink video from aircraft.

**RECOMMENDATION**: Ensure each vehicle commander knows how to operate ECMs on his vehicle and can turn them off quickly when needed. UHF frequencies have been found to be affected the most from ECMs. Establishing a VHF frequency as a primary air frequency during mounted operations would mitigate the impact of ECMs on ground-to-air communication. With ECMs operating a FAC/JTAC will also likely be unable to gain a clear video down-link from aircraft. Turning off ECMs would increase capabilities for any type of target correlation.

**TOPIC: DAMAGE CLAIMS**

**DISCUSSION**: An unclear process of tracking damage claims caused multiple individuals to be overpaid. The representative from Civil Affairs Group did not pass on any information about who he was paying or what damages were being claimed. When a policy was enacted that required Marines on patrol to verify claims, they had no way of knowing what areas had been claimed already, and there was no one to contact about whose claims had been addressed after the CAG Marine departed. Most Marines also have no idea how large the Afghan unit is that they use to measure land.

**RECOMMENDATION**: Attach CAG Marines to infantry units for the duration of deployments, and establish simple policies for verifying damage claims so that any squad leader can speak intelligently about claims policies. Instructions for squad leaders should clearly state that a local national will request an initial claim form from the CAG representative. When a patrol passes the area being claimed as damaged, a Marine on the patrol will verify the size, nature, and location of the damage and return the initial claim form to the local national. Once the damages are verified, the local national can return to the location of the CAG representative to receive a properly completed damage claim, which he and the District Center will recognize and track.

**TOPIC: CASH FOR WORK**

**DISCUSSION**: Cash for Work project policy dictates that we pay local nationals on site. However, the locals on site are not always there for work. The Taliban secretly joins Cash for Work project groups to identify the paid workers in order to tax the participants. Death or physical abuse often results when workers receive cash in front of the Taliban observers.

**RECOMMENDATION**: Issue workers a card that contains their name, tribe, and the amount they earned instead of cash. In addition to the card, create a master roster to verify each day’s attendance, since not all of the same workers return when a project continues more than one day. Pass this information to the CAG representative at the District Center. This will allow the worker to receive cash out of sight of the Taliban by claiming his pay at the District Center.

**TOPIC: EXCALIBUR**

**DISCUSSION:** While faster than HIMARS, Excalibur still takes a considerable amount of time to fire due to the hot wall requirements.

**RECOMMENDATION:** Combat outpost (COP) Fulod had a chronic problem with a sniper operating out of a cluster of buildings approximately 200m to its east. On a daily basis the sniper would engage posts, typically shooting between the hours of 0700 and 1000. Priority Excalibur targets had already been established on the shooter’s most frequented firing points; however, it was still taking anywhere from 5-10 minutes to get the hot wall cleared. After some discussion with the fire support coordinator (FSC), the hot wall was established at first light for roughly three hours in anticipation of the shooter reoccupying his former position. True to form, the sniper began shooting at around 0930 from the vicinity of one of the preplanned target. With the battery already laid in and the hot wall hot, the company was able to take the shot within about two minutes. It is unknown whether or not the shooter was killed in this engagement; however, approximately 30 seconds after the round hit an individual left the building next to the impact area, traveled to a known enemy C2 node, and met with approximately 9 other individuals, some of whom were armed.

**TOPIC: DANGER CLOSE**

**DISCUSSION:** Due to the close nature of the fight in Sangin, almost every fire support mission will be danger close.

**RECOMMENDATION:** Proper weaponeering is a must. A careful decision must be made concerning which of the available weapons will most expediently and effectively neutralize the enemy threat and cause as little risk to nearby friendly forces as possible. The weapon of choice for Lima when collateral damage concerns have been high has been the gun run. Though a 500 pound bomb and a high mobility rocket (HIMARS) have roughly the same danger close distance, the perception from forces on the ground is that a HIMARS has a more localized blast, possibly due to the nature of its trajectory and velocity as it impacts the target. The arrival of 155mm Excalibur in the AO now allows for the use of an even smaller yield precision weapon, bridging the gap between a rocket and gun run and a full out bomb or HIMARS strike.

**TOPIC: MORTAR EMPLOYMENT**

**DISCUSSION:** Due to restrictions imposed by the tactical directive, rules of engagement (ROEs), and a general lack of accuracy, 81mm and 120mm mortars proved to be fairly unresponsive and difficult to use effectively in the more urbanized environments.

**RECOMMENDATION:** Setting up a company run fire direction center (FDC) for 60mm mortars provided the company with the ability to provide timely and accurate indirect fire from firm bases in support of maneuver units on the ground. With prior training both pre-deployment stateside and while in country, the company was able to set up two FDCs for our 60s in separate locations. Because 60mm is cleared at the company level and there are no restrictions for canister fall grids while shooting illum, establishing and firing targets is probably two to three times faster for 60s vice 81s and 120s. The ability to have a 60mm call for fire (CFF) sent up from units on the ground to the mortar team allows the maneuver elements the freedom to maneuver without lugging around the entire 60mm set up. 60s were kept with maneuver elements on the ground; they traveled light, only carrying the assault plate and a minimal number of rounds. These first few rounds fired from hand-held mode allowed the second tube, which was set up conventionally in a COP or FOB, to dial in on the enemy location and be prepared to fire in case they were needed. Furthermore, due to the advanced nature of intelligence/surveillance/reconnaissance (ISR) platforms available it is possible to fire without an observer on the ground. Without an FDC, this kind of fire would be impossible. Additionally, the ability to fire both illumination and infrared (IR) illum at a grid requested by maneuver units enabled us to provide illumination support for units on the ground without having to call the battalion and work through the hassle of finding a suitable target with an appropriate canister fall grid (any illum target for shells larger than 60mm must have a canister fall grid that is at least 200m from any structures. This is nearly impossible in the tightly packed farmland and urban areas around Sangin.)

**TOPIC: FIRE SUPPORT TEAM (FST) TASK ORGANIZATION**

**DISCUSSION:** With precision fires forming the majority of ordnance utilized, controlling, deconflicting, and refining missions becomes exceedingly difficult for the FST leader and FAC if located on the ground with maneuver units.

**RECOMMENDATION:** In reality, the FST team in our operations operated more as a company level FSC. Instead of the traditional T/O where the FST remains intact at a centralized location, the company farmed out all of its FOs and JFOs to maneuver units and kept the FST leader and FAC at the COC where they could utilize video feed from ISR/attack platforms and have access to significantly better communications and computer programs such as PSS-SOF and Falcon View. These assets are crucial with the kind of weapons that are being employed and help the FST Leader/FAC provide timely refinements and keep a better overall picture of the fight. While it is definitely possible to do the traditional FST set up and locate them on the ground with the maneuver elements, a centralized FSC style set up proved to be the most effective method, especially when several units were in contact. At several points the FST has been forced to provide simultaneous fire support to two different elements separated by over 4 kilometers. Having access to six different radios (all amped), mIRC, PSS-SOF, Falcon View, and BFT allowed the FST to simultaneously call in a HIMARS mission on one location, drop a GBU on another location, and continue to shoot 60s at both locations, without losing situational awareness on either situation, all while being able to match the weaponeering aspects to meet the company commander’s intent. Having the FST Leader, the FAC, and the CO or XO (or whoever is clearing fires) all located in the same location with all the advantages of amped radios and computers facilitates fire support to a level that would not be possible on the ground.

**TOPIC: FAC/JTAC PLACEMENT AND JFO INTEGRATION**

**DISCUSSION:** Coming out of TACP School, FACs and JTACs typically see themselves employed either on foot mobile patrols or from a FST hill setup. The problem with this notion is that during clearing operations, there are far too many individual maneuver elements for each one to have FAC or JTAC attached. If the company’s only controller goes out into the field and a maneuver element other than the one he’s with takes contact, given the restrictive visibility in the area, it’s very unlikely he’ll be able to locate the enemy and talk on the aircraft, rendering him ineffective.

**RECOMMENDATION:** If a company has only one controller, his default appointed place of duty ought to be the company combat operations center (COC). While it’s certainly faster and easier to control aircraft while directly in the fight, too often the unit not weighted with the FAC or JTAC will not be the one to take contact, or worse, multiple units will be in contact simultaneously. Keeping the company’s only controller in the COC allows him to monitor and control the fight most effectively, particularly if there are multiple units in contact simultaneously. In order for this employment scheme to work, JFO integration is key, and all leaders from the fire team leader up need to understand how to “paint the picture” to higher.

The toughest part of employing aviation ordnance or ground-based indirect fires, as simplistic as it sounds, is knowing where both the friendly and enemy positions are- once you know those two things, the fires employment becomes a simple geometry and weaponeering problem. When a unit takes contact, its leadership’s immediate responsibility is to employ the unit and its organic weapons against the enemy. The leadership’s next reflex has to be to provide higher with the necessary situational awareness to deconflict and augment fires. This comes in the form of a ten-digit GPS grid for friendly location followed by a magnetic azimuth and estimated distance to the enemy. This information can be plugged into FalconView within ten to twenty seconds, producing a reasonably accurate eight-digit grid for the enemy location. After that, the rest of the “paint” from the unit in contact comes in the form of more detailed enemy and friendly actions. For example, “This is [unit call sign], taking heavy, accurate fire from the tree line immediately south of [building and sector number]. We’re returning fire with 5.56 and 240, but are unable to maneuver. Request indirect or aviation fires on the enemy in that tree line as soon as possible.” If the unit in contact has a JFO, or another high Marine typically high on situation awareness, that individual can then augment and refine the situation report and enemy position and activity via a TAD frequency, whether or not there is air on station. In essence, the TAD frequency also acts as the doctrinal TACP Local net, but at the Company level. Using both nets keeps all players’ situational awareness higher without unnecessarily clobbering the Company Tac with overly elaborate situation reports from a single unit in contact, when there may be multiple simultaneous engagements. The JFOs (or other “talkers”) have to share the TAD frequency with the FAC/JTAC and the aircraft; still, the maneuver elements hear real-time updates from the aircrews and can interact with them directly, preventing a “telephone” game of the FAC/JTAC relaying transmissions from the Company TAC on the TAD frequency and back. All players not in contact remain quiet and simply monitor, the FAC/JTAC controls both the aircraft and the communications on the TAD frequency.

**TOPIC:** **ESSENTIAL GEAR FOR EMPLOYMENT OF INDIRECT AND AVIATION ORDNANCE**

**DISCUSSION:** In order for the above employment tactics to work, the following is the minimum recommended gear list.

**RECOMMENDATION:** Every fire team leader needs a GPS. The Garmin Foretrex 301s work well, as they can be worn on a wrist, a weapon, or flak jacket and last approximately 18 hours on two AAA batteries. Every squad leader needs a compass in order to give accurate azimuths to target locations. Of note, most buildings in the Green Zone parallel the river, leading to frequent disorientation by Marines, who subconsciously and mistakenly cue off building faces for cardinal directions. All Marines need a PRC-153, to be used for intra-squad and intra-platoon communications. This allows the PRC-152s to be used exclusively for Company TAC and the TAD frequency. The 153 batteries last much longer and the radios weigh less, so this lightens the average load carried by the average Marine and reduces the logistics effort necessary to keep the various elements supplied with batteries. The more GPS units and compasses spread throughout the company, the better.

JFOs, JTACs, FACs, and any other scouts or individuals frequently controlling or requesting aviation or indirect fires would benefit from carrying a small laser range finder (off the shelf models are typically effective to 1200-1500 meters) and small pair of binoculars. When used in tandem with the GPS and compass, there is no need to carry the bulk of the entire Vector-DAGR system, as the individual elements can be easily combined with FalconView (or a paper map and protractor) to give a solid eight-digit grid. All JFOs and squad leaders and above need a GRG - preferably both a British and an American version. The British GRGs have more overlay information on them, which is very helpful, however the American GRGs are printed on a smaller scale, so more imagery detail can be seen; US aircrews carry only the US GRGs, so they will likely be unfamiliar with British references until briefed by the controller.

When not foot-mobile, FACs/JTACs need a VideoScout or a Rover, preferably both. Both systems need Falconview software with color 0.6 meter CIB imagery, PSS-OFF with updated imagery, and preferably digital copies of all the GRGs, both American and British. The VideoScout and Rover are complementary systems. The VideoScout is more portable and only needs one power source, making it much easier to use in an MATV or to transport around. The Rover can receive the same bands as the VideoScout, plus the S and Ku bands. The Aerostat blimp, a phenomenal asset, transmits only in Ku, so a Rover is necessary to receive its transmissions. The Scan Eagle transmits in both L and S bands during the daytime, but only S band at night, and of the two, the S band generally gives the best picture. So, the Rover is typically recommended for the Aerostat and the Scan Eagle, leaving the VideoScout for manned CAS/ISR assets.

**TOPIC: COMPANY OP BOXES FOR FIRES CLEARANCES**

**DISCUSSION**: The use of Company level operations boxes to expedite fires deconfliction and ensure timely, responsive fires, though the DASC continues to lack C2 of aircraft that transit the AO.

**RECOMMENDATION**: The Battalion granted clearance boxes for companies that were operating away from other units and this facilitated the timely and responsive deconfliction and clearance of fires. This TTP made a huge difference for units located at great distances from the Bn, However, the continued move away from doctrine in the control of aircraft routing continues to cause problems for ground units, and expose a lack of true control by the DASC to know where all aircraft are in the AO. It is highly recommended that we return to doctrine and route aircraft via ACAs created by the battlespace owner and all aircraft check in and out so all units know who is in the AO at all times.

**TOPIC: SABER SYSTEM**

**DISCUSSION**: Superb system and used extensively during the deployment. The system was not used in a vehicle due to lack of converted MRAPS in theatre. This was the CAAT platoons single biggest shortfall, as it made it near impossible to use a dismounted SABER system unless the section were to go static for a long duration. In addition the requirement to put the system in a trailer due to its size made using it unfeasible in most cases. The system when dismounted performed in an exceptional manner in a harsh environment better than anticipated. However the fragile handsets were the single item which deadlined system most of the time. The Bunker Buster round was effective against each target we engaged at ranges beyond doctrine.

**RECOMMENDATION**: Not having the vehicle upgrades forced us to transport the components (minus the TAS) and missiles in a trailer. The weight of the system and the amount of components that come with it, require at least four or more individuals to move the weapon into position. The batteries are the biggest problem associated with the system due to charging them and keeping them available. The rounds used against dismounted area targets were the AA and BB rounds. These rounds created EKIA and EWIA however the development of a HE Anti-personnel round would greatly enhance the lethality and flexibility of the system. Engaging concentrations of enemy forces around a crew-serve weapon were primary targets, as well as long range targets (generally IED emplacers). A HE Anti-Personnel round that would detonate in a 360 degree radius and comprised of shrapnel would generate more EKIA and EWIA in before mentioned situations.

**TOPIC**: **MULTIPLE SECTION/FDC’S AND FDC CROSS-TRAINING**

**DISCUSSION:** Before we RIP’d with 3/4 we were told to expect to have our platoon spread across seven different fixed positions. As a result, almost every Mortar Squad would need to be cross-trained in FDC procedures. We found out about this around three months before we deployed and began to work in earnest since we had only trained to be broken down into three different sections with organic FDC’s. When we arrived in AO Tripoli and with the arrival of 1/2 in Now Zad we only had the requirement to man three fixed positions.

**RECOMMENDATION**: Assume each fixed position your battalion will fall in on will need at least a mortar squad and FDC. This will require all mortar squads to also become proficient in FDC procedures. Emphasis will have to be placed on developing initiative within the squad leaders and section leaders since many of them will be answering to and giving recommendations to a company commander or a platoon commander of the company they are attached to.

**TOPIC**: **120MM MORTAR TRAINING**

**DISCUSSION**: We conducted one week of 120mm Mortar training with division schools approximately one month before we deployed. We have been using the 120mm Mortars in tandem with 81’s and at times with 60’s. Clearing fires for 60’s can be done at the company level, so some of the line companies kept one at the COP/FOB since they are most responsive and easily cleared.

**RECOMMENDATION**: Achieve mastery with 81’s before you even begin considering training with 120’s. If a team can be fast on a 81, it will have no trouble with a 120, in many ways it’s easier to work with a 120. Cross-train the mortarmen throughout the battalion early in the PTP in 60’s, 81’s, and FDC procedures. Have select mortarmen across the battalion get 120 training as well. This will pay off dividends later on and will allow more flexible employment of all mortars across the battalion.

**TOPIC**: **APPROVAL OF FIRES**

**DISCUSSION**: Fires approval has been made more expedient when we have had tubes attached to line companies with FiST teams approving fires. The FiST teams are usually given a stay below altitude for which they can approve fires and this worked pretty well. When we had Weapons Company operate as a MAC we had to pull Marines from Battalion Fires cell to support the MAC. As a result, the time in which fires were approved took longer since less people at the fires desk had more work to do. Also during the handoff of authority from company to battalion communications had not been fully established with Battalion Fires and as a result we had to relay through Weapons Company net, adding more time to the approval process.

**RECOMMENDATION**: Before any hand off of clearance authority is given positive comms must be established across the board. If a Battalion Fires or FiST team has less manpower then they are commonly used to they need to conduct multiple rehearsals with the FDC before hand in order to better establish their battle rhythm for the operation.

**TOPIC:** **BRACKETING ONTO THE TARGET**

**DISCUSSION**: When shooting in support of maneuver elements we engaged a variety of targets to include enemy machinegun positions, enemy mortar teams, and observation posts. We noticed that many of our observers never got to a fire for effect on the target but bracketed within 50 M of the enemy position after one or two adjustments then announced end of mission because the enemy had withdrawn. The enemy will do the same thing that we do when taking IDF, he will displace before they can get bracketed on. Most of the missions we shot were also within danger close to friendly troops, usually 200-400 M from friendly troops.

**RECOMMENDATION**: Even though mortars are considered non-precise indirect fires every effort must be made to get first round effects. We began to implement several changes within the FDC and the gunline to help facilitate this to include using an accurate propellant temperature as well as keeping ammunition lots together. Train your forward observers in hasty bracketing after they become proficient in standard bracketing. The creeping method for adjusting rounds was not used in any instance by any of the JFO’s conducting danger close missions but should be used whenever possible.

 Information Operations

**TOPIC: INFLUENCE OPERATIONS**

**DISCUSSION:** The times the company was most successful in Counterinsurgency (COIN) was when we occupied and lived within the local communities and did not operate from COPs or FOBs. Our ability to interact with the local population and force the enemy to attack us inside their communities helped to take away the enemy’s “Robin Hood” image. We accomplished this through multiple lines of operations. By living inside of the community we forced the locals to except our presence. However, this was only accomplished due to our partnership with Afghan National Security Forces. Additionally, we continued to use the influence operation theme of de-mining operations. On every large clearing operation we used word of mouth and bullhorns to let the locals know we were conducting de-mining operations. The presence of Afghans with us allowed us to search homes without offending the local population.

**RECOMMENDATIONS:** Use civil affairs and psychological operation in tandem. Our IO messages were part of the operations orders and usually written by our CAG Marines with guidance from commanders. The main theme was always WIIFM “What’s in it for me.” The local population lacks the overall education to understand the importance of governance each of our IO messages and themes were directly target towards the welfare of those living in the village we were operating in at the time. The locals would often state the only reason there is no security is because coalition forces are attracting the Taliban. If we were not in the town there would be no fighting. We would often point out the number of children and locals killed or maimed by IEDs. Whether we were conducting movement to contact or clearing operations the theme to the locals was always we are there to remove the land mines and IED from their village. This presented us and ANA as the good guys. Why would the Taliban attack soldiers removing mines from villages. The obvious answer was because they wanted to harm the locals and had no remorse for the children who struck IEDs. This worked in our favor well because we were able to find so many IED. Once the locals seen this they would start to tell us were other IEDs were. This is a theme that needs to continue.

Force Protection

**TOPIC: FORCE PROTECTION AND OCCUPYING COMPOUNDS**

**DISCUSSION**: While operating in the Northern Green Zone of Sangin, platoons occupied a different compound every couple of days. Virtually all were occupied by local nationals. Some compounds lend themselves to being more easily defendable with high walls and overhangs around the roof. Locals were naturally opposed to occupation due to the following suspicion of US collaboration and the imminent threat to the structure from Taliban attacks which followed Marine presence. Also, the company routinely found it necessary to make force protection improvements to make a compound sustainable, often to the detriment of the locals’ living conditions.

**RECOMMENDATION**: Only choose a compound that has a family already in it. Do not move into compounds that are not occupied, they will most certainly contain IEDs. Have every Marine carry at least five sandbags. Filling the sandbags at every compound quickly gives the Marines standing guard protection from direct fire weapons. The male of the house needs to stay, but he can send his family away. Keeping the man of the house around will ensure he cannot blame you for something that may get broken in his absence, and also give you partial insurance against attack. Don’t let his family come and go as they please. When selecting a compound, look for one with a roof with access and preferably a wall around the top part of the roof. Try to find one that is alone, and does not have other compounds attached to it. During the corn season, knock down the corn along the outside of the compound to negate the grenade threat. All damage to crops and compounds due to force protection can be paid utilizing a claims card. Also, for hygiene reasons, try to find a house with a hand pump well.

**TOPIC: TERRAIN/SECTOR SKETCHES**

**DISCUSSION:** When taking contact at a patrol base, the posts would have trouble communicating exactly from where they were being engaged, largely due to the lack of GRGs.

**RECOMMENDATION:** Have FOs/JFOs make terrain sketches supplementing the range cards for each post. This way they have a visual image of the terrain they are looking at and have available, a corresponding direction, distance, and building number for what they can see. This speeds up the process in identifying firing points and engaging with available fire support assets.

**TOPIC: IED INCIDENTS INVOLVING ANA/ANP**

**DISCUSSION:** The ANA/ANP have proved to be a useful tool in the locating of IEDs due to their knowledge of the area and people. During this tour, ANA/ANP discovered several IEDs. ANA/ANP have little or no training on how to cordon a danger area and control the local populace. They also have no knowledge on how conduct command and control of a site as the On-scene Commander. This puts undue risk on the EOD team and EOD security. The EOD Team Leader now has to control a small unit of ANA/ANP, while at the same time conduct procedures on the IED and coordinate with higher. ANA/ANP are able to get a close-up view of classified EOD procedures. This puts EOD teams at risk of walking into an EOD targeting booby-trap on later missions.

**RECOMMENDATION:** ETT/PMT elements were established for a reason. All IED sites established by ANA/ANP need to have an ETT or PMT liaison team present, at a minimum, to confirm the need for EOD support and provide command and control of the ANA/ANP. ETT/PMT liaisons can solve this problem by providing a solid cordon and limiting the number of personnel in the EOD security bubble.

**TOPIC: IED AVOIDANCE THROUGH VARIED AND UNPREDICTABLE ROUTES**

**DISCUSSION:** IED defeat does not only consist of finding and clearing a threat. IED defeat is also achieved by IED avoidance. If nothing or no one is affected by an IED that is never found or functioned, than the IED was defeated in a sense. For the most part, Lima Company varied its routes, took the road less traveled, and got a little wet in a great effort to defeat the high IED threat in its AO.

**RECOMMENDATION:** Continue the IED avoidance practices and never become predictable. The moment the enemy can predict what US forces are going to do, IED strikes will occur. Squad leaders and below are the most crucial part of IED defeat, so special attention should be paid to their turnover process.

**TOPIC: EMPLOYMENT OF THE EOD TEAM**

**DISCUSSION:** Since the start of the Iraq and Afghan conflicts, EOD teams have usually been in a QRF/response status. EOD teams typically were spread out through an AO and each team had a certain area of responsibility. It was not until recent history that EOD teams were utilized as a direct support asset to infantry companies due to the nature of current Afghan operations. This new method of EOD support brings many new questions on how to employ the EOD team throughout the company. Lima Company’s answer to this question varied depending on current operations. During dismounted clearing operations, EOD was attached to the forward platoons to provide immediate EOD response. During mounted operations, EOD was kept with the mobile HQ element because EOD could respond quickly to any forward platoon. Between operations, EOD was kept back in a QRF status and responded accordingly. These methods of EOD employment worked well for the most part, but there were many instances where it became difficult to get EOD from position to position. While attached to a dismounted platoon, EOD could respond immediately to that platoon, but responding to any other element was time consuming and required extra manpower to escort EOD around the AO.

**RECOMMENDATIONS:** In a perfect world, EOD would have a squad of Marines dedicated to them for dismounted and mounted response. The best answer to the question is a dedicated EOD security element. Ultimately, it will come down to the Company Commander and the EOD Team Leader having a well thought out discussion on how to employ EOD for the current mission. Company to EOD relations need to be kept up at all times as the solution will likely change for every mission. EOD teams are not sweepers. Engineers are the main effort in the location and confirmation of hazards. Each infantry squad is also issued metal detectors so they can sweep for themselves when needed. Training with the metal detectors and IED locating and confirming needs to be constant to remain proficient. Once a threat has been located and confirmed by an engineer or sweeper, EOD begins procedures to clear the threat and any surrounding hazards. A full EOD capabilities brief should be conducted between the EOD Team Leader and the Company leadership.

**TOPIC: IDD TEAMS**

**DISCUSSION:** The dogs are ineffective when used in conjunction with vehicles. The concept made sense, however the reality was an ineffective, dog with very limited time on station that ended up being a moral dog rather than a working dog due to their limited attention span. The dogs used were the wrong ones as their work ethic is lacking and a German Shepherd or Belgian Malinoise would have been a better fit. In a 7 month deployment our dogs found/confirmed 2 IEDs. The heat in the summer months take an extreme toll on the animal and the animal will not last as long as the handler/patrol. IDD’s were taken out on nearly every patrol early on in the deployment. Getting dogs in and out of MRAPS/MATVs due to the grating on the steps was a serious issue. The grates would rip toenails off and create wounds that would need to treated and sometimes kept the dog off patrol for extended periods (light duty).

**RECOMMENDATION**: Acclimatization was an enormous problem for our dogs due to the fact that they rode in A/C all day and then would be asked to work in the summer heat, if lucky the dog made it 15 min. Black Dogs are a liability in this heat and as mentioned before a lab is not a true working dog it is a hunting dog and so it does not last for hours on end. For summer deployments lighter colored animals are optimal. We found that taping the grates on the MRAP steps helped for the loading and unloading of the animals, not a permanent fix, but alleviated the torn nail issue.

**TOPIC**: **ENGINEER ATTACHMENTS**

**DISCUSSION**: CAAT Platoons will encounter and deal with more IED’s than any other maneuver element on the battlefield. We started the deployment with no attached engineers, therefore we had 03XX’s sweeping and attempting to locate IED’s. Their experience and training in this area is very limited. Using this Marines to sweep should only be a last ditch option.

**RECOMMENDATION**: All CAAT sections should have engineers, as soon as they are attached to the battalion.

**TOPIC**: **INTERNAL GUARD FORCE**

**DISCUSSION**: Starting with EMV and continuing through the initial force laydown at Deleram I, H&S company was tasked with providing the base defense force. Thirty-eight Marines were pulled from the staff sections and assigned as a permanent guard force that manned posts, internal QRF and localized patrolling efforts. However once the effects of combat operations took the toll on Marines and additional Marines were needed to fill vacancies in the combat trains, Jump and sections, the Marines available to guard became smaller, and tended to be the Marines that the sections didn’t want. This led to several challenges and considerations to be made once the battalion displaced to Sangin. DO is going to require H&S to have the flexibility to provide internal defense.

**RECOMMENDATION:** Bite the bullet early on in the PTP and augment H&S with 3-5 03XX Marines, with at least one being an 0331 for expertise in using and manipulating the various MMG and HMG’s that the Marines manned on posts in Sangin.

 C-IED

**TOPIC:** **CIED TRAINING**

**DISCUSSION**: No doubt the greatest threat to personnel in theatre. The numbers of losses both through the loss of life, wounds and concussions as well as destruction of vehicles and equipment were predominantly a result of the IED. The basic make-up (design), artful emplacement and rudimentary initiation/triggering of these devices are unlike what was seen in Iraq. The IED encountered on this deployment were victim actuated (pressure plates), command detonated (pull string) and Radio Controlled respectfully. The use of IDD teams, ECM’s (both vehicle and man pack) mine detectors coupled with an intensive IED training lane (rehearsal prior to the Musa Qalah Wadi operation) mitigated casualties and loss of equipment. With that said, each counter measure has its limitations and when used by itself as a stand-alone resource, chances are great of a strike. However, when used as a “combined arm” is virtually undefeatable.

**RECOMMENDATION**: IDD team training is crucial as already discussed. The animal has the ability to smell the large quantities of explosive the enemy is using and when visual identification by the handler or sweepers isn’t successful (due to low-light or expert concealment) the dog is the main detection device. Limitations of the IDD team were already identified earlier. ECM’s both in vehicles and dismounted are critical for obvious reasons. The use of the man pack ECM is widely used by our dismounted patrols. The “newest” system (THOR) was introduced within the month. Training during 3/5’s ADVON RSO&I did not include the THOR system and this must be rectified immediately. The mine detector has proven a useful tool in confirming the location of the power source (generally not the actual IED due to low metallic devices) which leads to the quick identification of the explosive charge. One of the more effective means in finding IED’s has been the individual Marine in a “V” sweep and visually identifying disturbed earth, seeing wires or pull strings and paying attention to their surroundings (patterns of life).

**TOPIC**: **IDD TEAMS**

**DISCUSSION**: Great concept, however the dog is only as good as the handler. Our success rate did not meet expectations in the field. With that said, after taking a closer look at our low success rate, we determined that training time was the crux. Due a late assignment as an OEF unit, we did not marry up the dogs to handlers until very late. The other issue regarding the animals was the RSO&I for dog and handler once in theatre. There is an average fourteen day train-up/acclimation/evaluation for dog and handler conducted at the Leatherneck kennels by a FSR. This requires the dog and handler (Dwyer RCT and eventually the Deleram RCT) to find themselves separated from their battalion until the dog is acclimated and “hitting” on the explosives found in theatre. This leads to the RCT LNO becoming responsible for the training of the handlers (BZO, required classes, flights etc.). The problems associated with this system have already been addressed above. The heat in the summer months take an extreme toll on the animal and the animal will not last as long as the handler/patrol. IDD’s were taken out on nearly every patrol early on in the deployment. This high workload wore the animals down and thus led to missed IED’s, dogs lagging behind instead of executing its assigned mission which led to a lack of confidence in the IDD. Getting dogs in and out of MRAPS due to the grating on the steps was a serious issue. The grates would rip toenails off and create wounds that would need to treated and sometimes kept the dog off patrol for extended periods (light duty). Toward the end of the deployment the dogs became more like pets than working animals and thus the dogs lost some of their desire to work.

**RECOMMENDATION**: IDD teams should be trained a month to a month and a half prior to EMV. ITS’ should be established for IDD and evaluated during EMV. This early integration will provide commanders the understanding of the IDD capabilities prior to deployment. Kennels should be established at both RCT bases and the FSR and vet should fly to those bases for the training and evaluation alleviating the issues that arise with personnel being separated from their units. Also, a FSR should be located with each battalion HQ IOT continue training and evaluation (reset training) of the IDD. Black Dogs are a liability in this heat. For summer deployments lighter colored animals are optimal. Due to the stress of extreme heat and terrain encountered throughout our deployment, task organization and tasking for specific missions would be best (something potentially worked through during EMV). We found that taping the grates on the MRAP steps helped for the loading and unloading of the animals, not a permanent fix, but alleviated the torn nail issue.

**TOPIC**: **NEGLIGENT DISCHARGES**

**DISCUSSION**: We encountered a rash of ND’s (7-total) early in the deployment. Some were due to untrained Marines on the weapon or disregarded the safety rules.

**RECOMMENDATION**: I was assigned the task of drafting three battalion Policy Letters (PL). The first dealt with condition codes for Special Purpose Weapons (shotguns, 203’s, M32’s, M79’s etc) IOT negate ND’s with non-primary weapon systems. The second addressed Weapons Assignments (too many weapons and not enough training) to mitigate the assignment of a weapon not trained to. The third PL mandated training requirements for non-0331’s, outlining the guidelines for training anyone assigned to a MMG and HMG. The issue is ultimately there are more weapons (both quantity and type) than in CONUS. The PTP, ammo allotments and number of weapons do not lend to “certifying” each individual on each system encountered in theatre. A concerted effort must be made to plan (like drivers) how many personnel will need MMG, HMG, MK12, M32, M79, shotgun, M203 training prior to the deployment. Again, ammunition allotments in CONUS and time simply do not allow for everyone to train. I recommend we look at Division Schools non-0331 course as an avenue. I do believe though that a “pay as you play” (regarding ammo) should be abolished and ammo should be supplied by Division for a set number of seats per battalion, allowing the battalion to use its ammo for 0331 training. Also, I agree with the Division Gunner regarding training all MOS’ on MMG and HMG’s at SOI (both MCT and ITB). I plan to develop a MK12 course at the 29 Palms Rifle Range within one year of my taking over as OIC to facilitate mentioned training and relieve pressure off the battalions.

**TOPIC: IED DEFEAT**

**DISCUSSION:** The biggest threat on the battlefield is IEDs. They hinder all operations both mounted and dismounted, inflicting damage to vehicles and personnel in all strikes. Being able to counter this tactic is critical to mission success on all operations. The enemy implements IEDs in both offensive and defensive operations, covering their egress routes and creating standoff while engaging friendly forces. Their tactics and techniques are ever evolving to they are getting more advanced while still being able to create them with everyday materials. The majority of the IEDs encountered have been pressure plate IEDs (PPIED) and some type of command detonated IED, whether it is a command pull, with kite string, or command wire, simply completing an electrical circuit. The majority of all command detonated IEDs target dismounted troops and are placed in natural chokepoint. PPIEDs target both mounted and dismounted troops, the only difference in the size and tension put on the pressure plate.

While mounted in vehicles, convoy commanders need to have the tactical patience to allow people to dismount from trucks and sweep natural chokepoints. It is understandable that convoys need to get places quickly drop off personnel and gear and return to the logistical staging area. However they need to weigh in the cost-benefit of allowing sweepers to get out and do their job that will take 20 minutes or sitting on a downed truck for hours waiting on the recovery assets.

Dismounted operations have an extremely high success rate of finding IEDs. There are a lot of tools that assist in finding IEDs on the battlefield available. The number tool that Marines should use is their eyes. The visual indicators are always around the site where IEDs are present. If they get the feeling that there is an IED in the area they then confirm it with a metal detector.

IEDs can be defeated and it takes attention to detail, avoiding patterns, and having the tactical patience to allow sweepers to do their job.

**RECOMMENDATION:** All Marines need to be continually trained and brought up to speed on local IED tactics the enemy is using in the area of operations. The enemy also sets patterns in how they use IEDs and where and they are emplaced. Leaders at all level need to turn the map around and look at it from the perspective of the enemy. They need to avoid the most likely avenue of approach and take the difficult route. All people are inherently lazy and like to take the easiest way to do things, whether that be taking the same route over and over again, crossing streams at bridge points, or taking the most direct route to key terrain. Taking the difficult route often adds time to missions; however, it needs to be taken to avoid the threat of IEDs. IEDs cannot be placed everywhere, it is a limited asset and the enemy simply cannot afford to IED in random spots. They observe, gaining situational awareness on what we do and they exploit our critical vulnerabilities. Pattern setting needs to be avoided at all costs. It also needs to be brought to the attention of Marines that the best covered position may need to be bypassed, the enemy knows the terrain better than us, and they exploit that gap, it is better to take the second best covered position. Leaders need to stress tactical patience, avoiding patterns, and maintain a high situational awareness while operating.

**TOPIC: IED DEFEAT**

**DISCUSSION:** The enemy uses three different categories of IED to ambush CF. They use the IED as both a defensive and offensive weapon. They will often use pressure plate IEDs to defend weapons caches and firing points and a combination of pressure plate IEDs (PPIED), command wired and pull string IEDs (CWIED and PSIED), along with Remote Controlled IEDs (RCIED) to conduct deliberate ambushes on likely patrol routes. If they are able to inflict casualties with IED they will attempt to ambush responders with command IEDs and direct fires. The key to defeating the IED is to control the tempo and have tactical patients.

**RECOMMENDATION:** First thing we did was to convince our Marines that we could defeat the IED. As we gain confidence in our ability we were able to become bolder with our actions. Our engineers and Explosive Ordinance Disposal teams (EOD) were our best assets. They were included in all the planning and our leaders listen to their advice. We attacked the three main types of IED directly with an evolving technique for each IED level.

The first level of IED we address in our combined approach was the RCIED. To defeat the RCIED threat we focused on the use of our vehicle mounted Electronic Counter Measures (ECMs) and our man-packed ECMs. Whenever possible we would incorporate the vehicle ECMs because it provided a further range and battery life was not an issue. However, this was not often possible so we also relied heavily on our man-packed THOR systems. The draw back to the THOR system is its weight and its short battery life. The average battery life for the THOR system is between two and four hours. This needs to be planned for and was one of the primary reasons for use securing LOCs during major operations and a need for a battery recharge and supply plan. However, the use of ECMs defeats the long range IED threat and forces the enemy to use CWIED or PSIED. This brings the enemy in closer to firing points that he has to man at ranges of 300 meters and in.

 The second IED threat is the CWIED and PSIED. In order for the enemy to employ these IED they are usually in a concealed position within 200 meter when operating in rural terrain and within 300m when operating within urban terrain. The following are the techniques we used to defeat these devices in a rural setting. First, we identified natural lines of drift and chokepoints where these IED would be place. Then we would identify straight lines leading from these locations. These lines usually consist of 3 foot irrigation ditches, walled orchards, irrigation pipes, and even as small as dirt rows in field. Along these straight lines is where the enemy will run command wires and pull-strings. Once the lines are identified satellite patrols would target concealed areas at the end of these lines in order to disrupt trigger men. Once the trigger sites are seized our engineers were confident they could find PPIEDs.

 In urban environments we isolated trigger sites by overwhelming the area from multiple directions and avoided canalizing terrain by using ladders to pop over and secure compounds and by entering building through or over walls. Additionally, we would access compounds by linking roof tops. All of this was done by isolating adjacent compounds and providing over watch down long accesses of advance. The basic principle was to always have an L-shape ambush on the enemy and to retain over watch positions. These principles were adhered to at every echelon of maneuver ever maneuver element had it own internal L-shape ambush set-up for the enemy and its own over watch.

 The third IED type we targeted after isolating the trigger sites was the pressure plate. Our engineers were phenomenal. They believed they could find any PPIED provided they had security and they were not going to be targeted by CWIED or RCIED. Ninety percent of our engineer PPIED finds were visually cued. The engineers were able to quickly identify likely locations for IEDs and detect subtle differences in soil composition, color, or out of place objects. With their vallons they were then able to confirm PPIEDs. Our engineers stuck to their strict procedures and did not deviate or take shortcuts. This saved their lives. Many times they found IEDs with anti handling devices because they stuck to their procedures no one was injured. Our engineers developed the trust of our Marines and this built the confidence that the company could defeat IEDs.

 The layering effect of each of these TTPs directed at each IED typed allowed us to maneuver in a mined area. Additionally, the company used tactical patience by not rushing into enemy kill boxes every time they were fired at. They were instructed to take a breath study the ground and make the right call. This often meant returning fire and maneuvering over difficult terrain to pursue the enemy rather than taking the most direct route. They were also instructed down to the individual to take the second best covered position and gain fire superiority rather than running for the most obvious cover that was often IED. Furthermore, our engineers became comfortable sweeping while receiving fire because they had trust that the security elements would pick up the threat. Additionally, knowing the enemy also has to produce results we drew him out of his cover positions by not running head first in to a preplanned ambush but rather by showing weakness to our flanks and then aggressively pursuing the enemy when he attack those perceived weakness hastily.

**TOPIC: MITIGATING THE IMPROVESED EXPLOSIVE DEVICE (IED) THREAT**

**DISCUSSION:** IED’s are an enduring threat, and efforts to detect/ avoid them need to be included on every patrol.

**RECOMMENDATION:** Vary patrol routes, and conduct honesty traces to avoid route repetition. Include dogs with dog handlers and engineers with metal detectors on patrols whenever possible. Employ APOBS to clear lanes through treelines or fields as required, and position dismounts within the ECM coverage of vehicles when able. The use of Remote Control Improvised Explosive Devices (RCIED’s) was minimal so commander’s need to conduct mission analysis and take into factor things such as heat, duration, distance traveled, terrain, etc. and decide the usefulness of the Guardian or Thor system. IED training lanes, continuously conducted throughout the deployment, will hone the ability of Marines to detect IED indicators. When an IED is located, ensure that Marines hold security on the area until EOD is able to exploit the device, and be prepared to take contact while EOD is operating.

COMMAND AND CONTROL

**TOPIC: SWAN** **CONFIGURATION FOR FORWARD COC**

**DISCUSSION**: The use of a SWAN in support of a Forward Combat Operations Center (COC) enabled the battalion staff to effectively control combat operations from an advantageous command and control position. The initial battalion laydown in the Delaram area of operations was not conducive to single channel Very High Frequency (VHF) radio communications, and the Battalion Main COC relied heavily on a single dedicated SATCOM net for voice communications. In order to operate with the full complement of VHF radio nets, the battalion staff was required to move within a few kilometers of the maneuver elements. The only way to move the battle staff to an advantageous command and control position and not lose any capabilities is to bring a SWAN along with the Forward COC. The switches, routers, modems, and all internal parts of the SWAN were installed inside of a 6X6 MRAP, with the dish itself being towed in a trailer. We discovered that in order to reduce the amount of wear and tear on the SWAN dish and it’s components, the installation of the dish itself on the MRAP was the best course of action. This action reduced the amount of setup time for the SWAN itself as well as reducing the amount of wear and tear associated with the SWAN dish and components being towed in a trailer in off road situations.

**RECOMMENDATION**: The dedication of a SWAN for a Forward COC is only needed if the battalion’s disposition is dispersed beyond the range of VHF communications. In an environment in which combat operations are run primarily out of Forward Operating Bases, the SWAN would be put to better use at a static location rather than in a mobile configuration.

**TOPIC: CENTRIX AT THE INFANTRY BATTALION**

**DISCUSSION**: The management of CENTRIX at dispersed positions is extremely difficult. Due to reduced administrator rights, the local data administrators have little ability to troubleshoot the servers that are physically located at the battalion’s Main COC. Reliance on higher headquarters to troubleshoot and fix local problems on CENTRIX increases the amount of time that a problem persists at dispersed positions. CENTRIX itself takes up half of a transmission device, further reducing the depth of data transmission from a dispersed location. Although needed by some individuals at the infantry battalion, the amount of time and energy spent by Data Marines on CENTRIX is proportionally larger than the time spent per user on both SIPR and NIPR systems combined.

**RECOMMENDATION**: Increase the amount of administrative rights for Data Marines at dispersed locations. This alone will reduce the amount of time spent troubleshooting the system and will enable the Data Marines to spend more of their time on managing the SIPR and NIPR networks.

**TOPIC: CONTROLLED CRYPTOGRAPHIC ITEMS (CCI) SPECIFIC GOVERNMENT FUNDED EQUIPMENT (GFE) IN MATVs AND MRAPs**

**DISCUSSION**: In an environment that is heavily laden with Improvised Explosive Devices (IEDs), the amount of MATVs and MRAPs that require a higher echelon of maintenance is significant. Vehicles that require evacuation were often times back hauled to Camp Leatherneck in order to undergo repairs, the CCI in those vehicles (PRC-152s and PRC-150s) are required to be handled and accounted for in a completely different manner. The radios were collected by the battalion’s Communication Platoon and ‘held’ until the vehicle that was evacuated returned from the maintenance cycle. This caused a disproportionate amount of PRC-152s and PRC-150s to be held by the battalion at any given time. Evacuation of these assets to Regimental Combat Team-2 at Camp Delaram was not logistically possible.

**RECOMMENDATION**: Battalions are issued a designated number of PRC-152s and PRC-150s in accordance with their EDL of MATVs and MRAPs. The battalions then retain all CCI throughout the course of the deployment in order to better maintain accountability and reduce the friction associated with the retrograde of vehicle assets.

**TOPIC: VOICE OVER INTERNET PROTOCOL (VOIP) PHONES**

**DISCUSSION**: VOIP phones had significant issues once the battalion moved to Sangin. The issues included significant voice delays and phones reverting into ‘Upgrade’ for extended periods of time. Once Regimental Combat Team-2 brought a call manager out to the Battalion Main in order to upgrade all of the phones to the latest software, the issues improved; however the issue is not 100% resolved.

**RECOMMENDATION**: The use of both Voice of Secure Internet Protocol (VOSIP) and Voice of Non-Secure Internet Protocol (VONIP) at remote locations requires a local call manager in order to improve services. A call manager will reduce delay in VOIP phone calls, reduce the VOIP phones from reverting into ‘Upgrade,’ and enable local troubleshooting at the battalion level. This will significantly improve the quality of the primary conduit of voice communication to higher, adjacent, and subordinate units.

**TOPIC: REPORTING**

**DISCUSSION:** The key component to rapid fires and aggressive maneuver was accurate reporting. It is something that was and still is continuously hammered every day. Squad leaders were taught from day one upon contact to immediately send a POSREP followed by a SALTA report. All POSREPs include unit location in six digits if on the move and eight if stationary, cardinal direction of movement and destination. Enemy locations in SALTA reports were only to be given in eight digit grids. It was the responsibility of the squad leader to conduct terrain association and get a refined grid. Distance and direction were not accurate enough to provide fires from. An eight digit grid with terrain talk on would allow the FiST to produce a refined grid from PSS-SOF. Additionally, accurate size and description of enemy forces were strictly forced to prevent the over commitment of forces in a 360 degree fight. Furthermore, unit leaders were taught to always give the actions they would take and what support they would need from higher.

**RECOMMENDATION:** This needs to be trained from day one. Prior to every company or platoon mission we would conduct communication rehearsals. During these rehearsal we would go through the entire scheme of maneuver with each unit leader sending reports based on injects. It is recommended that units rehearse and plan for casualties and fires.

**TOPIC: PLATOON TAC VS COMPANY TAC**

**DISCUSSION:** At times Kilo Company benefitted from having all stations operate on company TAC, as it kept the headquarters element abreast of all developments in the platoons. However, the net could become clogged if multiple units needed to report critical information simultaneously. In these instances encrypted platoon TACs, or the use of PRC-153s, enabled platoon-internal communication. However, this protocol was not always in place, nor was it always followed when it did exist.

**RECOMMENDATION**: Develop a communication plan that incorporates platoon-internal and company-level coordination. Equip all agencies that need one with the appropriate radios, and conduct rehearsals to ensure that communication is fluid, and that procedures are refined. Establish priority on company TAC if more than one unit is in contact, or be prepared to maintain two company TAC nets. The feasibility of executing such a communication structure is limited only by the number of radios and frequencies available to each company.

**TOPIC: GROUND-T0-AIR COMMUNICATION FROM PATROL LEADERS**

**DISCUSSION**: To communicate with air, specific radio settings and equipment are required, but not every patrol has been ready with these. This has limited some patrols’ ability to communicate with aircraft for overheard surveillance or close air support, and would also hinder their ability to conduct a medical evacuation by air.

**RECOMMENDATION**: Prior to departing, patrols need to conduct a radio check with the FAC on multiple air nets. Patrols also have not always been timed or synched with the pre-planned air, and this adjustment would be easy to make. When communication between a patrol leader and a pilot does occur, the information passed does not always get circulated throughout the COC because the patrol leader begins using the air net as his primary means of communicating. In instances such as these an assistant patrol leader should maintain communication with the COC directly via a different radio.

**TOPIC: TARGET LOCATION AND FRIENDSLY POSITION TALK-ONS**

**DISCUSSION**: The ability to locate the enemy and effectively talk-on the COC (Company Commander, FiST Leader, and FAC) or aircraft to a target or friendly position can be very difficult in dense vegetation, especially when features such as cornfields and treelines are commonplace.

**RECOMMENDATION**: Thorough route, terrain, and GRG studies need to be conducted prior to departing friendly lines. Friendly units must also have an effective way to mark both their position and the enemy location. Smoke, pyrotechnics, IR devices, and direct fire weapons (M-203 smoke grenades) are just some marking tools that should be incorporated into the signal / marking plan.

**TOPIC: REPORTING REQUIREMENTS UPON TAKING CONTACT**

**DISCUSSION**: There have been instances when a friendly unit was under fire, but the reporting to higher included nothing more than a call sign and the fact that the unit was taking enemy fire.

**RECOMMENDATION**: Standardize the reporting requirements to suit a company SOP. Some information, such as the size of the enemy forces, may change and should not be required, or expected to be accurate, immediately. The information initially needed at a company level includes an updated posrep from the unit in contact, the direction and distance to the enemy, the nature of the enemy fire (RPGs, machine guns, sporadic or heavy, accurate or not, etc.), and if there are casualties. The on-scene commander will work the fight the best he can, but the information listed above will enable higher to begin sourcing support and refining it as the situation develops.

**TOPIC: RADIO TRAFFIC ON COMPANY TAC AND TAD**

**DISCUSSION:** When conducting operations, the net can get clogged with both maneuver and fires trying to pass information over one net.

**RECOMMENDATION:** Have the fire supporter for an operating unit monitor and pass information over a TAD (VHF). This way the maneuver commander can pass all maneuver information while the FO/JFO is passing ISR tasking or targeting information on the TAD to the FAC or COC. Additionally, reception is often better on plain text TAD. Air net radio checks on all hand-held PRC-152s is vital.

**TOPIC: POSITION REPORTING**

**DISCUSSION:** Without subordinate units continuously passing position reports, higher cannot keep an accurate and updated picture of the battlefield. Position reports are vitally important to command and control, fires deconfliction and integration, and Intelligence gathering. Battalion tracks friendly movements down to the squad level, with position reports required every hour for static forces, and every half-hour for those who are moving.

**RECOMMENDATION:** Subordinate units must push position reports to higher at the prescribed intervals; otherwise, it can take nearly the entire half-hour to collect the reports, starting over again once the collection is complete. Eight-digit grids are recommended for dismounted troops, six digits for vehicles. Ten-digit grids are only necessary when giving an enemy location relative to a friendly position. The company must track those position reports in both a list and a topographical format, with a push-pin representing each maneuver element on a GRG, giving a common tactical picture to the Company COC. Battalion does the same in their COC, also projecting the graphics digitally onto a white board.

**TOPIC: VEHICLE COC SETUP**

**DISCUSSION:** When pushing into new or remote areas, as was done repeatedly by each of the 3/7 companies, it will almost certainly be necessary to direct operations from an MRAP configured as a Company COC.

**RECOMMENDATION:** There are not enough 6x6 MRAPs for each company, and the battalion, to have one. Therefore, the company needing it the most at the time should be given priority. A vehicle-based COC can be, and has been, run from a 4x4 MRAP; however the 6x6 variant is much better suited. Regardless of which variant is used, once a static position is selected, the gunner should be dismounted and employed elsewhere, as there will not be enough room in the vehicle for him.

The required personnel in the COC vehicle are the XO, FST Leader and FAC/JTAC. While the CO can certainly reside in the COC when not engaged elsewhere, he needs to be free to place himself at the point of friction and steer the company, leaving it up to the COC to battle track and approve fires (with Battalion’s approval, for fires requiring it).

The minimum required gear for a company level COC vehicle is four radios, a BFT, a position report tracker, a target list, and a map board depicting positions and FSCMs. The radios are dedicated to the following nets/frequencies: Battalion Tac, Company Tac, the FSC net, and a TAD frequency, for directing aircraft. A second BFT should be installed in the back of the COC MRAP; this can be a tricky issue however, as the installation must be completed without voiding the MRAP warranty. The electrical system for both the 4x4 and 6x6 MRAPs can support four 50-watt VAUs and two BFTs simultaneously, though it’s recommended only the front BFT is used only when the vehicle is moving and the rear BFT only when the vehicle is static. Calls-for-fire from organic 60mm mortars can be executed on PRC-153s, while CFFs from Battalion 81 or 120mm mortars can go on the COF net on a handheld PRC-152 or the radio usually dedicated to the FSC net. Battalion monitors both FSC and COF, so no connectivity is lost by rolling from the FSC net to COF.

When established in a firm base with an electrical generator and data connectivity, the COC can and should have all of the equipment listed above, however it will also have the luxury of more space, mIRC, VOSIP and VONIP phones, and as many radios as needed. Nothing changes in the roles or operations, except that an SOG can also be posted in the COC, for augmenting control of the guard force and preventing the company from being engaged in a perimeter (platoon-level) fight.

**TOPIC: BATTLE DRILL**

**DISCUSSION:** When a subordinate unit or several units simultaneously take heavy contact requiring inorganic fires, the Company COC has the potential to quickly be overcome by events if command and control roles are not clearly understood. Detailed below is the battle drill that worked well for Lima Company.

**RECOMMENDATION:** The primary reporting chain is, of course, through the maneuver commanders on Company Tac, however it is augmented by JFOs and other “talkers” on the TAD frequency. For the most highly kinetic events, a combination of aviation and ground-based indirect fires will likely be used. Aviation fires should be used on the more dynamic targets, while indirect fires are used to prosecute the more static targets. Because the dedicated “talkers” are using the TAD frequency and also because the aircraft can often observe enemy positions on their own, the FAC/JTAC will develop the situation fastest, back-briefing the XO and FST leader.

There are typically two distinct decision points. The first is the allocation of the fire-support asset to the targets, i.e., air on target one, HIMARS or Excalibur on target two, once those targets are adequately developed. When the group huddle in the COC is complete and this decision is made, the FAC/JTAC begins briefing the aircrews on the game plan and CAS nine-line, while the FST leader passes the call-for-fire to the appropriate agency, often through the FSC net. It is crucial to point out that throughout this engagement, the COC must simultaneously draw information from the company and pass it to battalion, cohesively painting the same situation and requested COA to both the maneuver and fires cells via Battalion Tac and the FSC net. The XO can handle the Company and Battalion Tac relay, with guidance as appropriate from the CO as necessary, or the CO and XO can divide these responsibilities. The FST leader paints the mirrored image to the FSC simultaneously.

The second decision point occurs when the respective agencies, i.e. CAS players and indirect fires agencies, are briefed and ready to execute their respective, complementary game plans. At this point, the Company CO or XO have already approved the game plan and are awaiting approval from the appropriate higher command in order to prosecute the various targets with the allocated assets. This approval can come simultaneously or sequentially; when the approval is given, the targets are executed with the necessary deconfliction. Multiple 3/7 companies have prosecuted targets with CAS ordnance and one or more HIMARS rockets within three minutes in the same objective area using this model or a variation of it, with decisive success.

Late in the deployment, due mostly to the integration of the Aerostat blimp and the artillery battery, lower intensity skirmishes have been ended decisively by one or more Excalibur rounds. In this case, the JTAC/FAC will play a much smaller role or none at all; it will predominately be the CO/XO and FST leader developing and prosecuting the target.

**TOPIC: WEAPONS COMPANY VS MOBILE ASSAULT COMPANY**

**DISCUSSION**: Our deployment saw the company go from a traditional Weapons Company into a Mobile Assault Company and ultimately morph into a hybrid that looked like a weapons company but had a MAC HQ element and the ability to “MAC up” if needed.

**RECOMMENDATION**: Train up as a Mobile Assault Company so that T/O you have dismounts and all the necessary ingredients to be used as a maneuver unit. It is easier to chop units to fulfill a classic weapons company role than it is to transform into a MAC once in theater especially due to the direct impact it has on the FSCC its personnel.

**TOPIC**: **PLATOON COMMANDER LOCATION**

**DISCUSSION**: At the beginning of the deployment, Platoon Commanders tried to put myself at the point of friction and dismount with the Marines when they closed on enemy positions. This proved to be a huge mistake and resulted in loss of command and control.

**RECOMMENDATION**: With few exceptions, the platoon’s commander should be located with the vehicles. The BFT and the comm suite allow him to command, control, track units, de-conflict fires, and coordinate with higher.

Administration

**TOPIC**: **ACCOUNTABILITY UPON ARRIVAL**

**DISCUSSION**: The S1 section came in at two different times, the first on ADVON and the second with 3/7’s main body. ADVON moved to Camp Deleram 1 before the Main body arrived. The movement prevented the accurate and timely capturing of all personnel coming into the AO and placing them into SPA. Rosters were out of date as they arrived.

**RECOMMENDATION**: For both deployment and redeployment it will be ideal to have a representative at Camp Leatherneck and in Manas, Kyrgyzstan to facilitate accurate and timely accountability of personnel.

**TOPIC**: **PERSONNEL CASUALTY REPORTS (PCRs)**

**DISCUSSION**: It is implausible to have the accurate zap number, injury, cause of injury, all symptoms of the injury, who identified the casualty, details if the casualty wearing all personnel protective equipment from the fireteam to the MEF level within one hour. The command operation center (COC) will focus on getting the casualty to a higher level of care. However, the COC’s primary focus will be to enable the Marines on the ground to close with and destroy the enemy. Whether or not the casualty was wearing eye protection or who was the corpsman that assessed him is far below the Battalions COC’s concern when Troops in Contact (TIC) is declared. Timeout’s do not exist on the battlefield to confirm all details. Urgent casualties evacuated to Bastion/Leatherneck were validated by our LNO in Leatherneck. There were instances what caused great confusion. There was an instance where multiple ZAP numbers came to the COC from the same instance all with similar injuries. Our LNO was unable to verify each of the casualties. Due to the time constraint, PCR’s were sent to higher without verification. It was realized that one of the ZAP numbers was incorrectly reported to the COC, however, it was too late for us to rectify as the primary next of kin had already been notified. The Marine called home and explained to the family the situation. There were other instances where Marines would, at the time of an IED strike, be fine. As time would pass they would begin to exhibit symptoms of a concussion and a late PCR would have to be generated.

**RECOMMENDATION**: Do not submit PCR’s until verification. Accuracy is more important than time, send out PCR’s with 25% of the required information if that is all you have in one hour.

**TOPIC**: **AWARDS**

**DISCUSSION**: Deadlines for awards are needed. However Marines will continue to perform with courage until the day they leave. There have been issues as several awards are submitted as Navy and Marine Corps Commendation with “V” and a week later performs to the level worthy of a Bronze Star with “V”. Within 3/7 we were too hard on some of our award recommendations to begin with as we initially didn’t have a line between NAM with “V” and Navy Comm with “V”. On one occasion we had a Marine die due to enemy action and performed in an exceptional manner. We however pulled the trigger too fast and submitted him for a Bronze Star with “V”. It was not until after the operation details on all of his heroics came out. The award had been awarded as it was a posthumous award and was a priority for all of the chains of command. His actions were said to be that worthy of a Silver Star or Navy Cross, but weren’t captured in the award. Purple hearts are generated off of PCR’s and are validated by medical records. The determination for the Purple Heart is done at MARCENT and requires the PCR with medical documents with a medical officer’s diagnosis. Gunshot wounds and shrapnel are clear cut and meet the required criteria. Concussions, however, are a different issue. The different grades are determined by a Medical Official with only Grade III fitting the criteria. There is an issue f a casualty has a loss of consciousness and is determined to have a grade II by a Medical Official. It is then required for a witness statement stating the loss of consciousness.

**RECOMMENDATION**: Stay on top of awards, and don’t pull the trigger too fast if a Marine is killed and is up for an award. Capture all of the details to make sure he is written up for what is appropriate. Staying on top of awards will allow you to process valorous awards that occur during the final months of the deployment. As a part of patrol/convoy debrief it would be best to have the patrol leader take statements if a Marine lost consciousness (due to RPG, IED, or otherwise).

**TOPIC: LEGAL AND POLICY**

**DISCUSSION**: Most of our legal issues arose due to a guard falling asleep on post, negligently discharging a weapon, and losing gear. Before deploying there were existing policy letters in regards to negligent discharges and losing gear. Another policy letter was given in regards to the specifics of weapons conditions had to be distributed. There were instances where OPSEC was compromised and had to be rectified. A policy was put into place with two audiences in regards to OPSEC. One audience was the Marines and Sailors the other audience is the family and friends back home. While there were a few occasions, they were rectified.

**RECOMMENDATION**: Have Policy Letters that set clear boundaries and guidelines in regards to gear accountability, conduct on post, negligent discharges, and OPSEC. Additionally, have documentation that all Sailors and Marines within the command confirm they have read the policy letters.

**TOPIC: RED CROSS MESSAGES AND EMERGENCY LEAVE**

**DISCUSSION**: There is very little you can do in regards to anticipating Red Cross messages. It is important to remain consistent in your decision on unique situations. The situations I speak of are undefined life expectancies, pregnancy issues, and individuals not listed as loco parentis yet are claimed to be as such on the message or by the individual. There will be times where the service member is requested to return home due to the spouse/mother/father are ill/dead and unable to care for the family/children. In these instances the family care plan needs to be emphasized as opposed to pulling the service member out of country.

**RECOMMENDATION**: All decisions must be consistent in regards to the unique circumstances.

**TOPIC**: **CERP RSO&I CAMP LEATHERNECK**

DISCUSSION: Training to certify the battalion CERP Program Manager, Purchasing Officers and Pay Agents consisted of a 30 minute PowerPoint class given to all staff and officers in the battalion. Once complete, Purchase Officers and Pay Agents were then authorized and expected to correctly handle up to $350,000 in funds, along with all the various paperwork involved. This training was entirely inadequate to ensure that PO’s and PA’s could properly complete the numerous forms required to utilize CERP funds.

**RECOMMENDATION**: This class should be expanded and should require practical application with the necessary forms.

**TOPIC**: **LINE OF DUTY INVESTIGATIONS**

**DISCUSSION**: Currently, battalions are required to conduct formal written preliminary inquiries and forward them to the GCMCA in any case where a line of duty finding is required. First, this is not required by the JAGMAN. The JAGMAN does require a preliminary inquiry for any injury where a line of duty finding is required. However, the JAGMAN also states that a “preliminary inquiry may be accomplished in any manner considered sufficient by the commander.” A preliminary inquiry does not necessarily constitute a formal written document. Furthermore, the JAGMAN states that commands below GCMCA shall report their command’s findings in LOD cases using the PCR system. The JAGMAN does not mandate that a written PI be forwarded to the GCMCA. Consequently, a PCR, verified by the Battalion Executive Officer or Commander, which indicates the circumstances of injury, along with a recommended LOD finding, should be sufficient.

Marines in an infantry battalion are routinely injured. Conducting formal preliminary inquiries in every case is a significant, and unnecessary, drain on resources. Often, the Battalion Commander or Executive Officer only has voice or Blue Force Tracker communications with his line companies. On numerous occasions, it took significant efforts to transport Marines and documents to different locations during combat operations so that they could type up a statement and document explaining, for instance, that a Marine did not appear to intentionally slam his finger into the door of their MRAP. Platoons often operate in areas with no internet capability, let alone the capability to print or scan documents. If the purpose of this requirement is to further ensure battalion commanders prevent unnecessary injury, it is unnecessary. No one in the chain of command has a greater incentive to prevent the loss of combat power than do battalion commanders.

RECOMMENDATION: A PCR which has been verified by a field grade officer of the battalion and which outlines the circumstances of injury should be sufficient for the Line of Duty determination. If, based on the facts outlined in the PCR, the GCMCA desires further information, only then should a PI be required.

Terps

**TOPIC:** **OUTFITTING INTERPRETERS AT LEATHERNECK**

**DISCUSSION**: 3/7 experienced having to wait on several interpreters to finish being outfitted with gear and documentation prior to flying from Leatherneck to the Sangin AO. This was due in large part to an inefficient system to issue gear to these assets. This resulted in twice having to send our terp manager to leatherneck to supervise the new hires, speed up their administrative process and ensure they got their gear and were taken to the ADACG for flights.

**RECOMMENDATION**: is that terps are not sent to a unit until they have been fully issued gear and trained to go, placing that onus on the company contracted for their control. Secondly Regiment should provide the ability to manage and move assets from LNK to the Battalion, as sending the terp manager down there puts more Marines from a Battalion capped at 925 down at LNK vice in the battalion’s battlespace.

 D. C. NIELSEN

1. Exercise Mojave Viper (EMV) [↑](#footnote-ref-1)