

TASK FORCE *Lifeliners*

101st Sustainment Brigade

SPECIAL EDITION:
Coordinating Staff discusses lesson learned



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Managing YOUR Career

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I was the Adjutant General (AG) Branch future readiness officer for a year, followed by two years as a career manager for AG company grade officers. Those two jobs provided invaluable access to the inner workings of managing an officer's career. The jobs left an indelible impression on me concerning the importance of managing one's career. I interacted with and answered questions for officers on a daily basis concerning their careers, as well as interacting with the systems and personnel that had a direct impact on officer's careers. The three questions I was most often asked were: what do I have to do to get promoted, what are my assignment choices and lastly what should my next job be. The reality is those are questions you should not have to ask, because you should know what your options are. It is important that you understand your career and what you need to do to ensure you meet your goals and the Army's goals.

PROMOTIONS

Promotion questions were the most common asked of the three. I believe without reservation that the senior rater portion of the OER has more to do with an officer getting or not getting promoted than any other aspect of an officer's personnel file.

Field grade officers are often told about the "heartbeat" concerning their OERs. Essentially, a field grade officer should have Above Center of Mass (ACOM) and Center of Mass (COM) evaluation reports in their file. If you merely have COM reports in your file you lack a heartbeat. Analysis of the most recent active duty LTC Force Sustainment (FS) selection board results revealed that officers with only one ACOM in their file did not get promoted. Most officers will have between four and six OERs prior to their LTC's selection board. So based off the last selection board for FS field grade officers at a minimum two ACOMs are needed for promotion to LTC.

Company grade officers do not get block checks and the criteria to MAJ are not as stringent as to LTC; however, performance matters and if you get an OER with fully qualified rather than best qualified it will be more difficult to get promoted than one with all best qualified. The underlying theme for promotion is performance matters, whether it is as a company grade or field grade. Officers get caught up in where and what the job is, rather than performing in the job.

OERs narratives are important and officers need to understand the difference between good and great OERs. Quantifying performances and clearly articulating ideas are important in the OER narrative whether you are writing for an officer or getting one written for you. The SR portion of an OER is so important understanding how an OER should read is also important.

The ORB acts as your resume; it is a snapshot of your career. Your ORB acts as your introduction to new organizations as well as the selection board. It is your responsibility to ensure the information is correct and up to date. Your assignments should never read as incoming once you have been arrived to your unit. Ensure the job titles are correct and the organizational names are correct. Often times your career manager will review an officer's ORB as a means of evaluating the officer for a nominative position, which often is career enhancing.

ASSIGNMENTS AND JOBS

Assignments, although not solely controlled by the officers, the officer should have a clear understanding of where they are eligible to go, as well as where they should go. If you are coming from a TDA assignment or non-traditional assignment you should look to go to a divisional unit; if you've had mainly MTOE assignments, TDA or non-traditional assignments can be sought out. The traditional key developmental positions remain important and all lend themselves to an officer's depth. Broadening opportunities such as interagency, fellowships, training with industry, advanced civil schooling, as well as institutional Army opportunities play an important role in the development of an officer providing breadth. The traditional jobs provide the necessary tactical and technical expertise needed to succeed as an officer, whereas the broadening opportunities ensure an officer's perspective is not narrow in scope and can also help an officer succeed.

General Petraeus, in his article, "Beyond the Cloister", spoke to the importance of officers first and foremost being competent in their warfighting skills, however; he also spoke to the importance of civilian education and the benefits provided to the officer. In short, once an officer has attained the requisite level of expertise, it would benefit them to expand upon their knowledge base. Our current operating environment lends itself to officers that are not myopic in their perceptions or knowledge. We have truly morphed into a joint, combined and interagency organization; therefore it is important when offered the opportunity to work or learn with outside organization officers understand the benefits.

In conclusion, I remain firm that performance matters, regardless of rank or job, performance clearly articulated in the OER generally is the deciding factor in an officer's promotion. Having a clear understanding of assignments and jobs will allow an officer to chart his career ensuring the traditional job benchmarks are met, while allowing educational and non-traditional job opportunity, all of which will make for a better rounded officer.

Sustainment Brigades & Strength Management in a Modular Unit

by 1LT Seth Dorris
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I have had the fortunate opportunity to deploy with, work, and learn in a sustainment brigade where the intricacies of modularity become prevalent in the area of strength management. This article will describe my inaugural deployment with a sustainment brigade from a strength management perspective.

Being the strength manager for the brigade, personnel accountability is one of the core tasks I am ultimately charged with. I deployed as part of the advance party (ADVON) in order to lay the foundation for strength reporting and personnel accountability. I started learning from my deployment on day one when I realized I would have to manage over 40 different UIC's at one time, all of which were within different stages of the deployment rotation. Over the course of the deployment, I would find myself managing a total of over 90 different UIC's belonging to four different Combat Sustainment & Support Battalions and one Special Troops Battalion utilizing five different Human Resource Systems across three different platforms.

After the transfer of authority between the outgoing brigade and my brigade, I inherited the responsibility of reporting individual augmentees, civilians and contractors. Initially there were about 60-65 of these individuals, and I continued reporting these individuals because I made the mistake of assuming that these folks were supposed to be accounted for by our headquarters since the previous headquarters had been doing the same. Never assume that the previous headquarters was doing everything correctly, one must always try to understand and answer the question of why things were done the way they were. I pulled a list of all of our individual augmentees, civilians and contractors and began to email each one of them, stopping them in the halls, doing whatever I thought was necessary to find out whom they worked for and if the company or organization they worked for was already reporting these individuals up the chain through alternative channels. Turns out that about 25 of these individuals were being reported directly to our higher headquarters by their parent organization/company and then once more by my brigade headquarters resulting in these individuals being double counted at the top of the chain. After discussing the matter with my higher headquarters, I was able to remove the double counted individuals from our daily strength report. In trying to solve the question why are we reporting these individuals? I was able to cut our reportable civilian and individual population by 40%.

In a sustainment brigade, one has the unique opportunity to work in a unit where only about 14% of the 2,500 assigned personnel are organic to the brigade. The subordinate battalions and companies come from all across the Army and belong to separate brigades all together, which cause problems in the area of strength management. I have often referred to myself as more of a strength monitor rather than a strength manager due to the lack of influence in the strengths of our subordinate units. There are several personnel systems and personally developed products that I have that enable me to track and monitor the strength of subordinate units by Military Occupational Specialty (MOS) and skill level. The problem with modularity is that when I identify certain MOS shortages in subordinate units, I do not have the ability to alleviate these shortages by coordinating directly with my own rear detachment to send replacements. As I mentioned earlier, only 14% of the personnel assigned to the brigade are organic to the brigade itself; this leaves another 86% of personnel that are subordinate to different brigades across the U.S. Therefore, replacements and shortages must be replenished through the appropriate parent brigade; slowing down the replacement process further. Unit shortages have not been a result of inadequate manning; in most cases, these units are filled to aggregate strengths greater than 100% prior to deployment.

The largest cause of concern in unit strength is the percentage of Soldiers that are available. Units in theater will typically operate at about 10% less their assigned strength, with about 90-92% of those unavailable Soldiers due to Rest and Recuperation Leave (R&R). The Army has recognized this issue and will eventually do away with R&R when unit rotations are shortened to nine months in length rather than the previous twelve month tour, which entitles Soldiers to R&R leave. With the elimination of R&R, units operating strength percentages would remain consistently in the upper 90s rather than the high 80s to low 90s that units typically experience in today's rotations.

One can see that sustainment brigades and the intricacies of their modular structure pose challenges from the strength management perspective, however, these challenges are not insurmountable and offer sustainment brigade strength teams a unique opportunity that their brigade combat team counterparts are not afforded.

Take the HR Pulse of Your Company: A guide for Commanders and First Sergeants

by CW2 Laurence T. Robinson
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Sometimes in the AG Community, we joke that “Nothing happens without personnel”. If you think about it for a second, it is true. You can’t have an Army without Soldiers. You, as Company Commanders and First Sergeants are the leaders at the unit level responsible for making sure that your personnel are taken care of. Yes you have squad leaders and platoon leaders/sergeants, but you are the ones responsible for that individual UIC, and sometimes more than one. These UICs are what Human Resources professionals focus on for tracking the HR “pulse” of the Army. Enclosed are some tips that you can use to check the personnel health of your unit.

Many CDRs/1SGs are already familiar with one of the most popularly requested report from eMILPO, the Unit Personnel Accountability Report or AAA-162. This report contains standard name line information about your units’ assigned and attached personnel to include gain/loss dates to the unit, duty status information and non-availability status/reason. It now also includes Medical Readiness Classification (MRC) codes/Reasons.

The latest and greatest report to come out of eMILPO is called the Unit Soldier Readiness Report, or the AAA-167. This is a one-stop-shop of a report. In addition to what’s already in the AAA-162, it also contains component, Enlisted, Warrant AND Officer MOS, Dwell Time, Servicemember’s Group Life Insurance (SGLV) Election, and Certificate date/coverage, Record of Emergency data (DD93) date, expiration date of the non-availability status, PULHES, and latest HIV and Physical date. It is clear HRC created this new report to assist CDR/1SGs of deploying units or rear detachment units. There is currently no option in eMILPO to download these reports as an Adobe PDF file, or to export to Excel, but once the report is on your screen, it can easily be copy/pasted to Excel. Taking the pulse: Use this new report to check the deployability status of your unit or validate your rear detachment’s mission. Look for missing or expired data, and scrub availability and MRC reasons, keeping in mind that if there are multiple reasons, then only the highest availability reason will show up, or the three highest MRC reasons will display in order of precedence.

Authorized users of Internet Personnel Electronic Records Management System (iPERMS) have access to the DD93/SGLV information for any UIC they are authorized to view. The data comes up with a summary of each UIC and number of valid forms on file in a Soldier’s Official Military Personnel File (OMPF). Then the UICs can be “drilled down” to pull up a by-name list, initially in rank order, of each Soldier in your unit. At a minimum, their forms should be dated after 15 August 2008, but ideally they should be less than one year old. In no case should they be missing. If your unit is deploying, they should be updated within 30 days of rolling out. Your battalion S1 should have authorized access, and they can certainly get it if they request it. If not see your Brigade S1 Human Resources Technician for these valuable reports. Taking the pulse: This is non-negotiable. There should be 100% of DD93 and SGLV forms in your Soldiers’ OMPFs. They should also be current within the year, or within 30 days of your deployment date. You also need to ensure that your first line supervisors are keeping the pulse of their elements so that changes can be made immediately in the event of divorce, marriage, childbirth or any other changes to dependants or Next of Kin. Anything less is unacceptable.

Evaluations and Rating Schemes. ERBs/ORBs pulled from

eMILPO don’t always have the most up-to-date latest evaluation report listed. To confirm the latest evaluation report date, you can pull an individual report from Interactive Web Response System (IWRs). Additionally there are several look-up options for individual UICs. You can check status of submitted evaluations. This will give you a heads-up if there was an issue with an evaluation that needs to be addressed. You can also use this site to predict when evaluations are due. A word of caution – I would build (or keep updated) the unit’s rating scheme in Excel, and use IWRs as a resource only to confirm evaluation status. The website contains more information than you will need so you only want the relative data. Taking the pulse: Ideally you don’t want any late evaluation reports filed; this website can also be used to regularly see the Army, MACOM or PSB-code level of late reports. If your unit’s late percentage is always lower than your higher headquarters, then you are doing your part to keep late reports low and ensuring that your Soldiers; board packets are always ready with the most current information.

Slotting or proper utilization of your personnel. Battalion S1s should provide you monthly with a Human Resource Authorization Report (HRAR). This report is formerly known as the Unit Manning Report (UMR). If you are not doing this already, you should try to slot your new Soldiers as soon as they arrive at the unit and inform the battalion S1 of what position they are holding in your unit. The regulatory guidance is within seven days for slotting a new arrival to the unit, and in many units a Soldier may be at a unit for months before they are slotted in a position. Many times this is corrected because the Soldier themselves have gone to the unit/battalion and asked to be slotted. If a promotion board is coming up, or an officer/warrant officer packet is being submitted, or an evaluation is about to be posted, they themselves want their current position accurately reflected. It should not have to get to this point. In addition, properly slotting your Soldiers significantly makes the monthly Unit Status Report (USR) process go smoother. Many times this is not appreciated as the CDR/1SG assigns the Soldier to a slot, but then another officer/NCO participates in the USR process. A lengthy USR scrub is an indicator of poor slotting or lack of slotting on the unit’s part. Taking the pulse: Ideally you should never have less than 2% of your personnel un-slotted. Units with short tours may go as high as 10%. As long as you remain below these percentages, your slotting health is on target.

Modification Table Of Organization & Equipment (MTOE) or Table of Distribution and Allowances (TDA) documents: While not really a health indicator, these documents can be valuable tools. If you are new to a unit and you know there is a new MTOE effective date coming up, you can use FMSWeb (Formerly known as WEBTAADS) to not only pull up the new MTOE, or TDA document (in various downloadable formats), but you can also pull down a report that compares the current document with a future document. This way you will know what personnel (and equipment) changes are going to happen in your unit before they happen giving you adequate time to start planning for them.

As a CO CDR or 1SG, your first and most accessible HR support should come from your Battalion S1 office. They should be available for reports, queries and guidance. However, if that support is not readily available, you can also request direct access to many of the HR systems yourself. In fact, there are specific roles in eMILPO for CO CDRs/1SGs to access and impact that system. Remember, you can always see your Brigade HR Tech for assistance. We are here for you.

The “Real” Joint Sustainment Fight: Integration of US Air Force Weather Support into US Army Sustainment Brigade Operations

by MAJ Sean Gallagher
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Intelligence Section (S2)

“S-2, when is it going to snow here in Afghanistan?” inquires the Sustainment Brigade Commander with unrealistic expectations. “No snow is forecasted for the next 96 hours, sir” replies the Sustainment Brigade S-2. “I need a 10-day forecast so I can plan when to launch convoys ahead of the weather, advise BCT Commanders on when to drop LCLA, and figure out when to call ammo forward from Kuwait. This 96-hour forecast is not enough.” counters the Brigade Commander. This was a typical conversation at a battlefield update brief when the 101st Sustainment Brigade arrived at Bagram Airfield in December 2010.

Framing the “joint” problem. Afghanistan possesses some of the world’s most brutal terrain and unpredictable weather patterns due to topography, hydrology, and geography. This combination often serves as a greater threat to sustainment operations than the enemy’s vote. US Army Brigade Combat Teams (BCT) in Afghanistan receive their weather support from the Battlefield Weather Over-watch Team (BWOT). The role of the BWOT is “to evaluate and apply operational weather squadron forecasts to specific brigade missions, weapons systems, strategies, tactics, and applications; deploys with the brigade; and in general provides both direct and indirect tailored customer support.” However, a Sustainment Brigade is not a BCT and does not perform functions of a BCT, such as terrain management; and is not authorized direct Air Force weather support. Yet, the Sustainment Brigade spans BCT boundaries distributing logistics to multiple BCT’s. Furthermore, there is no natural source for weather support to the Sustainment Brigade due to its’ command relationship to the Joint Sustainment Command, not a Division or JTF headquarters. Most critically, Sustainment Brigades core function is to distribute logistics. Sustainment Brigades distribute logistics via air and ground, both susceptible to weather effects. Due to the large areas that Sustainment Brigades operate in, command relationship to Joint Sustainment Command, the unique battlefield geometry based on road networks, and the three-dimensional distribution of logistics; Sustainment Brigades, just like BCTs, require dedicated, habitual Air Force weather support to operations and planning of logistics distribution to the warfighter.



The northern portal of the Salang Tunnel headed north into Baghlan Province. Tunnel portal sits at approximately 12,000 feet elevation. Picture was taken in March 9, 2011, the snowpack at 20” still significantly impacts traffic. (Photo: MAJ Sean J. Gallagher, TF Lifeliner S2)

Logistics in Afghanistan is complex and fluid. The same can be said for the weather. Sustainment Brigade S-2 sections do not possess the ability to get to the level of detail required by the Commander due to manpower (six by MTOE) and scope of operating area (two Regional Commands consisting of 11 BCT-equivalent formations). Facing the challenge of capability versus requirement, the 101st Sustainment Brigade (TF Lifeliner) S-2 section sought out the 19th Expeditionary Weather Squadron (EWXS) BWOT at Bagram Airfield to assist the brigade in weather forecasting for operations. Initially, weather support began with up request convoy briefings while S-2 support was provided in the form of weekly intelligence summaries. As each unit understood the others' capabilities better, weather support grew to multiple staff briefings per week and long-range forecasts tailored for specific missions within the 101st Sustainment Brigade AO. The S-2 has provided desk space and dedicated terminals for weather personnel within the TOC as well as weather debrief information from all convoys. The integration of the BWOT into Sustainment Brigade operations has provided timely, accurate and relevant weather forecasts and analysis of potential effects on sustainment missions. BWOT collaboration with the Sustainment Brigade S2 has reduced risk significantly to Soldiers and Afghans, improved efficiency in distribution, and saved the US government money during the 101st Sustainment Brigade's deployment in support of Operation ENDURING FREEDOM.

Building the Collaborative Bridge. As soon as TF Lifeliner hit the ground in November 2010, challenges with weather and terrain began immediately. This led to the opening of our collaborative relationship with the BWOT. US Army intelligence Soldiers are taught to conduct analysis of weather and terrain effects on personnel, equipment, and operations. They are not qualified weather forecasters and depend wholly on Staff Weather Officer's for forecasts. Yet due to the fact that sustainment convoys take three days to travel to destinations, usually over mountain passes, to deliver sustainment to the warfighter; the commander and his staff need to see beyond the typical 96-hour forecast window. This was the genesis of collaboration. TF Lifeliner S2 approached the BWOT for support with a seven or ten day forecast. At first, the BWOT was hesitant to produce a forecast beyond 96-hours due to low confidence in the forecast. TF Lifeliner S2 stated that they needed a forecast for planning purposes and revealed that they were pulling Weather Channel 10-day forecasts for Kabul to show the Brigade Commander. The BWOT team agreed that there was enormous value added and began producing a 7-day forecast three times a week for the Sustainment Brigade. This allowed the SPO Transportation to make timely distribution decisions, assisted the Brigade S3 in synching convoy operations, and allowed the SPO Aerial Delivery section to plan air drops to BCT's in remote locations.

Joint Solutions to Joint Problems. The joint efforts between a US Army Sustainment Brigade and US Air Force Weather sought solutions to problems that have plagued logistics since 2001. This collaborative problem solving process tackled issues such as an extended seven day forecast for planning, identifying key terrain features for deployment of weather sensors, dedicated weather support to mission planning, and developing symbiotic relationship between US Air Force weather forecasters and US Army intelligence analysts to provide timely, accurate, relevant, and actionable assessments to commanders.

The next problem we tackled together was how to get near real time visibility on weather conditions at some of our key terrain features. Any weather forecaster worth their salt will tell you that the more sensors you have gathering data the more accurate the forecast. As an intelligence team, TF Lifeliner S2 easily understood the concept. However, Afghanistan has very few weather sensors. Most are anchored on large FOB's, not very close to key terrain features. For example, Salang Tunnel is a key terrain feature that

separates RC-East from RC-North that sits above 12,000 feet elevation. The closest sensor on the southern side in RC-East is located at Bagram Airfield, some 60 kilometers away and 6,000 lower in elevation than the tunnel. On the north side, the nearest sensor is at FOB Khillagey, located 60 kilometers away and 8,500 feet lower in elevation. Therefore, the ability to accurately predict the weather at any given time at the Salang Tunnel is purely guesswork. In fact, both the Sustainment Brigade and BWOT depended on calling the Hungarian Provincial Reconstruction Team in Pul-e-Khurmi for a report on weather conditions. The Hungarians would call the Afghan Ministry of Transportation Salang Guards for a description of the weather conditions. This led to communications challenges and was not timely or accurate in reporting. The 19th EWXS conducted research and TF Lifeliner provided the fiscal resources to conduct a JARB (spell out?) purchase of three weather sensors, with camera capability to position at the Salang Pass and the Tera Pass. These sensors would provide accurate readings for weather forecasters and display near real time images for the Sustainment Brigade commander and his staff. The weather sensor would prevent Sustainment Brigade convoys from traveling to the southern tunnel portal to find out it was closed, prevent convoys from attempting to push through tunnels and galleries during nightly freezing temperatures- only to get host nation truck low boys carrying heavy loads stuck on ice patches. Weather sensors will reduce risk for Soldiers, save time and money, and increase distribution efficiency.

As the relationship grew, the BWOT began to dedicate a weather forecaster to the Sustainment Brigade support mission planning and operations. This proved to pay big dividends early on. In February 2011, a series of snowstorms had paralyzed ground distribution in RC-East. During this period of inclement weather, a newly arrived BSB in Gardez realized that their fuel capacity was actually a lot lower than previously measured. They were down to less than ten days supply on hand. This required the Sustainment Brigade to escort host nation fuel trucks to Gardez. One small problem: the Tera Pass. The Tera Pass sits at 11,000 feet elevation, right along a boundary between two BCT's. Boundaries along Main Supply Routes in Afghanistan between BCT's are akin to state lines along interstates in the United States. BCT's rarely patrol to their boundary, much like state troopers on interstates. With neither BCT able to provide an accurate route assessment on the Tera Pass and more inclement weather moving in, an alternate route to Gardez was needed. TF Lifeliner S2 brought in the US Air Force weather forecaster to provide updated forecasts for all possible alternatives-different routes, aerial delivery, or air land operations. The weather forecaster noted that the next system moving in would severely impact travel at above the 9,000 foot elevation mark. This made traversing the Tera Pass impractical. However, an alternate route coming from the south would keep the convoy below the 9,000 foot elevation snow line. While this route elongated the convoy, it was deemed trafficable based on the weather forecast and current snowpack analysis. The presence and availability of forecast weather and current ground conditions facilitated the delivery of mission critical fuel to a BCT. The enduring impact of the dedicated weather forecaster is to allow the Brigade and Battalion Commanders to make decisions about managing the movement of convoys from node to node ahead of weather systems. This allowed key supplies to be pre-positioned to be delivered when the weather cleared.

The collaborative teamwork of the TF Lifeliner S2 and the BWOT enabled development of a symbiotic relationship between US Air Force weather forecasters and US Army intelligence analysts to provide timely, accurate, relevant, and actionable assessments to commanders. The Sustainment Brigade viewed the US Air Force weather forecaster as an integral member of the team. The weather forecaster was provided a seat in the Brigade TOC to work from, incorporated into numerous command briefings-

include the USAFOR-A Deputy Commander for Support and the ISAF Command Sergeant Major, and included the forecasters into our operations. In order to better understand how a Sustainment Brigade operates, the equipment capabilities and limitations, and the impacts weather plays on operations; the weather forecasters participated in convoys and conducted "ride-a-longs" with Low Cost Low Altitude (LCLA) and Container Delivery System (CDS) air drops. Also, the weather forecasters were immersed in an environment of technical experts in the Sustainment Brigade Support Operation Section (SPO) on equipment capabilities and limitations. In turn, the weather forecaster showed US Army intelligence forecasters how to pull weather satellite imagery and how to interpret the satellite imagery. They also provided a key component of providing assessments for the commander.

Sustain US Air Force weather support to Sustainment Brigades. The integration of US Air Force weather forecasters into Sustainment Brigade operations is a mutually beneficial relationship. The Sustainment Brigade receives timely, relevant, accurate, and actionable forecasts to plan distribution operations. The US Air Force weather forecasters see the impacts weather has

on operations across Afghanistan. In the end, each side needs each other in order to succeed. The Army cannot fight and consistently win the three-dimensional logistics battle to support the warfighter without dependable weather support. The weather forecasters can not accurately predict weather effects on equipment without harvesting that knowledge by working with the Army sustainers that know the capabilities and limitations of the equipment as well as supply the forecasters with ground truth from their missions. The relationship to date has saved hard wear and tear on our Soldiers and equipment; increased efficiency in distribution missions by not moving routine convoys during inclement weather. Furthermore, the collaborative efforts will result in the ability to see weather conditions at key terrain features and to be able to better predict future impacts; thus providing accurate and timely information for Sustainment Brigade, the Government of the Islamic Republic of Afghanistan, and the commercial trucking industry. The end result of this joint fight by US Army and US Air Force teammates is a better understanding of weather effects on the world's most brutal and unforgiving terrain to allow the American warfighter to fight and win.



Highway 1 in Baghlan Province, RC-North. Treacherous switchbacks combined with weather effects test even the most seasoned drivers of the MRAP-family of vehicles in Afghanistan. (Photo: MAJ Sean J. Gallagher, TF Lifeliner S2, 9 March 2011)



Highway 1 in Baghlan Province, RC-North. Constant harsh winter conditions and persistent cloud cover reduce visibility for drivers along the Salang Pass. This picture was taken at above 11,000 feet in elevation. (Picture: 82nd Sustainment Brigade, January 2010)

Incorporating Imagery Analysis into Sustainment Operations

by CPT Alicia Harness
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How significant could imagery really be in a place that has never been seen, traveled in, or explored before? The answer is simple: it is essential. Imagery has been used by the U.S. military for several decades and has served as a huge advantage over the enemy. Not only do Commanders and Soldiers in the U.S. Army realize and understand the importance of imagery in today's overseas contingency operations, but so do civilians and families preparing for summer vacations in unfamiliar destinations. Technology is so advanced that families can now, similarly to our armed forces, pull satellite images from Google Earth or MapQuest and zoom in on exact locations, and analyze the imagery to determine the best and safest routes of travel. Imagery is best described as a compilation and presentation of objects that are reproduced by space-based satellites or similar means in the form of photographs.

In the U.S. Army, imagery analysts are the experts who process these images and present the timely and reliable intelligence information to those who really need it. They play an integral role in providing the military with critical information about possible disposition of enemy forces, potential dangerous areas, untraveled routes, and much more. If imagery and the basic level analysis of it are used by families simply planning summer vacations, then it is unquestionably a necessity to the U.S. Army which includes Sustainment Brigades (SBDE) deployed to combat environments whose primary mission is to provide logistics through tactical convoy operations throughout the theater. This paper, through several vignettes, will site the benefits that imagery analysis provides sustainment units. Three of the most significant contributions and advantages to having imagery analysts at the SBDE level are the production of satellite images for various travel routes throughout the area of operations, identifying possible enemy locations and improvised explosive device (IED) emplacements and areas throughout Forward Operating Bases (FOB) that are selected for new construction projects.

Imagery analysts are the "eyes" of the military and serve as the subject matter experts on the various systems and tools used to collect imagery intelligence. They use state of the art equipment to help collect and analyze aerial imagery developed by electronic and photographic means in support of combat and sustainment operations. The functions of imagery analysts vary from unit to unit based upon the assigned mission; however, their range of duties include determining target coordinates for accuracy of location, identifying threats on the ground, and assisting tactical level units with route reconnaissance. In the last decade, the use of imagery to accomplish operations/missions has become a necessity and there are arguably no elements across the combined forces that would conduct operations without it.

There is no doubt that imagery analysts who work in Brigade Combat Teams at the tactical level focus on different imagery intelligence products than those who work in Sustainment Brigades at the operational level. However, imagery analysts all focus on gathering as much information they can using satellites to assist Commanders in making smart decisions. Some people would argue that Sustainment Brigades do not necessarily need imagery analysts within their formations as much as Brigade Combat Teams do, but the advantages that come out of the products produced by analysts at the Sustainment Brigade level are often overlooked.

Several companies within sustainment formations have conducted tactical convoy operations throughout Iraq and Afghanistan. Their mission was to deliver every class of supply to various areas and ultimately to the Soldier on the ground fighting the fight. However, as with any organization, extensive planning and analysis had to take place before Commanders and leaders were willing to send their Soldiers out to unknown locations and unfamiliar routes. Field Manual (FM) 4-01.45 Multi-Service Tactics, Techniques, and Procedures for Tactical Convoy Operations states the importance of incorporating satellite imagery products offered by imagery analysts as part of the Troop Leading Procedures conducted by Convoy Commanders. Units who were tasked to conduct convoys ensured that they talked to the intelligence cell in hopes of gathering as much information on their planned route, possible enemy locations and activities, and more. Prior to the availability of satellite imagery at the tactical and operational level, convoy commanders often conducted map recons to brief their routes to their convoy. However, with an imagery analyst available to pull actual satellite images of entire routes, convoy commanders now had the advantage of seeing every bridge, body of water, culvert, and any man-made object that could prove to be a potential obstacle throughout their route. The advantage was unparalleled because it gave leaders the ability to point out possible dangerous areas, alternative routes, and terrain features along the way. The satellite imagery produced by analysts contributes to making routes more visible, thus, providing Soldiers with total battle space awareness.

As technology advances at a rapid rate, the capability it provides continues to be vital to the military. Having a technological advantage over the adversary is the key to having the upper hand. The use of satellites to produce aerial imagery has proven countless times to be significant in

locating enemy positions, studying their movement, and planning for counterinsurgency operations. Imagery analysts are often called upon to gather multiple aerial and ground photos of areas of interest to analyze the data collected from the photos and present intelligent products to those leaders conducting operations outside of the wire. Collecting multiple images of possible targets from numerous overhead angles can provide significant information to commands. Leaders know that imagery analysts within their formations are specially trained to gather, interpret, and brief the intelligence gained from their products. If, for example, an Infantry Platoon received a mission to travel down a new route to a location identified as a possible insurgent meeting place, imagery will always be involved. Many times, if the military believes there are areas where there are possible insurgents planning attacks, they will use high-tech equipment available to our Army to zoom in on the area, monitor it, and take pictures. The imagery analyst can also provide images with a detailed analysis of the objective; highlighting all possible ingress and egress routes on the objective and identify any obstacles that may impede movement to the objective (i.e. fences, road washouts, low hanging wires, etc.). These images, if put together in a packaged product from a trained imagery analyst, can serve as a primary planning tool for that Platoon Leader. He can now plan avenues of approach, identify key terrain and possible insurgent hiding areas as well as develop a course of action with those images. Without the imagery that an analyst can provide in detail, operations become more difficult and plans are not as solid as they could be. On a larger scale, imagery has been used in past wars to identify known areas of interest and used as planning tools to conduct full scale attacks on our enemy.

At the SBDE level, the benefits of aerial imagery and the skills of an imagery analyst are just as significant to sustaining our Soldiers at war. On a daily basis, a SBDE will typically conduct 5-7 combat logistics patrols. An imagery analyst can provide detailed analysis of each of the routes commonly taken and of routes that have never been utilized before or rarely used by Coalition Forces. This analysis would answer a lot of the unknowns for a commander in the SBDE that has to push logistics to a location that the unit has never pushed to before. The following story illustrates how not having imagery support affected one of the 101st Sustainment Brigade's missions and how the outcome might have been different if the support was available. In late November 2010, the 101st SBDE was tasked to retrograde a unit out of a battle space that was relatively unknown to them. Prior to the mission, imagery analysis was only requested for a portion of the route that had never been traveled before and not for the portion of the route that had previously been assessed as trafficable. The organization did not think that it was important to double check a route that was already assessed as good. During the mission, the convoy experienced an untrafficable area on the portion of the route that was not included in the imagery analysis. The mission failed miserably due to the lack of a detailed route analysis being conducted on the entire route. Had imagery been requested for the entire route, leaders of the convoy would have acknowledged that some of the vehicles in the convoy composition were unable to traverse the terrain. Instead, the convoy was stuck out on a mission for almost a week and never made it to their end destination due to steep switchbacks and sharp turns. That week, many leaders learned to never assume that a route was trafficable just because it was assessed to be in the past; until eyes are laid on physically or through imagery, assume the worse. This was one of the greatest lessons learned on the significance of imagery in sustainment operations. After that mission, imagery analysis was never to be underestimated nor overlooked.

Since the arrival of an imagery analyst to the 101st SBDE, the unit has been able to internally support all imagery requests resulting in hundreds of hours saved in submitting RFIs to higher elements for imagery support and then having to wait for the higher unit to prioritize all the requests from subordinate units and finally answer

the request. One of the analyst's first tasks was to conduct route analysis of every route that the unit utilizes. Some of the analysis included identifying road construction in addition to identifying all the culverts and bridges along the routes that the enemy typically used to emplace IEDs. One example of the accuracy of this imagery analysis involved an IED strike against one of our subordinate units in April, 2011. After the post blast analysis of the site was completed, it was determined that the IED was emplaced in a culvert. Prior to this strike, imagery analysis revealed the culvert the IED was emplaced in an earlier product. This analysis was done so that the convoy elements using the routes would have situational awareness of all the possible danger spots.

On a separate occasion, the 101st SBDE was tasked to travel an unknown route to deliver a piece of equipment to a supporting unit. Determined not to fail again, a full imagery analysis was conducted of the entire route from two possible directions. There was no portion of the route that was left unturned through imagery support. The imagery revealed whether or not the route was improved or unimproved and it also revealed every switchback, culvert, bridge, and road construction along the route, all of which could potentially be dangers to a convoy. With the imagery analysis complete, it was assessed that the route from the North was not a logical choice due to all the road construction making the route impassable for a majority of the vehicles in the convoy, so this left the route from the South. The imagery along with the analysis of the route was given to the convoy element and the mission was conducted without incident. The convoy element reported that the imagery as well as the analysis were "spot on".

"Hey Brigade Engineer, I need you to figure out the best place on this FOB to build a new Ammo Supply Point." If the Sustainment Brigade Engineer heard this from his Commander, he would most likely start his planning process by heading straight to the SBDE imagery analyst to get satellite images of the entire FOB. The Brigade Engineer could then use the collection of images to best guess where the Ammo Supply Point (ASP) could be constructed. An imagery analyst would save that Engineer countless hours of driving around the FOB trying to physically see where an ASP could potentially fit. He could have the imagery uploaded to programs used by engineers in the military to construct blueprints, zoom in on terrain, and more. Furthermore, satellite imagery is often used in several briefings throughout the military. They serve as the best representations of exactly what an area being briefed looks like. "Pictures say a thousand words". Without an imagery analyst to consolidate and analyze the photographs that are captured by the satellites overhead, the images are not always understood and ultimately don't serve the purpose they were meant to serve.

The technical requirements of surveillance and reconnaissance involve vast technological systems, all of which must interoperate together to provide the military with proper mission command. Many of these systems are available to Sustainment Brigades and other organizations throughout the military upon deployment to serve as tactical intelligence and targeting systems. Imagery has been and will continue to be vital to the U.S. armed forces, especially during sustainment operations. As technology continues to advance and imagery analysts continue to receive specialized training on operating and analyzing these systems, the U.S. military remains a tough organization to defeat. Sustainment Brigades most certainly need imagery analysts within their headquarters to process aerial images and use them to draft periodic and special intelligence plans, reports, and briefs. They play an integral role in providing the military with critical information about enemy forces, potential dangerous areas, untraveled routes, and potential construction areas. Since the arrival of the imagery analyst at the 101st SBDE, he has proven to be worth plenty. Not slotting an imagery analyst on the SBDE headquarters staff can be detrimental to subordinate units that rely heavily on those products and will ultimately affect sustainment operations, which is not an option.

Preparing for and Executing Digital Mission Command in a Sustainment Brigade in Afghanistan

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Digital Mission Command in the Sustainment Brigade

The modular structure of US Army Sustainment Brigades (SBDE) and their subordinate units operating within different phases of the Army Force Generation (ARFORGEN) cycle, combined with a high operational tempo, multiple non-standard missions across an asymmetrical battlefield has created challenges for SBDE Commanders executing Digital Mission Command. SBDEs seldom conduct operational deployments with their home station subordinate units. Commanders have had to adapt to the lack of training with subordinate units to build an effective team prior to deployment by making the best use of digital Mission Command systems prior to deployment and while in theater. These systems include, but are not limited to: Army Battle Command System (ABCS), Standard Army Management Information System (STAMIS), Battle Command Sustainment and Support System (BCS3), tactical networks and commercial off the shelf (COTS) systems. SBDEs and their subordinate units have to make the best use of tactics, techniques and procedures (TTPs) learned during pre-deployment site surveys, from Center for Army Lessons Learned (CALL) manuals, and through communication and after action reports (AAR) received from the unit they are conducting relief in place and transfer of authority (RIP/TOA) with in order to effectively and efficiently conduct Mission Command while deployed.

• *Mission Command Defined: is the art and science of understanding, visualizing, describing, directing, leading, and assessing forces in operations against a hostile, thinking, and adaptive enemy. Mission Command applies leadership to translate decisions into actions – by synchronizing forces and warfighting functions in time, space, and purpose – to accomplish missions. (FM 3.0 Operations)*

In order to conduct Mission Command SBDEs must understand themselves, this is: their current capability for distribution, location of unit assets and the Commander's current priority of mission. Second, the SBDE must know the current quantity of all classes of supply that they have on hand and the status of units operating in their Area of Operation (AO). And finally, SBDEs need to know what is in the supply channels, the quantity as well as the consumption rate of supplies coming into their AO, and when it will arrive. The use of digital systems is the most effective method for a SBDE to receive and consolidate reports on commodity status, unit locations and the status of incoming supplies. The use of this information is the cornerstone of developing a sustainment Common Operational Picture (COP).

A Common Operational Picture is a single display of relevant information within a commander's area of interest. By collaborating, sharing, and tailoring relevant information, separate echelons create a COP. A common operational picture is an operational picture tailored to the user's requirements, based on common data and information shared by more than one command. The COP is displayed at a scale and level of detail that meets the information needs of the command at a particular echelon. (FM 3.0 Operations)

The epicenter for Mission Command and information management in the 101 SBDE is the Tactical Operation Center (TOC). The TOC is able to track and effectively consolidate and disseminate information to and from units. The TOC also monitors the movement of all classes of supply and the vehicles conducting tactical convoy's within the SBDE area of responsibility (AOR). This requires personnel who are trained on the tactical Mission Command systems and can efficiently manage the flow of accurate information. The primary systems used for Mission Command throughout the AOR are: the Command Post of the Future (CPOF), Blue Force Tracker (BFT), and internet information hubs (i.e. unit web pages). CPOF is used to track missions, communicate with higher headquarters and subordinate units for briefings, monitor current operations, and view and creating planning and operational overlays. BFT is the primary Mission Command tool used when traversing the battlefield between Forward Operating Bases (FOBs), allowing communication between units and continuous live location updates. Internet information hubs allow the storage and sharing of information with all units in the AOR. For example,

a well designed web page will assist in ensuring routine and reoccurring operational briefs and reports are accessible by all who require them, without the network problems associated with the delivery of large emails.

In order to ensure that the SBDEs are properly trained to conduct Mission Command and use TOC systems, a robust training plan must be used to prepare Soldiers for the use of their individual ABCS, as well as staff training to ensure the incorporation of the individual systems into a SBDE COP. Through the pre-deployment training period, the 101st SBDE undertook multiple training events to prepare the BDE Staff for deployment. The 101st SBDE used "crawl/ walk/ run" methodology to prepare for deployment and leveraged the Fort Campbell Battle Command Training Center (BCTC) and Army agencies such as Joint Readiness Training Center (JRTC) Leadership Training Program (LTP), Battle Command Training Program (BCTP) Operations Group Sierra and Combined Arms Support Command (CASCOM) to facilitate pre-deployment training. The end state training objective was tailored to set the conditions for the SBDE staff. We began with individual ABCS system training on the systems to be utilized in the BDE TOC. The instructors were primarily from the Fort Campbell BCTC. The training objective was to establish an understanding of the capabilities and limitations of ABCS and integration of the systems into a COP. The individual phase of training continued throughout the BDE's preparation for deployment to ensure late arriving Soldiers were trained and prepared to execute their mission.

The first collective staff training event was the JRTC- Leader Professional Development, Military Decision Making Process (JRTC-LPD MDMP). The JRTC cadre normally trains Brigade Combat Teams (BCTs), but the 101st SBDE became the first SBDE to use this program. It was beneficial for both cadre and training audience alike. Coordination required providing the SBDEs higher OPORD and additional products required to conduct MDMP. This training event resulted in the SBDE gaining a significant understanding of the future AO, as well as preparing staff members (almost all new to the BDE, and many junior officers and NCOs) to the standards they would be expected to perform. Our second event was a Battle Command seminar, hosted by BCTP OPS Group Sierra. This event was beneficial to the SBDE staff combining Doctrine as well as the TTPs required for operations in Afghanistan. The informal free flow of information, ideas, questions and general discussion enabled the staff to understand the Brigade Commanders concept of how the BDE would conduct operations during deployment, and clarified his expectations of what each staff section would be responsible for.

Our third event was the 184th Expeditionary Sustainment Command's (ESC), Command Post Exercise-Sustainment (CPX-S), conducted by CASCOM, which provided an opportunity for the staff to work on MDMP, tactical standard operating procedures (TACSOP) refinement, and concept of support refinement. Our fourth exercise was a Unified Endeavor exercise conducted with the Joint Warfighting Center (JWC) Battle Command Training Program (BCTP). This event was not nested with our deployed mission, location, or any unit we would share battle space with, therefore essentially requiring us to create our own event inside an existing training event. This training event allowed the SBDE time for continued refinement of our future base order as well as provided the opportunity to interact with staff counterparts from the unit we were conducting RIP/TOA with. Our final training event was conducted with the JSC-A as part of their culminating training event (CTE) at Fort Hood, Texas. This event allowed us to incorporate our late arriving staff officers into our team, as well as work directly with our higher sustainment headquarters prior to deployment.

The lessons learned in the BDE train up for deployment as it relates to Mission Command is to ensure cross training of subordinate staff to conduct multiple missions, and know how their operations tie into the

bigger picture.

Knowledge management is the art of creating, organizing, applying, and transferring knowledge to facilitate situational understanding and decision making. (FM 3-0 C1, Para 6-75)

During the CPX-S training event for the 101st SBDE, a COP was developed for RC-E that would be relevant despite the ever changing operational environment of Afghanistan. The combined information is presented through several mediums, such as twice daily SITREP briefs, twice weekly battle update briefs, and a constant display of up to date information in the Brigade TOC. This information is maintained by the SPO Battle Captain, the S3 Battle Captain, and the S2. The method of display is through CPOF and is projected onto three side-by-side screens located at the front of the Brigade TOC. At any given time, any person in the brigade headquarters can find a complete picture of the battlefield.

The developed COP allowed the Commander to see the location of all Tactical Convoy Operations, intelligence reports, reported enemy activity and any other significant activity; side-by-side within the AOR. The information on the COP is updated through the use of publish and subscribe servers (PASS), which act as repositories for information from all Afghanistan based Infantry Brigade Combat Team's and the Combined Joint Task Force. At any given time on the COP, there were numerous Tactical Convoy's, IEDs, TICs, and relevant route status information from the nine battle space owners the 101 SBDE works with on a daily basis. Knowledge Management is an integral component of digital Mission Command. Due to the diverse customer base the 101st SBDE elements work with across the combined joint operating area (CJOA); maintaining all the data and information required for reporting and historical data required the use of several different communication tools and data bases. Portal management was essential to SBDE daily operations. Easily accessible and meticulously organized information is paramount for interaction with battle space owners, subordinate units and higher headquarter elements. The more information that was placed on the portal in an organized manner, the easier it was to coordinate with subordinate units, battle space owners, customers, NATO partners and higher elements. 101 SBDE had a qualified portal designer and manager as their battle captain. Prior to pre-deployment training, the battle captain attended Microsoft Office SharePoint Services designer class through Eagle University. This allowed the SBDE S3 shop to design and maintain the portal pages themselves to maximize their utility and ensure the COP was accurate and relevant. In order for the 101st SBDE to execute Mission Command and display a clear and concise COP the staff had to understand the signal network in the AOR.

There are three primary networks that the SBDE used in the CJOA; secret internet protocol router (SIPR), CENTCOM regional intelligence exchange system (CENTRIX) and non-secure internet protocol router (NIPR). The amount of use that a staff section spends on a specific network is based on who they are (what nationality, branch of service or contractor), what their primary service is (operations, Intelligence, personnel, distribution or armament), and their physical location of the customer to the commodity provider (CONUS, Kuwait or Afghanistan). The challenges of the three networks and the various classification of each network led to several leader challenges. The most deadly was security issues and the risk of classified data spillage due to partnering with several different nations whom all have different levels of security clearance and were spread out over several battle spaces.

By continuing to use SIPR, CENTRIX and NIPR systems to conduct business, the SBDE is required to either repeat the work anytime they needed to move the work from one system to the other or "burn it across" several systems with differing levels of classification. Repeating the work was very manpower intensive

and personnel inputting information to meticulously screen the products to ensure information classification met the classification of the system and product receiver. Data burning rights were limited to 5% (by our higher) of the unit and opened the SBDE up to “spillage” incidents. Knowledge management was also hampered because server space is limited by what is allocated to each unit by the network managers. Due to continuous use of NIPR, SIPR, and CENTRIX systems for the same work, three times the storage space was being consumed with nearly the same material (some products were changed to fit the system classification). By using three separate systems to store and process information, there is confusion as to which system the information is stored on. Users had to manage and manipulate three different portals and three different emails to locate information. Limiting the use to one system reduced the demand on network managers for more storage space. In the Operations section, decisions were made to enable the 101st SBDE to communicate in theater, making CENTRIX the main system for communication with BSOs and NATO partners. The SBDE still had commodity managers working exclusively on SIPR or NIPR due to their location, customers or service provided.

One Knowledge Management considerations recommendation is to limit the use of SIPR and NIPR systems in the BDE COP process as they do not translate well among the several battle space owners due to limited bandwidth on NIPR and restricted access on SIPR. Several outlying COPs and FOBs do not have access to one or two systems; SIPR or CENTRIX. An all US Force COP did not have CENTRIX and Soldiers working with ANA and ANP did not have SIPR. These issues were a problem when trying to design a unified COP. This needs to be addressed prior to designating one specific system as the primary. These restrictions are driving the usage of several systems across the battle space. This need must be addressed in light of restricted burn rights, limited USB access, and increasing needs for information. One unified system would almost eliminate the need for burn rights, as the use of the portal and storage area networks could eliminate problems with back-up and information transfer. Additionally, CPOF is a CENTRIX based program. Originally, we planned to use CPOF as our primary Mission Command tool. However, there are 5 different repositories for information that CPOF draws from across the CJOA (each regional command has their own). Each repository is limited by Regional Command (RC) and is set up to support BCT’s within that AO. The 101 SBDE traverses and has subordinates located in three separate RCs, and has reporting requirements to their headquarters in a fourth RC. This repository set-up does not support the 101 SBDE’s ongoing operations, and reduced the ability of units to share data. This limitation requires the 101 SBDE and its subordinates to operate mainly through CENTRIX email and web page portals, making the CPOF system a secondary Mission

Command tool, as opposed to the primary Mission Command tool it was designed to be.

Furthermore, the 101 SBDE was unable to communicate and report to their higher headquarters, JSC-A, located in RC-South, or their subordinates located in RC-Capital and RC-North without switching to a separate CPOF repository. Switching to a separate repository would sever their communications with their subordinate units located in RC-East; the 101st SBDE main effort. These fundamental flaws in the set up of Mission Command systems in Afghanistan limited the ability of the 101st SBDE to effectively communicate with higher headquarters, subordinate units, foreign forces and austere detachments. A Recommended solution to this problem would be a separate repository (aka “PASS”) that draws information from all of the Regional Commands (RC), similar to headquarters elements above regional command level. This solution would ease the process of applying a clear and concise COP and allow the Sustainment Brigade Commander to more effectively conduct command and control of his formation and enable the flow of information between units.

In conclusion, Executing Digital Mission Command in a Sustainment Brigade in Afghanistan involves both the art, and science of mission command, there is no specific way or “right answer”. For SBDE Commanders to control their formations, they must rely upon their staff to process data, assess it, and turn it into information and the recommendations required to make timely, accurate decisions. In the CJOA there are many means in which the SBDE can track and compile all the data needed to ensure accurate and timely decisions are made to keep the required support of the maneuver commanders moving around the battlefield. The basis of the information flow comes from a well connected internet network, so that the SBDE can ensure their supported units will have uninterrupted support. This report provides steps to understand the process. SBDE Commanders must understand the communication capabilities and limitations of subordinate units and higher elements. Standards of how the staff communicates stores data and shares information must be established and ruthlessly enforced. Continual reassessment must be conducted with BSOs and subordinate units to confirm and reconfirm lines of communication remain open and unhampered through the numerous unit rotations within the CJOA. Most importantly, all the digital systems are merely tools used to execute the mission. The Commander and Staff must coach, teach and mentor subordinate units of the SBDE standards for reporting and understanding the commander’s intent. This will ensure the subordinate units have “bought-in” and understand the complexities of digital Mission Command in a Sustainment Brigade and can execute in the most complex and dynamic battlefields on the planet.

Operational Risk Management

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The purpose of this article is twofold. The first is to demonstrate how current practices in the application of Risk Management doctrine at the unit level prevent the Army from reaching safety goals and propose modifications to the risk management worksheet that will counteract these practices. Army risk management doctrine is second to none in its depth, breadth and clarity, yet many leaders fail to leverage the power of existing tools in facilitating safe mission accomplishment. The most serious accidents (Class A-C) still occur in significant numbers despite the use of existing Risk Management tools. Changes must be made if the Army is to achieve breakthrough results in safety and entrench risk management in its culture.

While deployed to Baghdad from Nov 07-Jan 09 I served as a company commander for 57th Transportation Company and reviewed risk assessments for over 800 missions. I also observed the Battalion Commander Review of over 2000 Combat Logistical Patrols. While in Baghdad my unit served under two Active Duty Support Battalions from two installations and received convoy escort from three different Reserve Infantry companies. The following paper details common practices that manifested themselves throughout the deployment across multiple units. Many of the trends highlighted here are the same trends I was guilty of practicing as an Infantry Platoon Leader in the Airborne. These practices include: allowing risk to compound, using previous risk assessments as a template without mission specific analysis, completing the risk management worksheet (RMW) as an afterthought, generating laundry lists of hazards and controls, failing to enforce controls, and not reassessing risk as conditions change. During the deployment the battalion commander was constantly training senior NCO’s and Junior Officers to fix these practices. Some will argue that these practices are isolated and are not widespread in the Army. Conversations with peers, review of Preliminary Loss Reports (PLR), data from the Combined Readiness Center, and experience all suggest that the culture of Composite Risk Management has not yet saturated the Army.

The most detrimental practice affecting the successful execution of missions is the failure to identify compounding risk. In nearly every serious accident multiple factors combined to set the conditions for a mishap. When viewed in isolation, the contributing factors would not likely cause an accident but combine with other hazards to result in catastrophe. The stories frequently told by Soldiers surrounding catastrophic events highlight inexperienced leaders in an unfamiliar environment with improperly trained and supervised Soldiers using poorly maintained equipment. This reality highlights one of the major shortfalls of the RMW. Instructions for completion of the worksheet state that the overall risk for a mission is determined by the hazard that has the highest residual risk. This would place a mission with five hazards having a residual risk of medium at the same risk level as a mission that has only one hazard with a medium risk level. Clearly these two missions do not have the same risk levels yet there are no concrete procedures to address the increased risk of the first mission.

In order to address this shortfall the instructions for the RMW should include a requirement to upgrade mission risk to the next level if the mission has four or more hazards at medium or high levels. Missions with low residual risk should be excluded because all of the Hazards will have a residual risk of low. A mission with four medium level risks should be upgraded to high due to the effects of compounding risk. This informs the next level authority of the level of difficulty of the mission with respect to the importance of the mission. That authority then chooses to bring more resources to bear, postpones the mission, or directs execution due to mission importance. Determination of hazard severity and probability are largely judgment calls by experienced leaders based on subjective criteria. This method leverages that experience and improves leader visibility of elevated risk missions.

The next negative practice is the inclusion of a laundry list of hazards and controls. Often this habit results in a three to five page risk management worksheet. While long RMW’s make leaders feel more comfortable that all of the risks are addressed by controls, it does not result in safer operations. I frequently heard critical hazard controls buried under trivial ones. During my tour there were many missions where the convoy commander read off the long list of hazards and controls at the end of an already long convoy brief. Few Soldiers listened to the litany of hazards and controls. Some of this was due to the repetitive nature of the missions but some of it was also due to human limits for information retention.

Within the safety brief the list of controls included actions that were already complete such as rehearsals and designation of the minimum rank of the leader of the convoy. Re-briefing these controls provides information that the Soldiers did not need and initiated the mental trigger for them to stop paying attention. Also on the list were many known standards and regulations. There is significant value in reinforcing the most relevant standards for a mission but an extensive list accomplishes the opposite effect by negating any intended emphasis. Soldiers may successfully execute the controls that prevent minor accidents but neglect the controls that prevent a catastrophe.

There were also controls that the Soldiers and leaders had no intention of executing. I believe the primary cause for this phenomenon was the dilution of emphasis and competition between the laundry list of tasks on the RMW. It is the approval authority's responsibility to provide clear and prioritized instructions free of nuance. The current form of the RMW does not set the conditions for this. While long risk assessments address every conceivable risk they fail to provide a foundation for prevention of the most serious accidents. The solution to this phenomenon lies in two parts.

First, conduct a thorough risk assessment in the same fashion that they are now. Prioritize the list of hazards based on residual risk. Controls identified in the planning and preparation phase of the mission should be executed. Selecting the right level of leader for the mission, inspecting equipment, and conducting rehearsals are all essential elements to successful mission execution and should be part of company SOP's. Rehearsals, in particular, aid in developing subconscious execution that is so critical to effective units. These controls, however, need not be reinforced in the mission brief as they are already completed. This leads to the second component of the solution.

During the mission brief the controls requiring specific Soldier actions during execution, particularly non-routine actions are the most important elements of the RMW. I call this component of the RMW the execution list. Soldiers and NCO's already have a tremendous amount of information to process and it is critical that they do not receive any unnecessary data. In order to combat these practices the number of hazards for a specific activity should be limited to seven on the execution list. This facilitates greater emphasis on the most salient hazards. It also provides leaders specific areas of focus. Research has shown that it takes many repetitions of a task to make it part of the subconscious. Limiting the number of hazards to seven improves the probability that Soldiers will listen to, remember, and execute the controls and that leaders will enforce them. As specific controls are repeated and enforced over multiple cycles, non-programmed behaviors become programmed. Once these controls become habitual remove them from the RMW and move the eighth Hazard by priority onto the execution list. This method results in a dependable ratcheting down of hazard risk over time. The approval authority approves missions based on the full list of hazards and controls and validates the top seven hazards, or execution list. This allows leaders to address lower risk hazards with specific controls in the mission planning phase while preventing the dilution of the most critical controls during execution.

A secondary effect of long RMW's is the copying of risk assessments from previous missions without performing mission

specific analysis. During my tour I required hand written RMW's from leaders to combat this trend. Convoy commanders frequently handed the battalion commander (to his ire) risk assessments that contained hazards irrelevant to the current mission. Most Officers are familiar with RMW's that include hot weather injuries for winter operations. While limiting the number of hazards for the execution list will not eliminate this trend, it causes leaders to think harder about what hazards and controls are on that list.

The last habit addressed is the timing of the completion and approval of the RMW. One of the key characteristics of risk management is that it is a continuous process. Unfortunately the current army culture surrounding risk management involves a single evaluation that is rarely modified or reevaluated as the mission progresses through planning and execution. One of the lessons I learned as an approval authority was that reviewing the RMW the day of the mission did not provide the time needed to make adjustments. As mission execution gets closer fewer risk control options are available. Identifying specific leaders for more difficult missions, rehearsals, and equipment inspections are all critical controls that are not available as time runs out. Mission changes in this timeframe result in greater risk as leaders implement unplanned activities into their timelines. This stress prior to execution often leads to confusion about priorities and results in the neglect of other controls. A leader racing out to notify Soldiers of modified timelines close to execution also causes subordinates to lose confidence in their superiors.

The corresponding problem with completing the RMW too early is that conditions on the ground like enemy and weather can change significantly or new hazards emerge prior to execution impacting mission risk. The solution to this problem is including boxes on the right hand side of the RMW for each hazard where leaders input the residual risk for hazards during planning, pre-execution, and execution. The approval authority signs the risk assessment in the planning phase and may delegate the pre-execution and execution re-evaluations one level down. Delegation of the re-evaluation includes specific instructions about notification in the event that hazards or the mission are upgraded due to changes in conditions. The approval authority may choose to retain direct re-evaluation responsibility if they so desire.

Composite risk management doctrine is sound but is not embedded in the Army culture. The Operational Risk Management worksheet embeds this doctrine and will help the Army reduce on duty accidents in a dramatic way over the long term. Operational Risk Management will help the army keep its promise of "Mission First, Soldiers Always" by crystallizing the right information at the right time resulting in improved decision making, resource allocation, Soldier survivability and Mission accomplishment.

Logistics Reporting Tool

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The Army has always attempted to be at the cutting edge of technology and using it effectively. Soldiers are not always receptive of these changes nor are they forgiving of products that do not meet the test of battlefield use. The Logistics Reporting Tool (LRT) was an update to one such system that failed to meet the war fighter's expectations and is still fighting for the recognition that it deserves. The LRT was first introduced in August of 2009 after extensive research and input from Logisticians to improve performance, user interface, and overall capabilities from the Legacy version of 2004 and the Ease of Use version from 2008.

The Logistics Reporting Tool is a piece of software that operates off of the Battle Command Sustainment Support System (BCS3). The BCS3 has several functions to include in-transit and supply-point asset visibility, equipment maintenance status, and unit logistics status that are utilized from forward operating units to corps headquarters including Active, Reserve, and Guard components in order to provide the war fighter with a common operating picture (COP). The platform on which the LRT operates has been systematically placed throughout the Army and communicates in real time with STAMISs like SARSS, SAMS-E, SAAS-MOD, and LOGSA; therefore, it has the greatest probability of streamlining reporting procedures and optimizing logistic accuracies, so why did it fail at first? The original software was considered too difficult to use and did not provide a full spectrum of reporting tools causing units to continue to rely on their original reporting procedures. For most units, this consisted of manually populated reports that were customized to each unit's preferences and then typically reconfigured for each higher echelon's individual report formats. At the time, it was more efficient to manually input data than to utilize BCS3's limited fields and input the remaining data in individual formats due to the necessity for each user to filter through every other user's data to get to the specific data needed within BCS3.

After BCS3's original fielding in 2004 there were hardware updates to improve functionality, but no software updates to address issues put forth by forward operating logisticians until 2008. These four years gave the war fighter a bitter taste towards the BCS3's abilities as a logistical tool on today's battlefields. In December 2008, the Ease of Use version began fielding with many improvements to include pulling data from LOGSA instead of regional databases to improve STAMIS data feeds, a wizard for filters and operational views, user defined task organization tool, and a logistics reporting tool that integrates data from different echelons. These improvements were critical in the BCS3's road to redemption, but still did not meet the modern logistician's needs. The Logistics Reporting Tool version, that began fielding in August 2009, was virtually the same as the Ease of Use version, but with a few critical updates that make it the incredible tool it is today. One key update was that the data created by lower units auto populated higher echelon units within the originating unit's task organization. This would allow a higher headquarters to not only see overall supply statuses within their organization, but also see each individual unit's logistical status increasing decision makers' operational visibility. Reporting options were also improved with the ability to generate munitions reports (MUREP), bulk petroleum reports (REPOL), and bulk water reports that were not available in previous versions as well as expanding the capabilities for CLI, IIIP, V, VI, IX, and X. The third major update was the ability to aggregate reports using the task organization tool. A user could utilize unit identification codes from multiple units on a FOB that are not within the same task organization to create a report for a forward operating base as a whole. These three updates allowed leaders to see what is truly on the battlefield effectively reducing the occurrence of redundant logistical convoys, duplicate orders, and hoarding of supplies in one location where it is not needed. Having stated these benefits, it is only true if the war fighter uses the LRT.

The Army has pushed for Soldiers and Logisticians to utilize the Logistics Reporting Tool more frequently over the current methods of reporting. The failure of previous versions as well as each individual unit's desire to maintain their customized reports have considerably reduced the reception of the LRT. The Army has installed the LRT training modules into the institutional training all Army Logisticians now receive in order to increase the receptiveness of future leaders, but this does not solve the issue of current leaders. The Army has continued to push for current use in both Iraq and Afghanistan and some headway has been made in both. Once the LRT has been properly instructed and utilized leaders see the benefits of increased visibility, automated reports, and the ability to maintain some customization. The system still has flaws and as we are in an ever evolving battlefield the BCS3 and LRT will need to evolve with it. The equipment must be as portable and flexible as the Soldier that uses it. Currently, the LRT is web based allowing the software to be loaded on any computer, but the computer is still tethered by power and the network by signal restrictions. If a unit were able to arrive in a theater with a portable reporting system, it would make the transition to a more permanent structure seamless. The Logistics Reporting Tool has the potential to meet the war fighter's requirements and ensure an accurate and real time COP of every logistical asset is maintained from the United States all the way across the world.

Bridging the continuity gap one Sailor at a time

by CPT Michael Whitten
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If any outgoing Post 9-11 battlefield Commander were asked to look in hindsight and summarize their deployment experience, most answers would likely share a resoundingly familiar theme: "I wish I knew what I know now when I first stepped on ground."

As many times as this statement has been spoken and relived throughout the entirety of our Post 9-11 deployments, it underlines a systemic inconvenience echoed and experienced by all branches of our military, especially those units whose missions are perpetually engaged with the local populace or relying on civilian agencies for critically needed services: find a way to maintain the relationships and knowledge achieved by our predecessors after their inevitable transition.

Prior to every unit's departure from combat, a relief in place / transfer of authority RIP/TOA must occur. This process establishes an operational baseline for every incoming unit to successfully assume their new mission. The outgoing and incoming units must equally participate in this process as Commander's begin to focus their efforts on mission-oriented tasks that must be achieved. If these tasks are not accomplished, critical gaps in mission planning and execution occur and tend to inflict painful consequences throughout the command and subordinate units. The Army, as an aggregate, has developed a very systematic and disciplined approach to capture and transfer the lessons learned from each outgoing command. This process is critical to establish a template for the follow-on unit to successfully assume ownership of the mission. Multiple fractures within this process still exist, however. Many of these gaps appear weeks after the collaboration window has passed and while the new unit is operating alone and unafraid in sector. To help mitigate this gap, specifically within the Sustainment Brigade (SBDE) Headquarters, a solution to bridge and retain the continuity between units just happened to be provided by an individual Sailor who truly exemplifies his service's motto: Non Sibi Sed Patriae (Not self but country).

Enter Logistics Specialist 1st Class (LS1) Lamont Hardy. The 101st SBDE assumed their battle space ownership duties in Afghanistan for the third time in November of 2010 with one additional member on their team: LS1 Hardy, a Naval Logistics Petty Officer assigned to the Brigade S-4 office as an augmentee from the Joint Sustainment Command – Afghanistan (JSC-A). His role is to facilitate the Sustainment Brigades supply operations section and to maintain the continuity between the rotating Headquarters elements of the 82nd SBDE and the 101st SBDE. As the incoming staff sections and customers entered the S-4 office during the RIP/TOA, they noticed a flurry of conversations and desk side engagements between the incoming and outgoing S-4 personnel. Drawing their attention to LS1 Hardy's desk they noticed it was manned by one person and only one person: himself. There was no immediate rush to engage Lamont in a collaborative forum or to extrapolate and apply his lessons learned for our future operations. Unlike his counterparts in the 82nd SBDE S-4 staff, he would not be leaving our office anytime soon. Lamont was already infused into our daily operations; so much as if he had always been a member of our staff. He was already operating weeks ahead of our tempo - undeniably the most seasoned member of the S-4 team at that critical junction in time.

This deployment, his seventh during his 16-year career and first to Afghanistan, came with a whole new dynamic of acronyms, meetings and command structures to master. During his tenure within the Headquarters, he experienced the rotation of 40 separate Army and Air Force units underneath the Sustainment Brigade. Each of them were positively impacted by his sustainment efforts or by his off-duty focus of improving the Lifeline's MWR facilities and the overall quality of life for his fellow Bagram Airfield residents. Although the majority of Lamont's contributions to the mission were often transparent to his peers brigade counterparts, his physical presence was undeniable. Whether it's his irrefutable laughter reverberating throughout the headquarters hallway, or placing 2nd in a Bagram Airfield 525 lb. dead-lift competition, he continually showcased what the Navy's elite enlisted ranks are comprised of.

To summarize LS1 Hardy's cumulative achievements in theater as "great" is almost dismissive of his contributions to the 101st SBDE and his impact on the mission. His unwavering ability to identify, defend, and procure a staggering 259 class VII items for 40 separate subordinate units is without comparison and often unheard of in the sustainment world. The benefit of maintaining a continuity of effort was most dramatically seen here, especially when considering that such an achievement was the direct result of an individual Sailor within and Army Headquarters element. The dedicated efforts, energies and focus needed for one individual to track, coordinate and close out these requisitions simply defies reality and establishes a stringent standard for his predecessor to follow.

After 15 enduring months with the S-4 office in Afghanistan, LS1 Hardy's tenure is approaching the inevitable end. As he begins to mail off his belongings and set his sights on the next horizon, whether it is at land or sea, Lamont's enduring impact on sustainment operations within Afghanistan will be felt for rotations to come. He has set in motion countless conditions to successfully sustain the war fighter during their last tactical mile and deny the enemy a vote during combat and sustainment operations.

Army Strong, A Global Force For Good, Lifeliners, Air Assault!

Establishment of a Sustainment Brigade Plans Section (S5)

by CPT Timothy D. Oysti
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Army doctrine exists to provide a baseline for thought when planning for and executing military operations. Doctrine is the basic foundation that Soldiers, Units and Armies are built upon, providing the standards and guidance necessary to ensure basic competence and commonality among Army Forces. However, doctrine is only a foundation, and the U.S. Army has traditionally used doctrine as a jumping off point from which to adapt in order to accomplish the task at hand. This article covers the Sustainment Brigade (SBDE) and its doctrinal roles, and then discusses how the 101st Sustainment Brigade Command adjusted from the doctrinal structure of the Brigade (BDE) Staff in order to improve sustainment operations in support of Operation Enduring Freedom.

ROLE OF A SUSTAINMENT BRIGADE

Page 1-1, Opening Statement of Field Manual Interim (FMI) 4-93.2 The Sustainment Brigade, describes the role of the Sustainment Brigade within the following context, "In response to the challenge of transforming into an expeditionary Army, the modular force was designed. To compliment the modular force, the Modular Force Logistics Concept was developed to provide commensurate increased operational flex and unity of command. For the logistician, this involved streamlining traditional systems for battle command, theater opening, and theater distribution." While deployed, the SBDE provides the Headquarters element for a task force of modular Sustainment units which collectively serve as the operational bridge linking the tactical and strategic levels of logistics. SBDEs are in direct and regular contact with the Brigade Support Battalions (BSBs) providing direct support to the Brigade Combat Teams (BCTs) that are the focal point of the Army's current fighting strategy. SBDEs satisfy the needs of BSBs and their BCTs by reaching back to a theater-level Sustainment infrastructure that includes Army, Joint and contracted elements. An example of this critical link is in the flow of ammunition, where SBDEs backfill a BCT's ammunition expenditures in the immediate aftermath of a tactical operation by issuing and distributing from its Ammunition Supply Point, while simultaneously requesting ammunition from the Theater Sustainment Command (TSC) located at one of the Strategic hubs with its theater stocks. Maintaining this bridge and providing seamless support to the Soldier allows the customer to sustain prolonged endurance for freedom of movement and operational

reach (Page 1-1, para 1-1, FMI 4-93.2 The Sustainment Brigade). The SBDE must remain adaptive to continue sustaining the Soldier, maintaining visibility and contact with the units in the field and anticipating changing conditions on the battlefield, changing needs, and changes to the larger Sustainment infrastructure. The primary burden to develop and oversee a concept of support that meets customer needs falls upon the SBDE's Support Operations (SPO) Shop, which handles day-to-day sustainment coordination. Daily coordination of the SBDE assets necessary to execute the SPO's concept of support falls to the SBDE's Operations (S3) Shop. The task to look beyond the day-to-day mission requirements and plan for future requirements in a dynamic environment falls to the Planners.

DOCTRINAL ORGANIZATION OF THE SUSTAINMENT BRIGADE PLANNERS

"Planning is bringing the future into the present so that you can do something about it now" - Alan Lakein (well-known author on personal time management)

According to FM 3-90.6, Brigade Combat Team: "The plans cell is responsible for planning operations for the mid- to long-range planning horizons. It prepares for operations beyond the scope of the current order by developing plans, orders, branches, and sequels using the MDMP." Organically, Sustainment Brigades do not have a Plans Section among its Special Staff. Instead, according to the FY11 Mission Table of Organization and Equipment (MTOE), the Sustainment Brigade is authorized planners under two Sections. The BDE S3 Plans Cell has a position for a single Planner (O3 90A). The SPO has a Plans Branch in which there are 7 individuals. The SPO Plans Branch is made up of a Chief/OIC (O4 90A), a Plans Officer (O3 91A), an Engineer Officer (O4 12A), a Supply and Services Officer (O3 92A), an Operations Sergeant (E8 92A), a Senior Movements NCO (E7 88N) and a Maintenance Management NCO (E7 91X). These Sections work may together in planning efforts, but can be pulled

“One of the serious problems in planning the fight against American doctrine, is that the Americans do not read their manuals, nor do they feel any obligation to follow their doctrine...”
- From a Soviet Junior Lt's Notebook

in different directions by competing interests and priorities, since one shop's focus is ultimately battle command while the other's is support operations. The natural consequence of the separation of the S3 and SPO Plans functions means that the two shops often operate without the maximal level of cross-staff interaction and efficiency.

AN ALTERNATIVE SOLUTION TO PLANNING AT THE SUSTAINMENT BRIGADE LEVEL

It was during the different academic and training exercises prior to deployment in support of Operations Enduring Freedom that the 101st SBDE Commander began identifying the need to expand the focus of the SBDE beyond the traditional roles of

Sustainment in order to properly support the ongoing effort in Afghanistan. The Commander and his staff developed a comprehensive Campaign Plan identifying multiple Lines of Effort (LoE) that could support the International Security and Assistance Force's (ISAF) larger goals to ensure Security, Promote Governance, and Enable Economic Development as part of the overall strategy to help the Government of the Islamic Republic of Afghanistan (GIROA) succeed. These LoEs included the development of Afghan National Security Force (ANSF) Logistics through partnering, mentoring, and advising; prioritizing the development of Afghan commerce through investment in key civilian logistics infrastructure; leveraging the SBDE's position within the existing Sustainment architecture to ensure that money, goods, and services were handled through legitimate businesses rather than feeding the insurgency and alienating Afghan locals; and conveying a positive Information Operation (IO) message in all interactions between SBDE Soldiers and the Afghan populace. These Counter Insurgency (COIN) strategies, which required the 101st SBDE to apply Sustainment subject matter expertise in new and undefined ways, could only succeed (or be attempted) if the SBDE successfully executed its primary role of providing Operational Sustainment and performed complex and time-consuming tasks such as managing the Force Management cycle (ARFORGEN), and ensuring there was adequate logistics capacity present on Bagram Airfield (BAF) to ensure effective Sustainment was possible for Regional Commands (RC) East, Capital, and North. These tasks, while mutually supportive of the doctrinal Sustainment functions managed by a SPO Shop and reliant on SPO expertise, did not fit into the SPO's day-to-day focus. Similarly, most tasks required long-term efforts that did not lend themselves to management under the S3 Section. For these reasons, in preparation for the upcoming deployment, the 101st SBDE Commander identified the need for a combined Plans Section as a way to bring focused attention to new problems, liberate the SPO Shop to remain singularly focused on Sustainment functions, and “Get After It” in regards to the efforts outlined in the Lifeline campaign plan.

The establishment of a separate and distinct Plans Shop (S5) was achieved by pulling the previously identified Planners from the S3 and SPO shops. This new S5 capability utilized certain members of the old SPO Plans Branch as the base to provide the requisite logistics subject matter expertise, while incorporating additional capabilities typically part of the Brigade S3 Section, and augmenting with additional personnel to address lines of effort not typically dealt with at the level of a Sustainment Brigade. The Planners still worked with Subject Matter Experts (SMEs) from across the Brigade Staff, in particular the SPO Shop, when planning different projects or initiatives. Having this close working relationship allowed the Plans Shop to maintain Situational Awareness and create a unity of effort that worked towards the BDE Commander's intent;

remaining distinct from the SPO Shop allowed the S5 to remain detached from day-to-day Sustainment operations.

Like any organization, the right mix of personnel is essential. During the construction of the Plans Section, backgrounds, previous experience, MOS/Basic Branch, and positions needed were key criteria for consideration. Due to the uniqueness of the S5's mission, backgrounds and experience played a significant factor in enabling the team to support the different LoEs that fell within the Plans realm. Fortunately, the experience and backgrounds of the personnel assigned contributed to the success of the Section and the SBDE. Everyone had previously deployed at least once, if not multiple times, giving them experiences that they could draw on and provide insight during different planning sessions. The OIC and NCOIC positions were essential in order to maintain fusion and continuity with all sections within the Brigade, maintaining regular contact with Brigade Commander, the Primary Staff and supported units in order to remain aware of possible emerging requirements and shifting priorities. Other members of the Section had a different focus area that supported or coincided with at least one of the LoEs in the Brigade Commander's Campaign Plan, while also being available to respond to new and emerging requirements as they sprung up. The main focus areas of the Plans Shop were:

— Enduring Logistics Infrastructure: The placement and development of facilities that would support an enduring mission in the CJOA-A, and allow for a more efficient flow of materials and supplies in and through the different processing areas/locations on Bagram Airfield (BAF). The overall project was called “BAF after next”, and involved the establishment of enduring support facilities instead of the ad hoc expeditionary facilities that had become insufficient for the Sustainment tasks at hand. This project located all Sustainment Facilities into one area on BAF, easing traffic on already congested roads and creating a logical flow for the customers. This effort, headed by the Engineer Officer taken from the Brigade SPO Shop, was responsible for planning or helping to plan the different structures that were needed to create an enduring logistics infrastructure on BAF. The Engineer coordinated with the key installation Engineer Planners, such as the Combined Joint Task Force Engineer (in charge approving construction) and the Base Planner (in charge of the overall layout of the installation) on a daily basis to try to implement the plan. He tracked each project from the start to finish, in its infancy as just a Statement of Work (SOW) all the way to construction completion.

— Afghan National Security Forces (ANSF) Logistics Units Development (Combined Action): The strategy for ultimately bringing ISAF operations to an end in Afghanistan involves growing the Afghan National Security Forces' ability to sustain their own Combat and Police Forces as they maintain the security and sanctity of their Country from hostile forces. The Plans Officer tasked to oversee Combined Action was in charge of tracking all the Combined Action partnerships that the 101st SBDE and its subordinates were participating in, along with keeping up with policy and doctrine changes that affected the ANSF Logistics Units. A major benefit came from having a person that had previous experience as an ANSF Mentor fill this position. One of the big initiatives here resulted in the creation of a comprehensive Assessment Tool to assess the current capabilities of the ANSF Logistics Units, both Afghan National Army (ANA) and Afghan National Police (ANP). This recording and reporting tool was designed for all Coalition forces to use when partnered with or advising ANSF Logistics Units. The tool focused on the Mission Essential Tasks List (METL) capturing the critical tasks for an ANSF logistics unit, and provided a qualitative means of evaluating these

tasks. This method represented a substantial improvement over the previous, more subjective, assessment tool. The tool gives the Mentors and Commanders the ability to see currently where the ANSF Units is at, and be able to adjust training focus if needed. Through these efforts, the Combined Action Planner helped the 101st SBDE have a substantial effect on ANSF logistics partnership, both by helping mold the right training approach at the unit level and by helping to improve the way in which the system as a whole evaluated progress.

— Force Management: The ability to forecast, track, and manage the deployments and redeployments of modular units assigned to the SBDE upon arrival in the CJOA-A is essential to maintaining the combat effectiveness of Sustainment operations. This task was assigned to the Plans shop due to its direct effect on future operations. The position of Force Manager was filled by a Transportation officer who had knowledge and understanding of the tracking systems used for planning and monitoring both personnel and equipment movements. When the time came to undergo Force Adjustment in order to reduce the size of the logistics footprint in country, the Force Manager was directly and critically involved in the planning of all aspects of this effort, to include identification of candidate units, development of a mitigation strategy for the loss of key personnel, and affecting the movements necessary to redeploy units in accordance with Higher Headquarters' directives. Through the efforts of the Force Management Officer, the Plans Shop helped maintain the combat power of the 101st SBDE despite the challenges of modularity and the stresses of losing logistics forces to Force Adjustment.

— Stability Operations: This line of effort centered on initiating and managing Afghan infrastructure development projects that benefited the local Afghan populace and enhanced the prestige of GIROA. These projects included not only physical infrastructure improvements but also enhancement and employment of the Afghan's existing distribution capability (i.e. trucking industry) in a way that would employ individuals who might otherwise take up arms with the insurgents in order to make money for their families. This Staff officer oversaw all the projects and applications for Commander's Emergency Relief Program (CERP) money submitted to initiate these projects and demonstrate the benefit brought to the Afghan Populace in the areas that the SBDE and U.S. forces operated. An example of their work is the standup of a Transportation Network that employed the local populace to transport materials around the region, thereby bringing economic benefit to locals instead of employing or contracting trucking companies from out of the area. Major investment in the Afghan commercial port at the Afghan-Uzbek port was another example of SBDE effort to grow Afghan capacity. As a demonstration of the atypical responsibilities taken on by members of the Plans Shop, this officer expended much of his effort communicating with both military and non-military agencies (such as the U.S. Department of State, USAID, European Union contingents, and a range of Non-Governmental Organizations) to coordinate aid and development efforts.

— Information Operations (IO): The Information Operations Officer assigned to the Plans Shop was responsible for getting the word out and making the local populace aware of the benefits of U.S. presence, helping the populace understand that they were the ones the U.S. Forces were there to help. Furthermore, the IO plan focused on helping to reinforce the legitimacy of ANSF forces in the eyes of local Afghans, informed the Brigade Commander on key leaders and key considerations within the Brigade's operating environment, and developed contingencies for when unfortunate but inevitable incidents such as civilian casualties occurred. Though not an authorized position within the Sustainment Brigade, the IO Planner became a possibility when the Brigade Commander saw the important and oft-overlooked value of IO and chose to send an officer to IO training using unit funds. Through the IO Planner, the

BDE Commander endeavored to avoid the poor relations with the local Afghans that had plagued U.S. Units in the past.

All of these tasks were in addition to the primary task of the planning needed to work out the challenging logistical issues that affected ongoing combat operations. For example, major efforts during the deployment that took planners temporarily away from LoE efforts described above included the expansion of the Northern Distribution Network (NDN), the opening of a Theater Consolidated Shipping Point, and the establishment of a Concept of Support to meet emerging requirements for U.S. Special Operations' initiatives across Northern and Eastern Afghanistan, just to name a few. The individuals in the Plans Section still came together as a whole as needs arose in order to accomplish planning that will benefit Soldiers across the 101st SBDE Area of Responsibility (AOR).

RESULTS, RECOMMENDATIONS AND CONCLUSION

Success for the Brigade Plans Shop can be measured by the fact that it succeeded in turning the Brigade Commander's long term visions and initiatives into operational efforts that showed progress across a number of fronts. These initiatives evolved over time as they were aggressively executed while the main focus of 101st SBDE remained keeping the Soldier supplied to stay in the fight and maintain the ground gained. There are many problems that crop up during a deployment requiring a solution that cannot be anticipated in advance, but developing a team that is able to adapt and be flexible is the best possible solution to problems that haven't yet presented themselves. The organization of the 101st SBDE Plans Shop was an attempt to demonstrate this adaptation and flexibility. Minor improvements could be made, like identifying roles and responsibilities within the shop early to allow maximum opportunity to prepare for an assigned task, but like any other unit situations change or unexpected issues arise that were unforeseen. If manning numbers were not a problem, doubling the number of people assigned to a few of the different focus areas would be beneficial, but not necessary. Additional personnel would allow greater freedom to conduct battlefield circulation to give planners better visibility of the operating environment. Nonetheless, the value of a Plans Shop within the Sustainment Brigade was validated in the FY2012 MTOE, which created a separate planning entity where one had not previously existed.

In conclusion, on top of the traditional role in theater to monitor and provide operational Logistics to the Soldier, the 101st Sustainment Brigade was able to begin initiating forward planning efforts that put focuses on ANSF Logistics Partnership/Advising, Stability Operations, Theater Wide Distribution, Re-shaping Logistics Facilities locally, and some Information Operations through the resourcing of a Plans operation separate and distinct from the traditional S3 and SPO shops. These efforts were key to the 101st SBDE achieving maximum relevance within the context of the larger ISAF COIN initiative in Afghanistan. If it wasn't for the insight of the Brigade Commander and the Staff that created the Campaign Plan and enabled the Plans Section to be envisioned, there would not have been the same ability to “Get After It” and focus on initiatives outside of the normal realm of operation sustainment. These planning efforts will help reshape the over-arching sustainment environment at both the Operational and Tactical Levels to ensure enduring requirements are met as forward progress was achieved in legitimizing the Government of the Islamic Republic of Afghanistan. Finally, without the right team the significant contributions of the Brigade to the overall improvement and sustainment to Operations in the CJO-AA would not have been as successful. Without the right skill sets and experiences, the Brigade also would not have been able to accomplish what the unit as a whole has accomplished in a short period of time and will continue “to improve their foxhole” until properly relieved.

Logistics Improvement to Increase Stability in Afghanistan

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INTRODUCTION: LOGISTICS OVERVIEW

In the history of warfare, logistics is usually the least mentioned aspect of any battle or war. However, when you fully research the outcome of a battle, or why one country defeated another, it often has to do with the logistics capabilities of the victor. In recent warfare, the transition from conventional warfare to counter insurgency (COIN) has placed an increased demand on logisticians on the asymmetrical battlefield to assume new roles and take on more challenging tasks as logistics has become an increasingly important focus in the COIN fight. With the dilapidated infrastructure of Afghanistan, it has been necessary for logisticians to adapt and overcome obstacles to resupply line units in remote locations. Many areas of Afghanistan have no roads to the locations that Coalition Forces occupy. The COIN strategy requires Soldiers to live in remote outposts, urban centers, and many other places that logistically are difficult, if not nearly impossible, to resupply. This has caused logisticians to become increasingly adaptive in getting the necessary items to our Soldiers.

In addition to the logistics challenges of supporting U.S. Soldiers engaged in COIN operations, logisticians have expanded into roles as trainers, mentors, civil affairs, information operations, and a number of other missions during deployments. As a result, logisticians have become a part of the COIN effort itself. In Afghanistan as before in Iraq, the COIN strategy requires an increased focus on development and the infrastructure of the country, even as efforts to improve these areas often take place in close proximity to ongoing kinetic activity. Within this environment, the 101st Sustainment Brigade (SBDE), TF Lifeliners, asked the question, "How do we use our role as logisticians to enhance the capabilities of Afghanistan?" We began by looking at the deficiencies in the logistics and distribution systems throughout Afghanistan, particularly in the North where the environment was most permissive for commerce with a reduced enemy threat and limited kinetic activity. Many aspects began to jump out at us. A severe lack of improved roads to connect all the major cities in Afghanistan contributed to segmented regions of Afghanistan instead of a unified country. Exceedingly large amounts of foreign nationals were operating as truck drivers or other types of employment within the country, depriving Afghans of employment opportunities and driving many young men to fight with the insurgents, as much for employment than ideology. Afghanistan lacks a seaport, and much of the heart of the country is covered in difficult, restrictive terrain, making the challenges even greater. Fortunately, the brigade has a plethora of personnel trained to handle logistics focused operations such as container management or distribution operations, skill sets and expertise essential to face the challenges at hand.

TF LIFELINERS' ROLE

It is within this context that the 101st Sustainment Brigade was operating when the Northern Distribution Network (NDN) became a priority to General Petraeus, commander of ISAF. The NDN would see cargo transported from European and Balkan ports through the Central Asian Republics into Afghanistan through the port of Hairaton on the Afghan-Uzbek border. There were many challenges confronting the NDN but the idea was that cargo would shift away from the Pakistan Ground Line of Communication (PAK GLOC) and transported through northern Afghanistan via Hairaton. The expected end state would be the reduced pilferage of unit cargo shipped into Afghanistan, as well as create additional options in the event of any diplomatic issues with Pakistan. From the standpoint of a logistician, the largest task was figuring out how to best distribute cargo from Hairaton to the Combined Joint Operations Area of Afghanistan (CJOA-A). Many questions arose. What were the current capabilities of the ports at Hairaton and would they be able to manage the increased amount of cargo coming in on the rail line? Were the road networks capable of handling a large amount of truck traffic or would they quickly degrade? Who were the appropriate Afghan partners? How many resources are necessary for the problem? What would be the impact of the dramatic increase in the amount of truck traffic that would be coming through Mazar-e-Sharif, the major urban center of Northern Afghanistan?

The 101st SBDE Plans Shop determined that the best thing to do was to provide infrastructure projects to enhance the capabilities of the port and placate the local population, due to the increased amount of traffic, whose lives may be disrupted by ISAF cargo. These projects would increase the logistics capabilities for private and government enterprises so that Afghans can import and export goods more effectively from the country, which would benefit ISAF forces as well as the Afghans themselves. This increase in private enterprise would establish the nexus of economic development and capability. By investing in areas that were much more peaceful, we hoped to be able to lure the will to fight away from those that were unsure in the COIN fight. Hiring local drivers from the area to transport containers from the port through Mazar-e-Sharif, thereby creating an incentive for citizens to want to participate in the Northern Distribution Network and not oppose it, also considered in as an important part of a successful strategy. The

Lifeline Team hoped that with increased throughput at the port and throughout the region, this would create a greater need for employees, thereby transitioning fighting men away from fighting and into stable employment.

ESTABLISHING OPERATIONS

Operations began with the movement of personnel into a Tactical Operations Center (TAC) at Joint Combat Operations Post (JCOP) Nomad, just south of the Hairaton port. The 101st SBDE Commander chose to establish the TAC in order to create a 101st SBDE presence in the midst of an environment that was vital but not well understood. Their mission was to identify and facilitate the movement of containers coming into Afghanistan off the Northern Distribution Network. The immediate concern of the TAC was that the current port facilities were not sufficient to handle the proposed increase in containers that would soon be flowing down the rail line. Personnel quickly got to work with key leader engagements in the area to find out what deficiencies existed at the port and the quickest way to approach them. Based on their meetings and site surveys, the TAC personnel defined the main projects as improving the container holding yards, the roads in/around the port, and Material Handling Equipment (MHE) to enable more efficient processing and distribution of cargo from the railroad to its follow on locations. These projects would allow businesspersons a greater opportunity to distribute their products outside of Afghanistan, while also allowing U.S. and Coalition cargo to process more effectively. This is especially beneficial for agricultural produce that lacks timely transportation out of the country before the product spoils. The TAC personnel also noticed several key safety issues around the port that needed addressed. There were massive amounts of scrap metal that posed a danger to port workers as well as limited the container holding capacity. Workers also worked without the proper safety equipment that Western countries naturally take for granted when operating around heavy machinery.

Before initiating any projects, it was important to make contact with the other organizations and military units that work within Afghanistan. This coordination allowed Plans personnel to avoid dedicating time and resources to any projects that may have already been started, determine where our efforts could be best applied, and see what areas could be focused on by others. The most prominent entities to begin communication with were US Agency for International Development (USAID) and 1st Brigade Combat Team 10th Mountain Division (1-10 MTN). These two organizations were the most active in the area, and Soldiers of 1-10 MTN also living at the JCOP, with the 101st SBDE personnel, working in partnership with the customs police and Afghan National police. By meeting with USAID, CPT James was able to identify the most pressing issues as they saw it in Regional Command-North with a different perspective than the military. The biggest takeaway was the common opinion that improved road networks were a huge benefit for everyone involved.

One of the focuses of discussions with USAID was the possibility of building a host nation trucking network to carry cargo from the future TCSP to follow on destinations. This program would employ locally identified trucking companies of the area to carry cargo out of a large holding yard in the vicinity of the village of Deh Dadi to follow on destinations across the CJOA-A. A contractor for USAID had already established a list of companies that would garner initial capabilities. USAID was able to put me in contact with an organization that is already assisting in the training of current trucking companies, allowing them to conduct better business practices.

Major Hedgeberg and SFC Rosales of the Civil Affairs team attached to 1-10 MTN were also leery partners at the start of the 101st SBDE's efforts. They were the subject matter experts on anything Commander's Emergency Response Program (CERP) related and were able to give lessons learned in their time on

ground. The group discussed ideas that 101st SBDE had come up with as well as some projects mentioned by USAID. The biggest thing warning to the Lifeliners was doing a project not sustainable by the Afghan government. This is a key principal of CERP as it eliminates wastefulness of taxpayers' money. It is also a paradigm for the COIN strategy by bringing legitimacy to the local government officials and ensuring lasting beneficial effects. Several projects were reworked because the project had been completed, but the Government of the Islamic Republic of Afghanistan (GIROA) officials had no means of sustaining the projects, ultimately resulting in their degradation. There unfortunately seemed to be an increasing disconnect between projects proposed without the proper government officials being involved. Some projects in the North conducted through aid channels, without the government being aware of them. This led to increasing discontent among aid projects and government officials, and perceived as charity rather than the local government accomplishing something beneficial for their people.

CERP PROJECTS AND TEAM

Once the situation was assessed, the immediate issue was to assemble the necessary team members to fulfill the roles of the Program Manager, Project Purchasing Officer, Pay Agent, and Project Manager all essential to CERP. The Project Purchasing Officer (PPO) is responsible for receiving quotes from vendors, putting together the necessary paperwork, and acting as quality control when disbursing money for a project. The Pay Agent works directly with the PPO to pay needed funds for the project. Both team members are present to ensure the accurate amount of money is paid and the necessary paperwork is completed. The Project Manager is responsible for making sure the selected vendor or contractor complies with the project requirements. It is very important that the Project Manager regularly checks up on the project to ensure that it is being done to the agreed upon specifications between the team and the contractor. The best course of action was for individuals to work out of Hairaton where the majority of four projects would take place. This would also allow the team to meet with vendors in the area as well as have routine contact with Dr. Hashim, the Hairaton port director.

Once projects got started, the Project Manager would be able to verify the selected contractors were doing the work properly. Too many projects not checked thoroughly result in substandard work that requires a follow on unit to do the same project. This results in continued setbacks in Afghan economic development, as well as waste to taxpayer funding. These occurrences are usually a result of lack of coordination between transitioning units or in areas where a project is ongoing and units are not replaced. In some situations, a project manager is not located near the project so he or she is not able to check up on progress regularly.

Two of the 101st SBDE team members, selected from the TAC located at Hairaton, SSG Waychoff as Pay Agent and CPT Lee as Project Manager. Selected as the Project Purchasing Officer was First Lieutenant Strobel, but it was decided that she would be better served by staying at Camp Marmal, the German base located just east of Mazar-e-Sharif. With 1LT Strobel at Camp Marmal, she would be able to coordinate projects with the contracting office based there. This would allow her to follow up on lines of accounting while also giving her some assistance in selecting approved vendors for projects. Her location also allowed her the proximity to the RC-North CERP Team, allowing her to have the project packets quality controlled. This would save her unnecessary travel time of going to and from Hairaton if there were ever any issues with a submitted packet. Camp Marmal is also the main hub of travel in RC-North with flights leaving daily to shuttle people to the main Forward Operating Bases (FOBs).

Our initial project was to provide safety equipment to the port workers. While this project was minimal in terms of a logistics impact, it would establish rapport and reliability among the

TAC personnel and port director, Dr. Hashim. The project would provide the workers with the necessary safety equipment to make them more effective in their port operations. The equipment included radios, which allow for better communication throughout the port between ground safeties and crane operators. This allows for improved container loading and unloading, as workers on the ground are able to communicate more effectively to the crane operator during operations.

The heart of the CERP projects at Hairaton revolved around the road network and container yards at the three separate ports. Port 2 was the most significant of the three, due to its large storage space, overhead gantry cranes, and proximity to the customs facility. Dr. Hashim identified this port as the first and most important one to fix. By building up the capacity of this port, the workers were able to improve logistics operations, thereby increasing the amount of economic activity that the port was able to handle. This increase had two benefits. The most direct benefit was the need for additional workers to keep up with the traffic flow now able to flow through the port. This reduced the amount of unemployed men that otherwise would be recruited by numerous insurgent groups intent on doing harm to fellow Afghans and/or Coalition Forces. The indirect benefit was the amount of jobs created by entrepreneurs looking to benefit from the increased rail traffic. Those opportunities included, but were not limited to, trucking companies, increased agricultural commercialization, and industrial centers. While the ideal situation would have been to immediately begin work on Port 2, there were contingencies that we had to work through first. The biggest issue was the large amounts of scrap metal and dilapidated pieces of equipment littered throughout the container yards. It was vital that we cleared this out so that we could have clear workspaces and completely refurbish the container yards. However, despite the obvious benefits of improving Port 2, the prospect of initiating these improvements came with major challenges, namely the disruption in container activity during refurbishment of Port 2. For this reason, the decision made to refurbish Ports 1 and 3 first in order to offset any disruption in container processing created viable alternatives to Port 2.

We decided to work on Port 3 first as it had the least amount of container traffic compared to Port 1. Port 3 provided a great opportunity in the ability to fully utilize the entire port as a part of the entire port system than just using it as an overflow yard. Once Port 3 became operational, it allowed another facility to process containers, act as a segregating yard, or any other use that is necessary for the port. Port 3 had many of the same issues that Port 2 had with scrap metal, sub-par container yard, and a poor road system. An immediate limitation that Port 3 contained was the lack of efficient material handling equipment (MHE) to move containers. We hoped to mitigate this issue with the future purchase of MHE.

Port 1 required less work than Port 3. River traffic is the greatest cargo transportation for Port 1. With Afghanistan being a landlocked country, the Amu Darya provides the greatest amount of water commercial traffic. Currently, Hairaton is the only port capable of processing containers coming into and out of Afghanistan on the Amu Darya. By improving the road network and container yard at Port 1, Afghanistan is able to benefit from trading with neighboring countries. This is particularly beneficial with goods coming from western China who can ship the goods to Hairaton and then transport them down the improved road network instead of crossing over the less navigable roads of eastern Afghanistan. Port 1 also suffered from a lack of sufficient MHE; however, it contained a limited number of cranes capable of moving cargo around.

BEYOND THE PORT: AFGHAN TRUCKING NETWORK

Outside of the port in Hairaton, we developed a plan of action on building up the trucking capabilities in the northern region of Afghanistan. The task, termed Afghan Trucking Network (ATN),

by Major General McHale, Deputy Commander of Support for U.S. Forces in Afghanistan, developed a trucking concept that reduced the reliance on “international” drivers and gave more employment opportunities to Afghans. This initiative aimed to reduce the amount of private security companies hired by trucking companies to secure their trucks. In certain cases, these companies proved to be reputable and very capable at their tasks. However, it was increasingly apparent that these companies often paid off criminals and/or insurgent forces (INS) so they did not attack the convoy of trucks. This money was a direct benefit to the very INS that Soldiers are combating every day. A further end state was to reduce the pilferage by drivers by linking them directly with an influential leader within the region. In this manner, if anything was missing after a delivery, U.S. and/or Coalition forces were able to bring it up to influential leaders that they may deal with it on a frequent basis.

This trucking network initiative also serves the purpose of increasing security along the main transportation routes. Afghan President Karzai was adamant about reducing the large amounts of private security companies that operated throughout Afghanistan. This was very difficult to accomplish due to the small amount of available military escorts as well as the need for the security companies to protect development projects. With local drivers operating on routes, it was less likely that there would be cases of attacks on convoys. Most intelligence elements reported that insurgent groups are reluctant to attack other Afghans as it undermines their influence in the region. With the prospect of local drivers operating on local routes, the hope was for a significant decrease in attacks on logistics convoys. This met the demand of President Karzai while allowing continued logistics operations throughout Afghanistan. The final benefit allowed vetted security companies with the ability to protect development projects.

This concept had potential to create a litany of economic benefits to the Afghan people. By developing trucking companies, we encouraged businesses to develop that were necessary to support the companies. Companies that provide wrecker and towing services, truck stops, full service stations, and mechanic shops were just a few such opportunities possible. Successfully developing the entrepreneurial spirit of the Afghan people requires the utilization of training organizations, micro-grants/loans, and other non-governmental organizations.

CONCLUSION

With the reduced amount of available money for CERP projects, it has become imperative for the Afghans to fund many infrastructure projects on their own. We began to develop some ideas on how we can coordinate projects with the assistance of USAID and the local government of Hairaton. Many of these projects were not very costly and by encouraging the participation of area businesses, it reduced the cost further. It is imperative at this time that the Afghans began to take the necessary steps of entrepreneurship to develop their own areas. The many ideas I hear and discuss were all important to the future of this country. However, the window of opportunity to use US money quickly closed. By encouraging the Afghans to do the development themselves and coaching them on how to develop business strategies, we began to transition from a nation reliant on aid, to a nation encouraged by investment.

The projects and programs listed in this article were miniscule to what the 101st Sustainment Brigade had worked on during their time in Afghanistan. The focus since we arrived on ground had been to do whatever we possibly can to leave Afghanistan more capable than when we got here. These efforts, not just acted upon through development projects, but also through partnerships with ANSF, establishment of vocational training programs, and meetings with Afghan political leaders. As we moved forward in our time here, the Lifeliners built a solid base for those that came in to replace us in which to continue the efforts that will eventually make Afghanistan a truly remarkable country.

Construction of the Bagram Logistical Complex: BAF after Next

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In a military culture where personnel turnover is regular and constant, it should be a goal of every leader to leave a place better than it was before they arrived. Whether the task is to improve on a fighting position left by others, repair crumbling or inadequate infrastructure, or simply apply a fresh coat of paint to the walls, the intent of leaving it better for the next person is essential for Army units to avoid stagnation and complacency, and to maximize combat effectiveness. A clear example of this phenomenon can be seen in the case of 101st Sustainment Brigade's (SBDE) time on Bagram Airfield (BAF) in support of Operation Enduring Freedom (OEF) in 2010-2011. 101st SBDE (TF Lifeline) was responsible for providing Sustainment support to half of Afghanistan, yet was requested to do so using a collection of facilities that were undersized, inadequately equipped, and poorly designed for the function to which they were employed. This was not the result of mistakes made on the part of predecessors, but rather the natural result of Bagram having grown over the past 10 years through a series of individual, isolated decisions based more on expediency to solve the immediate need rather than a long term vision to develop a rationally designed infrastructure. A lack of central planning throughout most of the U.S.'s tenure, combined with annual or sub-annual turnover of personnel, meant that logistics operations on BAF had never been arranged or re-arranged in a comprehensive layout that maximized daily operations or the ability to support the Soldier. This long standing trend ended during the rotation of the 101st SBDE, thanks to a combination of positive circumstances, a clear strategy to achieve change, close coordination with a range of individuals and interests on BAF, and a dedication to leave BAF better than the 101st SBDE found it. In this article we will cover four areas, first an introduction to the location and what we intended to accomplish in our one year deployment, second the financial considerations/issues with the construction, three the number of “dominoes” that had to fall in order to achieve this goal, and fourth what we were able to accomplish.

DEVELOPING THE PLAN

Afghanistan itself is a land locked country with plains in the north and south west, and multiple mountain ranges and foothills covering the majority of the eastern portions of the country. The Hindu Kush mountain range runs from the center of the country to the north eastern border shared with China. There are only a few passes through the mountains including the Salang Pass, Unai Pass, and Khyber Pass (connects Afghanistan to Pakistan). It's through these passes that the majority of U.S Forces-Afghanistan (USFOR-A's) supply chains run, including CL IV and non standard construction supplies. The reason BAF is critical to logistics operations is because it is home to a C5/747 capable runway and it is situated near a major highway with access to the critical mountain passes.

During the majority of the US Armed Forces time on Bagram Airfield, land and resources were taken on a first come/first served basis. Priority went to combat forces, or organizations such as the U.S. Air Force and Army Material Command (AMC) who effectively conceived a long term vision for their operations, and required large swaths of land on which to build the vision. Meanwhile, most units would construct temporary structures around the airfield and develop future projects with little consultation with the installation manager, or the Regional Command. In March 2010, Bagram Airfield hired an experienced airport designer as the Bagram Master Planner. His duties included creating a plan for the enduring mission here on BAF, de-conflicting MILCON construction with short term contingency construction and ensuring units don't become excessive with camp improvements and unauthorized builds.

When BAF was repaired after the initial invasion and became the site of the RC- East headquarters in 2002, it also became the main support hub for eastern (and now northern) Afghanistan. The logistics footprint for that command priority consisted of two structures: a 1.5 acre Supply Support Activity (SSA) and a Class I yard consisting of 20,000+ square feet of storage for dry foods, emergency rations, liquids, and freezer stocks. For the majority of the past nine years, these facilities have accommodated no more than 15,000 US and coalition forces (2 Brigade Combat Teams), plus contractors across the whole of RC-East. The force expansions of 2009-2010 drastically changed the population of troops supported out of BAF. By June 2010, RC-East alone had 7 BCTs and 3 additional brigades, and RC North added two brigades requiring

Sustainment support provided out of BAF. Over 36,000 persons worked on Bagram alone. This new disposition of forces demanded an expansion of the logistics footprint on BAF. With the aid of the base master planner, logisticians of the 82nd Sustainment Brigade on BAF began planning this expansion in June 2010. This planning effort soon carried over to the arrival of the 101st SBDE. Required changes included rearranging the layout of the Central Receiving and Shipping Point (CRSP) yard, the Empty Container Control Point (ECCP), the SSA, and the Class 1 facility. Also included was the construction of a new Joint Management Distribution Center (JDMC), a new Command Post for the Inland Cargo Transfer Company (ICTC), and a new Combat Sustainment Support Battalion (CSSB) headquarters. Furthermore, proper facilities for operations such as rigging for the aerial delivery, conducting CIF activities and providing finance support had not previously been considered and had to be worked into the Bagram master plan. The project demanded compromise between competing priorities: rapid, expeditionary expansion to meet the needs of a supported force in combat, and planning and construction of a logistics infrastructure for an enduring base. The differing timelines, guidelines and regulations governing these two distinct priorities contributed to the challenges of making BAF after Next (the name assigned to the project by the 101st SBDE Commander) a reality.

In addition to traditional logistical capabilities, the scope of the 101st SBDE's operations included other aspects of support, and thus BAF After Next grew to include other facilities. If anyone has been to Bagram in the previous ten years, they've notice one Army Post Office (APO) on the installation, located directly across the street from the Fixed Wing terminal serving both Bagram and the CJOA-A. This was really convenient if someone was a redeploying service member and wanted to mail that last minute box home before they fly. Otherwise, it serves as a choke point for passenger pick up/drop off, unit mail call and other operations that take place in that one square block alongside the flight line. The solution to this problem was to move the military mail terminal (where mail is sorted and processed) to one location, and create satellite APOs across post to allow easier access for customers and decrease vehicle traffic around the PAX terminal. The satellite facilities would make it easier for Units and individual service members alike to conduct their postal needs throughout the day, rather than having to take hours out of their day to wait in line with the rest of the 36,000 persons to drop off/pick up their mail. When deciding on the location of the post offices, TF Lifeliner and the BAF Master Planner looked at the current and future hubs of activity and population centers. The placement of the satellites was dependent on the current and projected population size for the locations they were placed.

Like with any other deployment, throughout the year one starts to notice additional things to improve upon that weren't noticed/foreseen by the predecessors. As a result, the list of improvements we wanted to make to existing and new facilities kept on growing. Since the BAF after Next concept started with 14 initial projects, Task Force Lifeliner added a few large projects that TF Lifeliner's replacements (10th SBDE) would see into fruition, and additional smaller projects that seem like the preverbal tale of fixing issue after issue hoping to solve a greater problem. An example of a few of our smaller projects included resolving issues with seasonal flooding for the JDMC, the current Military Mail Terminal, CSSB motor pool and other areas that end up under water every year due to seasonal rain and bad drainage. All in all, BAF after Next came to encompass a total of 30 separate projects, spanning the length and breadth of Bagram Airfield

FINANCING THE PLAN

The three largest questions/obstacles we faced in our journey to BAF after Next were funding, timing and the contracting process for the CJOA-A. The first question asked in any construction

project is how much will the project cost? There are at least two cost estimates to any job (doing it cheaply and doing it correctly), and it's the Project Manager's responsibility to find the "happy medium" of the two. The maximum amount anyone can spend for military construction without requiring an act of Congress is \$750,000.00 (a threshold established in 1976). That cost includes everything from the gravel for the concrete bed to the light bulbs for the flood lights surrounding the structure. While building contingency facilities under this amount is common, it's a little less than realistic for the construction of enduring facilities in an expeditious manner. When designing warehouses and other facilities meant to support a customer population the size of TF Lifeliners', it is nearly unachievable. Normally when an enduring facility is identified, the Combined Joint Task Force (CJTF) CJ7 would identify requirements and through the Chain of Command they would apply to Congress for MILCON dollars to construct the facility. This process takes anywhere from three to five years from the time the need is identified until a unit can occupy the site. In many cases, by the time the unit receives the money the needed structure was built utilizing a different source, cancelled, or the requirements have changed to the point where additional funds are requested for the project. Or as in TF Lifeliner's case, if requirements were not identified, acknowledged and addressed in prior years, clever ways to construct what the is needed within the limits of fiscal law must be found in order to complete construction in a timeframe that is relevant and useful to the mission requirements at hand.

When it comes to getting the needed building constructed under the previously mentioned \$750k cap while still constructing a quality structure in a country with fewer construction firms than one would normally find, it becomes nearly impossible to find what one needs. In the immediate area of BAF there are three concrete plants (two reputable ones) and five construction firms (two Afghan) that have the knowledge and capability to construct anything more than the earthen structures commonly seen around Afghanistan. There are one or two additional firms in Kabul and in RC-North, but other than that construction on BAF requires non-locals to do it. In order to meet enduring requirements, structures must be capable of lasting for at least 25 years. The only structure options available at BAF that meets these requirements are Pre-Engineered Buildings (PEB) and K-Spans. Those structures have to be imported on order, a process requiring no less than four months in order to ship the steel and other construction materials. The largest cost in this area is the cost to procure and ship materials to BAF for the construction. The second largest cost factor comes from the fact that with such few companies able to do the type of construction one needs, the construction firms in the area have the ability to demand whatever cost they desire, and with few other options Regional Contracting Command is forced to accept it. Troop labor is always cheaper, however with only one Red Horse Squadron, one vertical engineer company, and a Seabee company, demand exceeds availability assets, and units have to rely on one of the overpriced companies for their construction. What partially helps is pre-negotiated prices in the form of Indefinite Delivery/Indefinite Quantity (IDIQ) contracts for items like concrete, gravel and pre-engineered buildings that the Regional Contracting Command creates with local firms in order to keep the cost at a reasonable rate. Without these control measures, the buildings would exceed the MILCON threshold without providing the structures needed to conduct the mission. Still, the easiest way to solve all of these problems would be to make the Military Construction threshold country-dependent and account for variables like shipping, and construction cost. Until this change is made, construction in a deployed environment will continue to be a major challenge.

MAKING THE DOMINOES FALL

Bagram Airfield is so saturated with pre-existing structures and

dedicated land that in order for one move to occur, a series of other moves must take place, causing a cascading effect which makes improvements codependent and complicated. As one could image, this continuous movement can become confusing and frustrating to say the least. It can delay projects for months at a time.

"Bagram math" was a phrase coined to describe the situation: Take the desired Estimated Start Date (ESD) and add a month per every move that has to take place for it to start. Some persons required to vacate are understandably less than willing. In those instances, it's good to be friends with the Base Engineer, Land Manager and Master Planner. They can help persuade those who are unwilling to move. Those moves (in most cases) require construction to create/update the areas the dislocated unit will occupy, which only contributes to delays in the move, and delays in the construction planned for the land about to be emptied. TF Lifeliner was guilty of reluctance to move in the face of pending construction on at least one occasion. When it came to moving the Bagram APO, the task force was initially required to move into temporary accommodations that were less than adequate for conducting mail operations, due to flooding that disrupted mail sorting and damaged mail. When TF Lifeliner was asked to move to a second temporary site so the Air Force could move something else into the site, TF Lifeliner refused to move again until the permanent facilities were up and running (scheduled mid FY 2012) due to disruption in CJOA-A postal operations that resulted from repeatedly moving the operation and a fear of being placed in another lousy location. Moving people is inevitable when having the clash of permanent facilities/structures with units that have a contingency mission sitting in the way.

In addition to the movement needed to open up space, the number of "dominoes" that have to fall also includes the number of steps each packet must go through in order for it to go from idea to breaking ground. These steps are the Technical Committee, Infrastructure Utilization Board (IFUB) or Airfield Facility Utilization Board (AFUB), Joint Facilities Utilization Board (JFUB), Comptroller and Regional Contracting Command. Some of these steps are essential, and others are necessary could be streamlined in order to decrease delays. An example of a process in need of improvement is the JFUB process. This process takes ten steps to complete and get the authorized signatures. Three of the steps are repetitive of the IFUB board. As anyone who has attempted to do construction on an installation other than a smaller FOB can testify to there are several things a unit must do before getting to the point of submitting a JFUB. Tasks like defining the requirement, designing/editing a set of designs to have the structure fit the designated area, and gaining/creating an Independent Government Estimate (IGE) for what the structure should cost in the US. On Bagram Airfield additional items are required: the blessing of the Base Commander and Senior Airfield Authority (SAA) through the Technical Committee, the IFUB/AFUB board (three steps in the AFUB) and finally the JFUB. The IFUB board's primary task is to allocate space and approve land usage; the board members for the IFUB include the Land Manager (chair), Base Engineer and Airfield Engineer (co-chairs), the Master

Planner, CJ6, Division Safety, Fire Chief, Mine Action Center, Prime Power, and a few other military and contractor representatives with the ability to non-concur the proposal. Anyone who wants to construct on the Army side of the post must attend this meeting. A similar set up is part of the Airfield Utilization Board (AFUB) for projects that fall within the "blue line" that defines Air Force operations and therefore require Air Force approval. Once these boards are completed, the requesting unit will go to the JFUB, which as mentioned before has 10 additional steps. The first three steps are repeats of the IFUB/AFUB board, with the addition of a Legal Review from the Division SJA, the remaining steps include writing the PR&C, designing the structure, creating the Scope of Work, sending to CJ 8 for funding and finally to RCC to bid and let the construction contract. This portion of the process could take anywhere between two and four months depending on any issues with the Tech Committee or initial JFUB. However, getting the rest of the documents done before the committee reviews it normally spares the unit six weeks. RCC itself will take no less than six weeks up and to two months to complete its work, due to the 30 day bidding requirement and the sheer number of projects landing on one Contracting Officer's (KO's) desk at one time. A suggested improvement to this three to four month process is to reduce the JFUB for BAF to five steps, require units to generate all the required documents beforehand, and allow brigade size units to submit their own JFUB papers instead of requiring the battle space owner to do it after they already approved the project through their own boards. The complexity of the process helps explain why units whom often rotate in/out of the CJOA- A on an annual basis do not achieve any meaningful upgrades in their footprint.

ACCOMPLISHMENTS

In the one year TF Lifeliner continued its Rendezvous with Destiny in Afghanistan, it planned, allocated funding and begin the construction of a new SSA complex with four times the storage capacity (72,000 sqft) of the one it replaces on six and one half acres, and a new Class I facility able to store enough days of rations to feed 40,000 persons for twenty one days. Not to mention moving the CIF and reorganizing the CRSP yard to increase efficiency. The BDE built a consolidated center to manage military convoys and supplies running through RC-East, Capital and North, and successfully reshaped the entire South East corner of Bagram Airfield to create a logistics complex that will serve BAF and the CJOA-A for the next thirty years. These projects alone cost over \$14 Million, with another \$5 Million dollars allocated for ongoing projects. Looking back on our accomplishments one can say that "all in all not a bad year for a handful of Engineers". The projects ongoing at the time of RIP/TOA included finishing work on the SSA and Class I facilities, the Military Mail Terminal, and beginning scheduling MILCON projects for a replacement brigade and two battalion headquarters complex, two new finance buildings, a consolidated rigger's facility, two post offices, and a few other projects that will bring BAF After Next to fruition.

Strategic Sustainment Planning in Afghanistan

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Planning at the strategic level entails future thinking that will attempt to define and describe actions taken to achieve the desired results of a stated mission. The nuances of strategic planning involves clearly seeing the intent and developing criteria by which the plan will be structured, defining the layout of the plan, and how it will evolve over time. To ensure each area of expertise is engaged in the planning process, individuals from different entities with specific knowledge regarding the mission at hand, their organization, and area of operation are imperative to capturing a comprehensive view of the fields of interest. The delineation of the intended process over time relies on each organization's involvement and understanding of their roll in the overall plan, in order so that the plan as a whole can to achieve the desired end-state.

STRATEGIC SUSTAINMENT PLANNING IN AFGHANISTAN

The Joint Sustainment Command Afghanistan (JSC-A) was the headquarters providing battle command to Sustainment Brigade's (SBDE'S) in Afghanistan during Operation Enduring Freedom. The JSC-A had primary operational oversight over logistics operations within the Combined, Joint Operations Area, Afghanistan (CJOA-A), ensuring the Sustainment of all US forces in the Afghan theater. Subordinate to the JSC-A was the 101st Sustainment Brigade and the 7th Sustainment Brigade. The CJOA-A was broken up into regions, which were referred to as Regional Commands (RCs). Each SBDE supported designated regional commands while providing overall coordination of efforts for logistics elements operating within those RC's. The 101st SBDE was responsible for RCs-East/North/Capital, while the 7th SBDE was responsible for RCs South/South West/West.

In the interest of developing a logistics plan for operations in Afghanistan, the JSC-A developed a Campaign Support Plan to sustain the current footprint of US forces in the Afghan theater, and prepare those same forces for retrograde operations during the responsible drawdown phase of the Afghanistan Campaign. Retrograde operations involve preparing units for movement out of theater to return back to the US. In an effort to support this mission of the 101st and 7th SBDE's participated in the planning process. This process involved a particular set of challenges that were not easily overcome but were mitigated through critical planning. Some of the challenges facing the team were Afghanistan's poor infrastructure, limited equality of the national protection forces, and caveats from Foreign Governments that limited conditions under which forces operated while on the battlefield.

The beginning stages of taking a critical look at the efforts of the JSC-A from a logistics standpoint were initiated with a mission statement in which JCS-A directed to its' subordinates to develop a plan outlining logistics enablers that will be put into place,

reallocated, or repositioned within the CJOA-A between the years of 2012-2014. This plan would detail the execution of how Sustainment was provided to the CJOA-A, where there were opportunities for better efficiency, and where force array required adjustment. The enablers will serve as the platform necessary to eventually execute retrograde operations from Afghanistan. In addition, the team was also directed to review the current process of how the Afghan National Army's (ANA's) logistics formations were being trained in preparation for supporting ANA forces as the took over as Afghanistan's leading security force.

THE SUSTAINMENT BRIGADES

The Sustainment Brigade members of the team, which consisted of a logistics officer from both the 101st SBDE and the 7th SBDE, looked at how Sustainment for US Forces was being conducted, and how Sustainment operations would change over time. The JSC-A had two Sustainment Brigade's that divided Afghanistan into two areas of responsibility (AORs); the 101st SBDE executed operational and tactical Sustainment in RC- N/C/E, while the 7th SBDE executed operational and tactical Sustainment in RC- S/SW/W. Each SBDE ensured area support by employing Combat Service Support Battalions (CSSBs), which were apart of their formations; and supporting the Brigade Support Battalions (BSBs) that were apart of Brigade Combat Team (BCT) formations. Sustainment to the RCs included a variety of support requirements, including maintenance, contracting, finance, mortuary affairs and distribution. Distribution of Class II, III, V, VII, VIII, and IX occurred using military assets. CL VII was primarily Theater Provided Equipment (TPE) that was managed by the 401st Army Field Support Brigade (AFSB), another subordinate of JSC-A. TPE was issued to units once they arrived in theater based upon operational need and was distributed to unit locations with the assets belonging to the SBDE's. CL IIIB and much of CL I was managed through Defense Logistic Agency (DLA) contracts with the prime vendor being Red Star for the CL IIIB and Supreme for CL I. These supplies were generally delivered using Afghan trucks.

Distribution of numerous commodities was executed by Host Nation Trucking (HNT). Host Nation Trucking was a conglomerate of trucking companies owned and operated by Afghans, with a few company's actually owned by personnel from the US. These trucking companies held a contract with the US Military in order to transport goods throughout Afghanistan. In order to

extend the contract and improve the terms, the contract evolved into the National Afghan Trucking Company (NAT) in the fall of 2011. The new contract added requirements to create better performance standards, provide the US military with greater ability to deal with contract compliance issues, and hire more Afghan contractors.

Looking out to 2014, Sustainment forces in Afghanistan have to consider the fact that they will lose capability due to drawdown of forces, in the form of personnel and

skill-sets that were formally used to conduct mission essential tasks. Example of these tasks includes maintenance, trucking, and cargo holding capabilities. All these operations can be augmented through contracts to mitigate the loss and fill the gaps in order to allow necessary Sustainment support to be continued. As the logistics footprint changes over the next three years, a result of forces leaving Afghanistan, the logistics capability will shift to enduring bases to accommodate the shift in troop formations. Enduring bases were determined by Central Command (CENTCOM) through the Afghan basing strategy which base locations best positioned for optimum retrograde operations and enduring presence within CJOA-A.

LOGCAP

A major component of Sustainment operations in Afghanistan was contracting. In order to effectively meet the needs of the military, contractors were used to augment and provide additional services to US Forces. This augmentation existed in many areas, for example postal operations, food specialist, vehicle maintenance, managing holding yards, and conducting training. A major portion of this contracting asset was the Logistics Civilian Augmentee Program (LOGCAP). Not only did LOGCAP contractors assist in the operations of running a FOB; they also played a major role in closing down FOBs. They provided personnel with specific expertise in the area of de-scoping services on a base such as dining facility (DFAC) operations, black/gray water services, and laundry services. During important events like closing a FOB, LOGCAP is vital in ensuring all procedures are followed to avoid unnecessary cost and efficiency in the process.

AIR OPERATIONS

With regards to executing Sustainment operations, air capabilities include both the airfields from which operations originate and the air assets that execute distribution. 9 strategic air fields, defined as strategic by the ability of C-17s to land and take off from the airfield, serviced the CJOA-A. Operations on these airfields were coordinated by the 313th Movement Control Battalion (MCB). 313th MCB was responsible for the reception and coordination of onward movement of inbound cargo, as well as the preparation and staging for departure of outbound cargo. In addition, the 313th MCB served as the contracted officer representative (COR) for contracted air assets.

Strategic air (STATAIR) is very important to operations because, as of summer 2011, STRATAIR remained the only way to retrograde CL VII and personnel out of theater. Having to use air alone as the method of retrograde is problematic, given the limited weight and volume that a single plane can carry. As of summer 2011, the amount of Class VII rolling stock within the CJOA-A was such that it would take approximately 7 years to retrograde rolling stock out of the CJOA-A using STRATAIR alone. To mitigate this problem, there was an initiative being put forth to obtain the

capability to conduct retrograde on the Northern Distribution Network (NDN), which consisted of several rail routes providing onward movement through neighboring countries and back to Europe or the Far East. Rail and air capabilities paired as retrograde methods were ultimately intended to become a multi-modal capability. Multi-modal operations consisted of CL VII being transported to its final destination through a series of transportation modes to include air, rail, ship, and surface.

AFGHANISTAN INFRASTRUCTURE

During the initial entrance into Afghanistan there was an immediate concern about the infrastructure of the country, along with a lack of entrance and exit avenues due to Afghanistan being land locked and not having adequate access to sea or rail. Since 2001, the US and other foreign governments have aided Afghanistan by donating billions of dollars to assist in an effort to improve the road system. The main road that exists throughout the country is referred to as the Ring Road, connecting the major cities Kabul, Mazir-e-Sharif, Herat, and Kandahar in a circular route that is used in order to maneuver through-out the area. However, as of summer 2011 there remained an approximately 234km portion of the road that had not been completed. It is imperative that the completion takes place to support trade and economic growth for the region and to allow for easy travel when trying to maneuver within its border. Other disadvantages to the Afghan infrastructure are choke points created as a result of small mountain passages that are affected by the harsh winter weather of the region. An example of such a choke point is the Salang Pass. The Salang pass is very important for travel because it is a primary link between the eastern and northern areas of Afghanistan. This pass has been used by US and coalition forces to transport supplies to the northern region, in addition to serving as the major artery for Afghan commerce, and if it is not available it causes days of delay when moving supplies. To mitigate this scenario, there are improvements projects scheduled to begin in 2014 in order to widen the path and allow for greater accessibility.

AFGHAN PARTNERING

The initiative to assist in developing the Afghan Army through the partnering was a subject of great attention during the development of the JSC-A Campaign Support Plan. Partnering was being conducted to assist the Afghan Army in conducting logistics operations, which was also expected to assist in the Afghan developing their own system. The partnering was conducted by a select number of Soldiers from each SBDE with a specific skill-set to match the skill-set of the Afghan Soldier that is being partnered. Some would argue that efforts toward this initiative have garnered minimal success for a number of reasons, such as illiteracy rate within the Afghan Army ranks, corruption, and instability of numbers. Despite all of these challenges, US Soldiers

continue to press forward in their task to teach and mentor. This task is imperative because it's a key element to the withdrawal of US Troops from this theater.

CONCLUSION

Through the analysis process and planning on a long term basis, the strategic planning cell has identified areas of concern that need to be addressed immediately, allowing decision makers the appropriate time needed to develop solutions in order to prevent disarray and delays. These concerns include: 1) the time needed to put in place enablers necessary to move CL VII back to CONUS or to a Army Prepositioned Stock (APS) site, 2) the enormous amount of effort and synchronization that will need to take place in order to close and transfer bases over to the Afghan Government, and 3) ensuring hazardous waste and environmental concerns are met. Addressing these concerns will prepare for future changes that will inevitably lead to US presence leaving Afghanistan and leaving the Afghan people to continue in their quest to become independent and develop into a thriving Country. Developments will continue to take place through assisting the Afghan Government in areas of building its national forces and teach them how to function properly and obtain longevity of structure and functionality, improving the afghan national economy through providing economic solutions by creating business opportunities, and fighting the insurgent activity to offer improved security for the population that will later be taken over by the Afghan Army.

The Building of Sustainment Brigades and the Inherent Issues Within

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Modularity was a significant change that has created many challenges for logisticians in today's Army. Modularity is the system of organization the U.S. Army transitioned to in order to establish a way to provide interchangeable, specialized, and fully mission capable units that could mobilize and deploy to a joint operating environment with or without their higher headquarters. Under the Army's modular design, Sustainment Brigades (SBDE) and their subordinate Combat Service Support Battalions (CSSB) were designed to provide direct and/or general support to Brigade Combat Teams (BCT) and Echelon Above Brigade (EAB) units on the battlefield. Modularity has allowed for these formations to be task organized to best suite the conditions and the needs of the customer. However, since the creation of the SBDE, the structure and organization has presented a multitude of challenges, due in large part to modularity.

Sustainment Brigades operate in deployed environments as a task organized formation of independently deployable units, each with their own unit identification code (UIC), and progressing through the Army's Force Generation (ARFORGEN) process individually. Having such a large number of individual units deploying and redeploying at various times creates several challenges for the SBDE and CSSB headquarters. These challenges ensure maintaining effective mission command, ensuring sustainment capacity is maintained during subordinate unit transitions, and ultimately, providing uninterrupted support to the customer. This article will examine the complexities of the mission command and ARFORGEN challenges that the 101st Sustainment Brigade has experienced while deployed in support of Operation Enduring Freedom 10-11, as well as issues I have seen as a Force Manager. I will address the current operating environment, what the 101st Sustainment Brigade is currently doing, the issues that have been worked through, and suggestions that can be applied to improving logistics capabilities on today's battlefield within a Sustainment Brigade.

The main goal and number one priority in war for Sustainers is getting Soldiers what they need in order to fight and win. Brigade Combat Teams are central to our war fighting strategy in today's U.S. Army. BCTs have maximum flexibility and responsiveness, but limited organic logistics "endurance". Brigade Combat Teams' organic sustainment units are Brigade Support Battalions. They ensure the BCT is logistically self-sustainable for a relatively short period of time. Sustainment Brigades serve as the foundation of a more robust logistics infrastructure designed to provide general support to BCTs across the combat zone, allowing them to be sustained for longer periods of time. Modularity allows SBDEs to be properly tailored for the mission.

The war on terrorism in both Iraq and Afghanistan has presented huge logistics challenges that were not as apparent in prior wars. Support units have to determine how to get supplies to the war fighters who are spread out across a non-linear battlefield. Due to upgrades in communications systems, in-transit visibility and integrated supply chains, support units are now more capable and task-organized Sustainment formations that are better tailored to the needs in executing logistics functions than they were prior to modularization. Furthermore, all leaders and many Soldiers in Sustainment units are trained as multi-functional logisticians as opposed to functional logisticians, thereby improving their versatility. All these represent advantages to sustainment operations brought about by modularity and the Sustainers of today's SBDE.

While it has improved service to the customer, the modular design, combined with a new ARFORGEN process, has caused friction for logisticians within Sustainment Brigade formations. The ARFORGEN planning cycle is designed to provide a timeline for all Army units to expect training, deployment, reset, and redeployment cycles. For Brigade Combat Teams, the ARFORGEN cycle is a more homogenous process, because every subordinate unit is at the same stage of the cycle and deploys as a single unit with the BCT Headquarters. On the other hand, Sustainment Brigades and those subordinate units attached are currently executing ARFORGEN separately. The Special Troops Battalion (STB) is the only unit organic to the SBDE that deploys with the SBDE Headquarters, and most of the personnel that fall under the STB are in fact part of the SBDE Headquarters. Under modularity, sustainment units are task-organized under the SBDE once in theater in an operational control (OPCON) relationship, sometimes down to the Team level. The units are sourced for deployment through Army Forces Command (FORSCOM) based on sustainment capabilities required in theater requested by the Combatant Command (COCOM). FORSCOM looks to fill those requirements by pulling from sustainment units across the United States that are available to deploy in the specified time period. These requirements are normally identified two fiscal years in advance to match the ARFORGEN cycle that the Army aims to follow. Once the sustainment unit is identified and prepares for deployment, they begin communication with the Sustainment Brigade that controls that particular area and function. However, Sustainment Brigade Commanders have no relationship with the incoming units until

they arrive in country.

The current ARFORGEN model for Sustainment Brigades forms a mission command structure that inherently produces a loss of tactical momentum with the rotation of each unit. The Sustainment Brigade deployed in the Combined Joint Operating Area-Afghanistan (CJOA-A) is a tailored force drawn from across the Active, Reserve, and National Guard components of the Army, Navy and Air Force. The SBDE can expect their formations to include Soldiers, Sailors, and Airmen; each with different tour lengths and pre-deployment processes/standards. Sister Service units from the

U.S. Navy and U.S. Air Force are on separate rotation cycles of 270 days and 180 days respectively, some unit based and some individual based. These rotation cycles, compounded with the average of a 325 day rotation schedule for reserve component units, result in an average of seven Relief in Place/Transfer of Authority (RIP/TOA) transitions within a three month period.

Standards, training, and personnel authorization levels all vary, with the deployed SBDE Headquarters having little or no ability to affect the resourcing or training of future subordinate units. At any given time, a SBDE can have several subordinate units that are just arriving in country, others that are getting ready to redeploy, and replacement units conducting training at The National Training Center or executing Culminating Training Exercises somewhere in the United States. Some units can deploy with as little as five personnel, while others bring hundreds of personnel. Personnel shortages are often not realized until units arrive due to last minute drops for medical or administrative reasons. Furthermore, many units deploy and fall under the SBDE in country for a couple of months, only to later fall under a separate SBDE once the original SBDE reaches their end of tour. Units are forced to quickly adapt to changes, new leadership styles, policies, and different priorities as their higher headquarters rotate out. Junior leaders lack continuity with their mentors and senior leaders.

In other words, what modularity has created is a system of "plug and play" units that never train together, experience multiple deployments at different times, but ultimately work cohesively to support the Soldier. The advantage is that units are mobilized and activated quickly to fill emerging requirements. Modularity of the force has increased the capability of support to the customer and provided a self-sufficient deployable unit. The new modular design also aims to provide more stability and predictability for Soldiers and their families, with intentions of decreasing the time units are deployed while providing the Army with a larger amount of combat deployable units. The disadvantage is that unit cohesion above company level lost is often lost and Soldiers struggle with constantly getting shuffled around and working for several different "bosses". These units train differently, have their own standard operating procedures, and are all forced to meet their higher headquarters and sister units on the battlefield, partner up, build command relationships, and conduct the assigned mission.

The 101st Sustainment Brigade was established on September 16, 2004 as a new separate brigade made up of former elements of the 101st Division Support Command and the 101st Corps Support Group and no longer an organic unit to the 101st Airborne Division. As the 101st Sustainment Brigade deployed to Afghanistan in November 2010 in support of Operation Enduring Freedom, it was task-organized under the 184th Sustainment Command (Expeditionary), assigned as the Joint Sustainment Command-Afghanistan (JSC-A). The 101st SBDE quickly assumed mission command of two CSSBs already serving in the CJOA-A, in addition to their organic STB. As task organized in theater, the 101st Sustainment Brigade (Task Force "Lifeline") provided

sustainment support through finance, human resources, ammunition, transportation, maintenance, and supply and service units. Within the formation were 33 subordinate units to include seventeen Active Army Component, four Army National Guard,

six Army Reserves, three Air Force, and three Navy units from a total of more than 30 separate locations within the United States. The Brigade's mission was to synchronize and provide tactical and operational sustainment to Regional Command (RC) East, Capitol and North within Afghanistan. The sustainment support that Task Force Lifeline provided allowed combat forces to conduct full-spectrum operations to secure Afghanistan and its population while achieving counterinsurgency success. Given this command and control challenge, setting standards, expectations, and priorities up front were essential in maintaining effective command and control of thousands of Soldiers, Sailors, and Airmen from various backgrounds and experiences. In doing this, the Sustainment Brigade Commander ensured that everyone in his formation knew what the mission was and what their individual responsibilities were.

The Sustainment Brigade headquarters worked with the 184th ESC (JSC-A) to determine how to resource capabilities in a process called Force Management. Correctly applying the rules of deployment for each unit's component of service (i.e. Army, Navy or Air Force) was challenging at all levels throughout the Force Management chain due to differing processes, timelines and standards. Sustainment requirements constantly changed as the operating environment of the supported force changed, and units were often directed to conduct several non-doctrinal missions in order to achieve overall mission success in the area of operations. For example, the 101st Sustainment Brigade had subordinate maintenance companies conducting convoy security, conducting Combined Action partnering with local nationals, and executing tasks such as base operations and security.

Under the current design of a SBDE, not all requirements were addressed, and the Brigade experienced challenges as a result.

Coordination for Roles I and II care for troops is an example of one of the many challenges faced by SBDE medical planners. Most modular Sustainment units do not have medics, dedicated physicians or medical supplies. As a result, SBDEs have the responsibility to coordinate for medical support and rely on other formations because they lack that support organically.

Force adjustment, the decrease in troops or contracting of their services, was another concern that Sustainment Brigades and support units faced and are currently facing. As combat operations increased, decreasing personnel strength in sustainment units supporting the fight against an already-high ratio of supported-to-supporting forces, just added to the challenge logisticians within the SBDE faced. Contracting became the solution to ensuring the fight in Afghanistan and the manpower required to do so was sustained. As plans to drawdown forces in Afghanistan developed, contract solutions became more and more necessary to replace the Soldiers that were carrying

out certain Sustainment functions in order to allow the Army to maintain the necessary number of Soldiers within the force cap in place within the CJOA-A. For example, dining facilities were ran by the military and Soldiers deployed to Afghanistan; most dining facilities were later contracted out and being ran by civilians with the help of local nationals.

As the 101st Sustainment Brigade Force Manager, my responsibilities included managing all incoming and outgoing units within the SBDE formation, and ensuring that sourcing issues were monitored and resolved for fiscal years two and three years out. Force Management included the task of contacting incoming units as early as possible, ensuring mission orders were completed, monitoring the flow of troops, and tracking unit RIP/TOAs. Ensuring that units had the proper amount of time to conduct Joint Reception, Staging, Onward Movement and Integration (JRSOI) once in country was vital. I made certain that a unit's arrival dates were documented properly, which determined the unit's end of tour dates. I ensured the unit's Soldiers and leaders had the correct amount of time to do their "left seat, right seat rides" with

the unit they replaced. I saw various issues with sourcing and the challenges that emerged from new requirements. Without proper planning and proactive coordination, units that were un-sourced for future rotations could go unnoticed for a while causing Force Managers to rapidly communicate up the force management channels to ensure the requirement was sourced for the next year. The potential issues required Commander's deliberate attention and involvement in order to avoid catastrophic effects. Unit level force management must continue to be dedicated and resourced to track the daily changes that occur in the global force management process. Force Management capabilities at higher echelons must be as equally dedicated and resourced as well as manned to support the larger field of view required at that level.

One of the biggest problems encountered was that the sourcing process required planning well in advance and Request for Forces (RFF) were not always filled completely. Requests for forces were sourced against Force Tracking Numbers (FTN) by the Force Provider (FORSCOM's subordinate units). I witnessed numerous RFFs that ranged from 75% filled to 100% filled. If, for example, a Quartermaster Company required to conduct water operations at a particular location had a requirement for 39 personnel, the RFF had to be validated and then written for 39 personnel. However, sometimes FORSCOM couldn't fill requirements to 100% due to competing requirements or other situations and units ended up deploying under strength to execute their mission. Furthermore, units were authorized to deploy at 100% MTOE strength, but not necessarily at 100% RFF strength, which often times was a higher number. So, even though they deployed at 100% MTOE strength, they still struggled with personnel shortages because the assigned mission required more than what their MTOE authorized. In relatively small modular units, the absence of only a couple of

Soldiers has significant impact. Additionally, if forward deployed units failed to document emerging or change of missions to

FORSCOM, their replacements risked deploying with little personnel, or with the wrong people who were improperly trained on a mission they knew nothing about. Communications up and down the force management chain, from the Sustainment Brigade level to their higher HQ, USFOR-A, ISAF, CENTCOM and all the way up to FORSCOM must remain open and receptive in order to elevate issues and provide mitigation when necessary.

The 101st Sustainment Brigade has adapted to the new modular design and recognizes the importance of keeping the right people in the fight. As a recently trained Force Manager with a logistics background in one of the busiest Sustainment Brigades currently deployed, I have seen firsthand the inherent issues that exist in our formations. I learned that, in order to be successful in synchronizing and providing tactical sustainment operations in Afghanistan, we have to resource and train our subordinate battalions and companies properly. Forward deployed units, along with the assistance of Force Managers and higher headquarters, are responsible for ensuring incoming units are properly equipped, trained, and prepared for their upcoming mission. Keeping a close eye on all units scheduled to replace our subordinate units is the key to ensuring no gaps or issues emerge during combat operations. Modularity has created an atmosphere that requires deliberate and advanced planning and preparation from the Team to Brigade level. Force tailored ad-hoc units from across the Active, Reserve, and National Guard components of Army, Navy and Air Force are a direct product of modularization. As long as SBDEs are providing general support to BCTs across the battlefield, Sustainment Commanders will be challenged with modularity, the new ARFORGEN process, and ultimately the mission command of multiple units on separate rotational cycles. The inherent problems in Sustainment Brigades are clear; knowing and understanding the issues that encompass it is the first step in knowing how to plan accordingly and be successful on today's battlefield.

Managing Perceptions and Monitoring Relationships: Performing Information Operations in a Sustainment Brigade

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On November 1, 2010, the 101st Sustainment Brigade, or Task Force (TF) Lifeline, arrived in Bagram, Afghanistan to support Operation Enduring Freedom as the Operational and Tactical Level logistics planners and operators for Regional Command North, Capital, and East. The Task Force Area of Responsibility (AOR) covered roughly 65% of the country and included vast areas and rough terrain representing one of the most challenging logistics environments in the world. Due to the immensity of the area of operation and the challenges of having to interact with many different entities (i.e. Afghans, contractors, other commands, Non-Government Organizations, etc.), there existed a need to develop a comprehensive campaign plan to guide the Brigade's efforts. This campaign plan identified the Brigade's Lines of Effort (LOEs) for the deployment and acted as a roadmap for how the challenges of the TF mission and environment would be addressed.

Each TF Lifeline Campaign Plan LOE was designed to support U.S. Forces Afghanistan's (USFOR-A) overarching LOEs for the OEF Afghanistan Campaign, which focused on improving the capacity and perception of the Government of the Islamic Republic of Afghanistan (GIROA) by enabling security, promoting governance and supporting development. The 101st Sustainment Brigade developed its LOEs by identifying the ways that the TF could affect the overarching USFOR-A LOE using their expertise and capabilities as logisticians. The TF identified the following LOEs: 1. Grow capability of Afghan National Security Forces (ANSF) to conduct Sustainment Operations. 2. Identify and Target Corruption Points in the Logistics Chain. 3. Promote Afghan Financial and Economic Capacity. 4. Promote Efficiency, Combat Corruption through Contract Management. 5. Partner with local political and business leadership in distribution operations. 6. Partner with local political and business leadership in infrastructure development. TF Lifeline's first two LOEs supported USFOR-A's Enabling Security LOE. The third and fourth TF LOEs fell under USFOR-A's promoting governance LOE. Finally, the fifth and sixth TF LOEs fell under USFOR-A's supporting development LOE.

After the LOEs were established, TF Lifeline leadership realized that one thing that each LOE had in common was a requirement to establish, develop and nurture relationships. The TF's overall involvement and interaction with Afghans (civilian, government and military) revolved around relationships and perceptions. Management of perceptions and relationship-building is performed at every level in the Army. Realizing the importance behind managing perceptions and monitoring relationships, the TF Commander identified Information Operations (IO) as one of the key components that would cement all of the LOEs together.

IO, according to doctrine, is the management of the Information Environment to gain information superiority for the benefit of coalition commanders. The Information Environment, in military terms, is defined as the aggregate of individuals, organizations, and systems that collect, process, disseminate, or act on information.² In a nutshell, at the Brigade TF and below level, IO is the management of perceptions and the monitoring of relationships. The Information Environment is made up of three dimensions: the Physical Dimension, the Informational Dimension, and the Cognitive Dimension. The Physical Dimension is the dimension in which people see and experience things around them. The Informational Dimension is the dimension in which people read, hear, or learn. The Cognitive Dimension is the dimension in which people make decisions based off of what they know or believe. The key to performing effective IO is knowing that the dimensions in which we can influence a Target Audience to either perform a desired or undesired behavior are the Physical and Informational Dimensions.

Regardless of the type or composition of a deployed unit, their presence alone on the battlefield has an affect on the Information Environment. All units deployed that are observable by the local population generate perceptions; those perceptions affect the Information Environment. All deployed units must interact with local civilians, contractors, governments and militaries, which in turn leads to the development of relationships. How the local population perceives and interacts with a unit affects the Information Environment, which in turn creates the need for units to perform IO at every

² Joint Publication 3-13, Information Operations, 13 February 2006. Pg. x. 3 Regional Command-East Commander's Conference Briefing, Information Environment Assessment, 14 April 2011.

level. Bearing in mind these considerations, the 101st Sustainment Brigade Commander directed his staff to create and carry out an IO Campaign in support of the Brigade TF's LOEs.

Based upon doctrine and unit manning, IO is only conducted on the battlefield by maneuver

brigades. Given the reality of the situation described above, that all Army units operate in and affect the operating environment, this approach is detrimental to the effectiveness, focus and purpose behind conducting Information Operations. It is crucial to the success of any unit to incorporate IO into the Military Decision Making Process (MDMP) and everyday operations due to the fact that every formation on the battlefield has an effect on the Information Environment. Due to the 101st Sustainment Brigade Commander's realization of this fact, he assigned one of his staff officers as the IO Planner and ensured that he received formal training prior to deploying to Afghanistan.

CONDUCTING DEFENSIVE INFORMATION OPERATIONS

"Defensive Information Operations is the integration and coordination of policies and procedures, operations, personnel, and technology to protect and defend information and information systems. Defensive information operations are conducted through information assurance, physical security, operations security, counter-deception, counter-psychological operations, counterintelligence, electronic warfare, and special information operations. Defensive information operations ensure timely, accurate, and relevant information access while denying adversaries the opportunity to exploit friendly information and information systems for their own purposes."

The following incident validates the 101st Sustainment Brigade Commander's decision to make IO a part of their Campaign Plan and to assign one of his officers as the Brigade's IO Officer:

On February 3, 2011 in Charikar District, Parwan Province, Afghanistan, approximately 10 miles from Bagram Airfield, a local national child playing by the side of an intersection of two major supply routes (MSRs) ran out in front of a U.S. Mine Resistant Ambush Protected (MRAP) Vehicle conducting a routine Convoy Logistic Patrol (CLP). The vehicle did not have adequate time to stop and the boy, age 6 and a resident of the local village, was struck by the vehicle and badly injured. His parents reacted quickly and scooped the boy up and took off in their vehicle before the convoy could check the boy's medical condition and get the family's contact information. The convoy, following standard operational procedures, awaited the arrival of the Afghan National Police (ANP) first responder, passed on their contact information and gave the officer the required Foreign Claims Forms for the ANP to pass on to the family.

Now, one might think that nothing more could have been done by U.S. Forces but this incident was a spark that had the potential to light a powder keg. What would be the difference between dousing water or gasoline on that spark was all in the hands of the CLP's higher headquarters, in this case the 17th Combat Sustainment Support Battalion, 101st Sustainment Brigade (TF Lifeliner); and the coordination of their efforts with the Battlespace Owner's efforts to effectively respond to the incident. The Combatant Commander (CCDR) in this instance was the 1st Infantry Brigade Combat Team (IBCT), 34th Infantry Division from the Iowa National Guard, or TF Redbull. When mitigating an incident such as this, gathering all of the facts and putting actions into motion are crucial, especially in combat environments like Afghanistan. Due to the fact that one of their subordinate units was involved in the incident, TF Lifeliner had the information before Task Force Redbull. TF Lifeliner developed a good situational awareness and briefed TF Redbull as more information was gathered about the specifics of the incident.

In coordination with TF Redbull, the TF Lifeliner IO Officer tracked down the father of the boy. The IO Officer then briefed the Brigade Commander of the situation and together they developed and refined a message from the Commander to the father and their family. The IO Officer and the Brigade Linguist contacted the father via cell phone and relayed the message to the father that the unit regretted the incident and that the Brigade was there to help the father in receiving the best medical care possible. The father told the Brigade that he appreciated all of the help and the effort

to track him down. He was in Kabul at a children's hospital and expressed concern about the quality of care the son was receiving. The following is the conversation with the father:

INTERPRETER: "COL Michael Peterman, Commander of the 101st Sustainment Brigade and LTC Leslie Caballero of the 17th Combat Sustainment Support Battalion would like express the fact that we sincerely regret this unfortunate incident occurred and our hearts go out to you. The American people care for the welfare of the next generation of Afghanistan. We want you to know that we are doing everything possible to ensure that your child receives the best care possible and are seeking ways to make amends for this tragedy. The 101st Sustainment Brigade and the 17th Combat Sustainment Support Battalion stands shoulder to shoulder with our Afghan partners, and is deeply vested in the health and welfare of the Afghan people. Again, we express our deepest regrets to you and your family."

FATHER: "Thank you, sir. We cannot express to you how much this means to me and my family. We are glad that you have not forgotten about us during this trying time. God bless you and your Soldiers."

INTERPRETER: "We regret the incident but rest assured we will monitor and help to manage your son's care throughout this process. Please let us know how we might help you in the future. God bless and our thoughts are with you and your family."

FATHER: "Thank you, sir. God Bless."

After the initial contact, the father then stressed that he wanted the boy transferred to a Coalition hospital. TF Lifeliner coordinated with TF Redbull and relayed the request and offered to take the lead with this issue. Due to the fact that TF Lifeliner's Liaison Officers were strategically placed throughout the AOR and had the ability to coordinate for medical transport and medical care, TF Redbull agreed. TF Lifeliner coordinated a medical evacuation flight for the boy and his father to fly back to Bagram Airfield, where he received top quality care from Air Force Surgeons. Once the boy and his father were in Coalition hands, TF Lifeliner continually monitored the boy's condition and maintained a presence with the father to ensure his comfort and reassure him that the Brigade was genuinely concerned for the boy's well being. Several surgeries and a couple of months later, the boy was released from the hospital, infection free and with a clean bill of health. While he was in the hospital, TF Lifeliner headed up the efforts to line the boy up with an Afghan Non-profit Organization to ensure continuity of care and long-term care. The members of TF Lifeliner also made sure that the boy went home with all of the needs and wants of a little boy (i.e. toys, blankets, candy, clothes, etc.).

This scenario provides a perfect example of how an incident, if not addressed in a timely manner, could have proved disastrous for all within mortar or rocket range of the boy's village. One fact that was not mentioned in this scenario is that the village the boy resided in was neutral to Coalition Forces, and mortars and rockets have been fired from within the vicinity of his village towards Bagram Airfield. How all units involved responded to this incident, what messages were disseminated (verbal or non-verbal) into the Information Environment in the Physical and Informational Dimensions could be the difference between creating sympathizers for the insurgency or winning support for the coalition forces. The insurgency in Afghanistan is very quick to responding to such incidents. They often spin a message to the media that is focused on showing the "failures" of the Coalition Forces and the Afghan Government to protect the people and that they do not care about Afghan lives. This fact creates an essential timeframe that must be followed in order to beat the Insurgents to the punch and be first with the truth. From the time of the incident until it is addressed by either insurgents or Coalition Forces an information void exists. The key is shortening the time of that void and providing a truthful response in order to mitigate the effects of the incident. "Being First with the Truth" is the motto of IO (Functional Area 30) Officers. It is

"Our ability to conduct peacetime theater engagement, to forestall or prevent crisis and conflict, and to fight and win is critically dependent on effective IO at all levels of war and across the range of military operations."

- Henry H. Shelton, former Chairman of the Joint Chiefs of Staff.

one their responsibilities, among many others, to mitigate incidents like this on behalf of their commanders.

CONDUCTING OFFENSIVE INFORMATION OPERATIONS

Offensive IO is very difficult for CCDRs to perform effectively. It is even harder for non-combatant commanders. "The Army defines offensive information operations as the integrated use of assigned and supporting capabilities and activities, mutually supported by intelligence, to affect enemy decision makers or to influence others to achieve or promote specific objectives." In order to conduct offensive IO the unit must operate within the constructs of the Dimensions of Influence, both the Physical and Informational Dimensions. In order to influence a target audience to either do or not do something, you must be able to convey messages through the Informational Dimension.

U.S. military doctrine limits, for good reason, message creation and dissemination to the Psychological Operations (PSYOPS) Community. U.S. Army doctrine, however, is vague in delineating what and where the responsibilities fall as far as theme and message creation is concerned. The following excerpts from U.S. Army Doctrine are the ambiguous directives on how to employ PSYOPSS and IO, first from the PSYOPS Community:

"The seven-phase PSYOPS process is a standardized, nonlinear framework by which PSYOPS are planned and conducted in support of (ISO) a broad range of missions. The fundamental goal of the PSYOPS process is to direct well-crafted and precise PSYOPS at the most appropriate foreign target audiences (TAs) to elicit behaviors favorable to U.S. national objectives...In BCTs, a sergeant first class military occupational specialty (MOS) 37F is assigned to the S-7 where he coordinates and plans PSYOPS to support brigade operations. At the Army corps and division levels, the deputy chief of staff or assistant chief of staff, G-7, Information Operations (IO), uses PSYOPS Soldiers assigned to the G-7 to coordinate and synchronize PSYOPS. At the unified command level, theater special operations command, and other than Army Service component level, IO and its elements are coordinated in the IO cell within the J-3 or G-3. The PSYOPS staff officer or NCO plans, coordinates, validates, and reports PSYOPS force deployments and activities theaterwide in response to the SecDef, the joint staff, and other operational and contingency requirements. The staff officer or NCO performs duties in the respective unified command's joint operations center, when required. He reviews and prepares detailed messages, special reports, and briefings as required by the J-3 director and the CCDR, and provides functional expertise in joint PSYOPS capabilities and doctrine. The staff officer or NCO is an organic part of the J-3 or G-3 staff and ensures PSYOPS inclusion and integration during all phases of the operation. PSYOPS planning occurs at all levels, from the BCT up to the joint staff, and the process described in this chapter applies to each level."

And then from the IO Community:

"Psychological operations are planned operations that convey selected information and indicators to foreign audiences to influence their emotions, motives, objective reasoning, and ultimately to influence the behavior of foreign governments, organizations, groups, and individuals. The purpose of psychological operations is to induce or reinforce foreign attitudes and behavior favorable to the originator's objectives (JP 3-53). Only Department of Defense agencies (including Army forces) conduct PSYOPS...With the G-2, G-3, and G-5, the G-7 (Information Operations Officer) evaluates enemy PSYOPS efforts and the

5 FM 3-13 (FM 100-6), Information Operations: Doctrine, Tactics,

Techniques, and Procedures, Headquarters, Department of the Army, November 2003. 6 FM 3-05.301, Psychological Operations Process Tactics, Techniques, and Procedures, Headquarters, Department of the Army, August 2007.

effectiveness of friendly PSYOPS on target groups. Once PSYOPS tasks are determined, the PSYOPS officer coordinates them with higher headquarters for the G-7. The geographic combatant commander approves PSYOPS tasks. A statement of requirements is a significant portion of the logistic and operational staff planning process in support of PSYOPS...The G-7 exercises coordinating staff responsibility over the PSYOPS officer."

Doctrine clearly states that PSYOPS is the instrument that IO utilizes for message dissemination and that coordination between the two staff sections is crucial. Unfortunately, it does not say much about how to create a structure or system by which to effectively accomplish this task. Also, even though the doctrine states that a PSYOPS Officer or NCO will be assigned to both Brigade and Battalion Level Staff for Brigade Combat Teams (BCTs) and their subordinate Combat Battalions, this is often not the case due to the limited amount of trained PSYOPS personnel across the Army. This leaves a void for IO Officers to have to outsource from either Psychological Operations Task Forces (POTFs), sister Brigades, Tactical PSYOPS Companies (TPCs), PSYOPS Teams (TPTs), etc. These units, under-resourced but much in demand, are typically assigned to provide direct support to CCDRs. Units such as Sustainment Brigades, which fall outside the task organization of the combatant commands that conduct combat operations in the battlespace, will inevitably struggle to receive the priority of support that is given to BCTs. This struggle to achieve PSYOPS and messaging support, understandable as it is given the obvious effect that BCTs have on the Information Environment, comes despite the fact that there exists a strong likelihood that Sustainment Brigade forces will have an effect (good or bad) on the environment in which they operate.

The 101st Sustainment Brigade was tasked during Operation Enduring Freedom to work with a Host Nation Trucking Network throughout their Area of Responsibility. The Host Nation Trucking (HNT) Network is the utilization of Afghan trucking companies to distribute equipment, supplies, fuel and ammunition throughout TF Lifeliner's AOR. What the Brigade began to realize was that the Afghan truckers were witnessing or often victims of acts of corruption (illegal checkpoints, pilferage of Coalition Forces' goods, etc.), criminal activity and/or insurgent activity. The Brigade's Law Enforcement Personnel (LEP) Team would conduct HNT Driver debriefs as the drivers would come to Bagram and other major hubs to load or unload their cargo. In the interviews many of the HNT Drivers were looking for a method to provide intelligence or information to Coalition Forces and/or ANSF in order to improve their security as they transitioned across the country.

After this problem was outlined by the LEP Team, the Brigade IO Officer recalled an IO Campaign set forth by 101st Airborne Division or Combined Joint Task Force 101

7 FM 3-13 (FM 100-6), Information Operations: Doctrine, Tactics, Techniques, and Procedures, Headquarters, Department of the Army, November 2003.

(CJTF-101), to encourage the people of Afghanistan to call into hotlines and provide information regarding criminal and insurgent activity called the "Guardians of Peace" Campaign. TF Lifeliner's plan was to use the HNT Network to augment the IO Campaign using the truckers as a target audience to get them to use the

Guardians of Peace Hotlines as a way to provide information regarding security and corruption issues. After contacting CJTF-101's IO Chief and gaining his agreement to the concept, they contacted Combined Joint PSYOPS Task Force (CJPOTF), the PSYOPS Command for the North-Atlantic Treaty Organization (NATO)'s International Joint Command (IJC) to gain approval to target the Afghan Truck Drivers. This took quite a bit of convincing and several discussions to many different PSYOPS audiences to get the PSYOPS community to recognize the importance of TF Lifeliner's efforts. After several meetings in which TF Lifeliner's intent was clarified, priority was given by CJPOTF to have the Regional Command PSYOPS Chiefs and their subordinate PSYOPS units support the mission.

Once approval was granted by CJPOTF, TF Lifeliner's IO Officer coordinated with the PSYOPS Company Commanders, TF S-7s (IO Officers), and CJPOTF Planners for product creation to reach the Afghan Truckers. These PSYOPS Products would consist of handbills, business cards, bumper stickers and billboards to reach the Afghan Truckers and get them to provide their information as it happens to the Hotlines within the area they were travelling. TF Lifeliner also coordinated for the creation of a PSYOPS Series that provided a list of numbers for the truckers to use as reference cards that would direct them to the closest Regional Hotline number while they were travelling throughout the country. TF Lifeliner, CJPOTF, and IJC worked together effectively and reached out to a part of the local population, that even though was employed by Coalition Forces, expressed a need that if addressed clearly supported the overall LOEs of USFOR-A. This is a clear example of how a Sustainment Brigade, through coordination and effective communication can perform Offensive IO and contribute to the efforts of the CCDRs to achieve Information Superiority.

ASSESSING PERCEPTIONS AND RELATIONSHIPS

When deployed to a combat environment, each and every unit must be cognizant of the fact that locals and other formations (friendly and adversarial) are watching how they conduct themselves. This, as discussed earlier, is the reach into the Physical Domain of the Information Environment. One thing that each formation must do is assess the way that others perceive them. One method that the 101st Sustainment Brigade, TF Lifeliner, used was the establishment of a Media Assessment Team. This team consisted of a Linguist hired by the Brigade to watch, listen and read the local media (TV, radio and newspapers) and report to the Brigade IO Officer as to what the local media was saying about the Brigade and their subordinate units and their missions throughout their AOR. The assessment was then compiled by the IO Officer, reviewed

by the Brigade Intelligence Officer (S-2) and then disseminated to all of the Commanders throughout the Brigade for their situational awareness. The value of such an assessment tool was that Commanders throughout the Brigade knew how the locals perceived their presence and allowed the unit to adjust or refine the way they do business. The Media Assessment Team was a way for the Brigade to gather information throughout their AOR about which efforts they undertook were seen as important to the locals and what efforts were not visible to the locals or seen as unimportant. The team gave the Brigade Commander a sensor to gauge how their missions were being viewed and allowed him to adjust fire and figure out where to focus his efforts to achieve the desired effects of the Brigade's comprehensive Campaign Plan and the outlined LOEs.

A unit's success on the modern battlefield is often tied to the relationships that they develop and maintain. In longstanding campaigns such as OEF, it is critical that the relationships that are made over a unit's deployment time are monitored and recorded. The monitoring and recording of relationships is part of the process of conducting Key Leader (KLE) and Face-to-Face Engagements. Realizing this fact, TF Lifeliner's IO Officer established a report

format for units to use when engaging Afghans and Key Leaders for this purpose. This report captured key information about the Key Leader and the meeting engagement such as the talking points brought forth in the engagement, the overall summary of the engagement, the location of the engagement, etc. Following a KLE, subordinate units completed a report and submitted it to the IO Officer. In turn the IO Officer entered the information into a computer database that is utilized by the Intelligence, IO, PSYOPS, and Command entities for the purpose of compiling, recording, disseminating, and the passing on of valuable mission related information. This information can be viewed by category by the various communities for coordination and sharing of information, to maintain continuity as units are replaced by other units throughout the entire campaign. By providing background information on the relationships with the Brigade's Afghan partners (civilian and ANSF), TF Lifeliner was ensuring that their replacements were able to deploy into theater and pick up where they left off. Partnering and developing relationships with Afghans in OEF is critical to the success of the operation. Monitoring and recording the relationships built and developed over the deployment also gave the Brigade Commander another tool to use to gauge what the Afghans perceived of his units. It provided him with a way to adjust his priorities to ensure that his KLE and Face-to-face engagement endstates were being met across the Brigade. Without the assessment of Information Operations, the Brigade had no way of knowing whether or not their campaign plan was on the path for success.

CHANGING THE WAY WE DO BUSINESS WILL LEAD TO UNIT SUCCESS

In order to address the need for non-CCDRs' ability to conduct IO and PSYOPS, some restructuring to unit manning and rewriting of doctrine should be considered. One solution would be to assign both and FA30 and PSYOPS (FA37) Officer to each Brigade level command throughout the Army and just add their duty descriptions into doctrine. Another solution would be to create a PSYOPS Task Force and assign them to each RC in a theater for the purpose of supporting both CCDRs and non-CCDRs, then assign one FA30 officer to each Brigade level command throughout the Army to act as the liaison between the PSYOPS Task Force and the Brigade Commander to effectively conduct IO and PSYOPS. The challenge to the later recommendation is that prioritization of PSYOPS assets will naturally go to the CCDRs, leaving non-CCDRs like Sustainment Brigades struggling for support.

In a 2006 article published in Armed Forces Journal, Maj. Gen. Robert H. Scales predicted that social scientists—especially those who study social influence and cultural difference—will soon be as instrumental in war as chemists and physicists have been in wars past. Every unit that steps foot on a battlefield has an impact on the Information Environment, regardless of the type of unit or their mission. If coordinated and staffed properly, every unit can perform Defensive Information Operations. Unfortunately, due to understaffing, doctrinal issues and the misconception that the only units that can conduct IO are combat arms units, Offensive IO is a challenge for all units to perform effectively and efficiently. With adjustment to manning tables and internal staffing of units, any unit will be able to address and perform IO properly. A clarification of doctrine between the IO and PSYOPS Communities along with a restructuring of PSYOPS support to commanders would also be the answer to enabling every commander to effectively conduct IO. The ultimate goal of IO is to achieve Information Superiority, conducting offensive and defensive IO is the responsibility of every commander. If IO is not addressed and performed by every command, the potential to create an uncoordinated IO effort or "IO fratricide" is very likely. Also, a command will also lose their ability to manage perceptions and monitor relationship, which is crucial for every combatant command in today's world.

The Importance and Challenges Of Fostering Signal Relationships As A Deployed Sustainment Brigade S6

by MAJ LaShawna Covey
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Fostering successful relationships is the backbone of accomplishing missions across the signal corps. This is no different now than it was in the past. The difference comes from the shakeup of the signal community to more directly support the customers, rather than consolidating signal Soldiers and assets into separate signal units. The signal chain of command changed drastically under modularity. Division signal battalions were inactivated and signal companies dispersed to brigades. Corps signal brigades were inactivated, and strategic signal assets were pooled at the theater level to provide area signal support to units without organic signal companies. The people providing communications support remained the same, but the way they were organized, their specific roles and the command authority drastically changed under modularity. This changed the doctrinal roles and relationships among the Brigade S-6, the Signal Company Commander, and the Division G-6.

The Brigade S-6 is a principal staff officer, responsible for determining the communications and network requirements for the brigade headquarters, brigade command posts and subordinate units assigned or attached to the brigade. The Brigade S-6 supports the commander's intent when it comes to implementing communications, and the S-6 is responsible for the network supporting the brigade. The Brigade S-6 does not operate in a vacuum though. S/he must build good working relationships with both the Brigade Signal Company Commander and the Division G-6. The signal company commander is responsible for the installation, operation, and maintenance of the information network, while the Brigade S-6 maintains technical control over the signal assemblages while they are in system. The S-6 directs emplacement, displacement and movement of signal assemblages within the brigade network to best support the commander's intent with regards to communications priorities. At no time does the signal company "work" for the Brigade S-6 in the sense that the S-6 has command authority over the signal company or its personnel. The signal company commander is responsible for the health, welfare, morale, personnel training readiness, and equipment maintenance readiness for the personnel and assets within the signal company. The S-6 has authority over the network, and that authority grants a wide latitude when it comes to prioritizing signal support and link management. The Signal Company Commander does not run the network, but is the critical force provider to ensure the network is installed, operated and maintained properly. While a good relationship with the signal company commander is important, the relationship with the Division G-6 is just as critical.

The Division G-6 can be a tremendous asset to the Brigade S-6, though the relationship is far different under modularity, than it was under the legacy Army. In the past, all the signal assets were consolidated in the division signal battalions or corps signal brigades. The signal battalion commander wore two hats as the Division G-6 and had much greater control over the network and the signal personnel and assemblages that made up the network. From a technical perspective, there is not that much different in the modular Army network than there was in the legacy Army network. The equipment is very different, and the Army networks involve Joint Network Node (JNN) rather than Mobile Subscriber Equipment, but the end result is still the same: digital voice and data communications to the customer through a reliable, seamless, redundant network. The difference now is that Brigade Combat Teams (BCT) have control over their piece of the network. They act like a smaller version of the Division G-6 and are responsible for bringing together all the different systems the brigade uses and integrate them into a reliable and redundant network. BCTs are also set up where they can act independently in a theater of operations. However, the Brigade S-6 is not usually alone in a theater of operations, but is part of a larger network, which the Division G-6 is critical for providing support. It is at the division level that all these separate BCT networks are combined into one seamless division network that enables all brigades to communicate across the division's theater of operation. It is the division that is responsible for ensuring the links between division and brigades are functional. Division G-6s currently have no command authority directly over Brigade S-6s, but the division commander has command authority over the brigades. Therefore the Division G-6 can release FRAGOs through the Division G-3 to direct mission changes or support requirements and the G-6 has control over the network it oversees. The Division G-6 derives his/her authority to control the division communications network from the division commander. This authority means that the Division G-6 is empowered to use all signal equipment and personnel to best support the division network. This authority is often exercised by tasking available signal assets to provide needed support elsewhere on the battlefield. This is most often seen with signal assets in functional brigades, because they often operate differently than BCTs.

Not all brigades, brigade S-6 positions and brigade signal companies are identical in terms of equipment composition or function. The composition of the signal company differs a bit depending on if the brigade is a BCT or a functional brigade. But the difference in equipment set is not the key difference in how the Brigade S-6 functions or the brigade signal company is employed. Functional brigades differ from BCTs in the sense that they do not own battle space; instead they

provide a specific function to the warfighter, like logistics, aviation support, military police support, engineer support, etc. Since these functional brigades do not own battlespace, they really don't operate their own separate and distinct network like a BCT. In fact many of these functional brigades provide support across multiple battle spaces and even theater regional commands. These brigades really don't establish independent communications networks. Rather it is crucial that the functional brigade S-6 interfaces, establishes and maintains a good working relationship with the Regional Command (RC) G-6/CJ6 or the battlespace's BCT S-6. A good example of how functional brigades differ from a BCT in terms of signal employment is the sustainment brigade.

Sustainment Brigades evolved out of the legacy Army division and corps support commands. Main Support Battalions, Corps Support Battalions and Corps Support Groups transformed into Combat Sustainment Support Battalions (CSSB) and ultimately Sustainment Brigades. One of the key differences with sustainment brigades is that the units comprising a sustainment brigade in combat are tasked organized according to the required support for a particular mission or theater of operations. When a sustainment brigade currently receives orders to deploy, the only part of that brigade that deploys is the Brigade Headquarters, the Brigade Special Troops Battalion (STB) and the organic signal company. All other units underneath the brigade headquarters are task organized according to need and sent piecemeal from their different home stations. This occurs all the way down to the detachment level, so when a CSSB deploys, they often don't take many or even any of their home station companies with them, but rather experience a constant inflow and outflow of other companies. The unique nature of the structure of the sustainment brigade and its mission makes it a challenge to support with communications and a challenge to build solid working relationships to provide the best support. A good example is the mission set for the 101st Sustainment Brigade providing support in Afghanistan.

The 101st Sustainment Brigade provides logistical support to RC(E), (N), and (C) in Afghanistan. Unlike the BCTs, it doesn't have any battlespace to call its own and control. Also unlike the divisions, it isn't even responsible for just one RC. Instead it must provide support to three RCs, and it has units located in three RCs. This makes the mission of the Brigade S-6 that much different than a typical BCT. The Sustainment Brigade also has very few signal assemblages compared to a BCT. A typical BCT in Afghanistan might control over 40 assemblages, where a sustainment brigade might only have as many as four, and not all of them might even be in system at any one time. Also unlike a BCT, the Sustainment Brigade does not have its own specific network to control. A sustainment brigade's signal assets are spread across the battlefield, depending on how the brigade commander wants to employ them. In fact, most of the 101st Sustainment Brigade's units are supported by strategic signal communications or a BCT's signal communications, depending on the location. The 101st Sustainment Brigade has three subordinate battalions: two CSSB and one STB. The STB and the 142nd CSSB located at Bagram receive voice and data off the 25th Signal Battalion strategic network. The 530th CSSB located at Camp Deh Dadi II in RC(N) currently receive communications from the sustainment brigade's JNN. The 101st Sustainment Brigade maintains a Forward Logistics Element in Kabul in RC(C) and receives communications from the 25th Signal Battalion strategic network. The sustainment brigade also has numerous postal and finance detachments that provide support to units throughout the three RCs. Those detachments are dependent on the strategic or tactical communications network provided by the tactical BCT signal company or the strategic Expeditionary Signal Battalion (ESB). This just reinforces the reality that there is no one way for a sustainment brigade to receive or provide communications, and a sustainment brigade signal company alone is not sufficient to provide communications for the entire brigade,

due to the dispersed nature of the sustainment brigade. There will always be a requirement for at least some sustainment brigade units to receive area signal support from strategic or tactical signal assets. The additional challenge for providing communications to a sustainment brigade is that the RC divisions do not have command authority over the sustainment brigade.

The dispersed nature of a sustainment brigade and its signal assets is reflected in the different sorts of relationship a sustainment brigade S-6 must foster. The 101st Sustainment Brigade S-6 must foster working relationships with the JSC-A J6, the RC(E) CJTF CJ6, the RC(N) ESB, and the strategic 25th Signal Battalion. Currently the sustainment brigades in Afghanistan do not fall under the command authority of a CJTF in a RC. Both sustainment brigades fall under the Joint Sustainment Command-Afghanistan, but work closely with the supported divisions/brigades within each RC. In Afghanistan, a divisional CJTF responsible for RC(E), so the CJTF CJ6 has technical control over most of the signal assets within the RC. An exception is the sustainment brigade. The lack of CJTF command authority over the sustainment brigade means a lack of complete network control over the sustainment brigade S-6. The CJTF CJ6 doesn't have the authority to task out the sustainment brigade's signal assets without its permission. This gives the sustainment brigade S-6 a measure of control to move their assets about the battlefield freely, but also requires the S-6 to foster a good working relationship to receive support from the CJ6 since the division doesn't "own" the sustainment brigade. This also means this relationship must be fostered in all RCs with sustainment brigade units to ensure all units receive quality communications. In RC(E), the CJTF CJ6 provides tactical communications support for RC(E), and the 25th Signal Battalion provides strategic signal support on Bagram Airfield. In RC(C), the 25th Signal Battalion provides strategic comms to RC(C). In RC(N), an ESB is designated as the Regional Network Control Center and provides communications to non-BCT assets on an area support basis. In all this, the Sustainment Brigade S-6 cannot forget the JSC-A J6 either.

JSC-A is the sustainment brigade's direct higher headquarters, and the J6 is the sustainment brigade S-6's direct higher staff support. They also have a direct line to USFOR-A, which can be very helpful at times when it comes to equipment and policy. Sustainment brigade S-6s currently report information and communications statuses to the JSC-A J6, but the J6 is not the only higher relationship the sustainment brigade S-6 fosters. Sustainment brigade S-6s find themselves with dual reporting channels and relationships: the official command authority with its higher headquarters JSC-A J6, and the network reporting and support relationship with the CJTF CJ6. JSC-A does not have its own NETOPs or its own signal company, so it doesn't run its own tactical or strategic signal network. They are merely a customer receiving signal support from a strategic or tactical asset. NETOPS support comes directly from the RC signal units, like the CJ6 or the ESB. This means the sustainment brigade signal units must integrate themselves into the appropriate RC signal network and are subject to their technical control while they are a part of a particular RC's network. Therefore, even though there is no command relationship with the RC tactical units, the S-6 must work closely with the CJ6s/ESBs to receive the best communications possible.

There is not much doctrinal guidance in the roles and responsibilities for sustainment brigades operating in a theater of operations, but not under direct division command authority. Often times, the quality of the relationship comes down to personalities, i.e. how well the sustainment brigade S-6 personnel integrate into the specific RC's signal network and signal support unit, and how willing the RC signal unit is to provide support and assistance to the sustainment brigade. All of these different relationships are critical to the Sustainment Brigade S-6. All of these different agencies provide a different level of support to a sustainment brigade and should be fostered accordingly.

Today's Signal Soldiers and the Lack of Training

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In today's ever-changing Army, the Signal Soldier is caught in the middle trying their hardest to stay up to date with the latest and greatest technology. In fact, it seems that the Army is so dependent on technology and its perfect use that the Signal Soldier cannot effectively train on all their equipment and technology they are expected to know. The Army constantly fields equipment at Signal Soldiers and they are expected to install, operate and maintain a piece of equipment that they may never have seen before. It is almost standard procedure for a unit to be fielded a wide variety of equipment shortly before the unit deploys to a combat zone. Some examples in recent years are the Joint Network Node, PRC-117G multi-system radio with networking capabilities, Command Post of the Future, Tactical Battle Command Systems, and PRC-150 High Frequency radios. That leaves the unit a very short amount of time to learn how to install, operate, troubleshoot and maintain the equipment. Even though very few of these systems are used solely by actual Signal Soldiers, because it is technology, they are the ones who are expected to use it. They are not just expected to know the systems to assist the actual users, but are frequently the only ones sent to the new equipment training. As a Signal Warrant Officer, I can speak first hand on this subject. It is not only the Signal Soldier that suffers, but the elite Signal Warrant Officer Corps suffers as well. A Warrant Officer is known by all as the Subject Matter Expert (SME) in his or her field. If a Signal Warrant Officer struggles to stay in tune with technology, imagine what the enlisted Soldier is going through.

So when do the Signal Soldiers train? They are expected to have their equipment up and operational at all times even during training exercises when other sections get to train and perfect their operations. Aren't training exercises meant for training? Not for Signal Soldiers. If Signal Soldiers can't train during a training event, then when do they train? One of the central tenets of Army training is "train as you fight." That tenet means that when a unit goes to the field, they should operate under the very same conditions they might encounter in combat. This is supposed to prepare units for all eventualities and breed adaptability into their operations and plans. While that may be true for operational Soldiers, it is not true of Signal Soldiers. Every exercise, every field problem is a real mission for Signal Soldiers. Commanders are frequently unwilling to accept anything less than perfect communications, even if doing so would present a realistic scenario of combat communications conditions. Other sections are afforded the time and opportunity to train and work through their issues, but Signal Soldiers are expected to have a flawless operation from start to finish. Signal Soldiers will typically deploy to the field site at least a few days early to set up communications assemblages and data connectivity in the Tactical Operations Center. Units fall in on established communications, so they never really feel the effects of trying to conduct combat operations in an austere communications environment. Units never have to work their PACE plan, because when they arrive on site, everything is set up and running smoothly. This expectation of perfection can have a negative effect on a unit when it actually participates in combat.

A prime example of this is the experiences of the invading forces during Operation Iraqi Freedom 1. Units deployed with Mobile Subscriber Equipment (MSE) to provide the voice and data. Up to this point, many units never really trained with combat net radios and were used to MSE providing the support they needed. However, during the invasion, MSE proved a dismal failure, because it wasn't designed for a fast-moving fight like Iraq. It couldn't establish connections fast enough and was mainly dependent on line of sight shots that were unsustainable in the wide desert of Iraq. Therefore most of 3rd Infantry Division units did not actually use MSE equipment until they established final positions after major combat operations were over. The units relied on tactical satellite and HF radios to command and control their subordinates and talk to higher headquarters. If units had properly trained on all their signal equipment during training exercises, units would have realized the full limitations of MSE and been fully versed in how to command and control units through radio systems only. Command and control across a full spectrum of communications systems is only possible through rigorous, focused and realistic training.

As young Soldier growing up in the 1990's, Sergeant's time training was a half-day where NCO's were given the time to train their Soldiers. When conducted, Sergeant's time training was very effective and allowed Signal Soldiers to train along with

other low density MOS's. Sergeant's time training needs to be enforced again Army-wide. It was guaranteed time for training, in which Signal Soldiers would benefit from the dedicated time and hands-on training, especially with all the newest technology that we continuously field. With Sergeant's time training being a thing of the past, when do Signal Soldiers train? If the S-6 shop shuts down for a few hours once a week to train, it is without a doubt, someone's e-mail will require repair or someone's phone will be inoperable, and the S-6 section can't easily say they won't provide immediate support, because they are busy training. Help desks are expected to be on call and available at all times with customer service the first priority. The Army is so dependent on technology to do its everyday garrison mission, not to even speak of the combat mission that Signal Soldiers can't train. Every issue is an emergency and everyone thinks they are priority. In most cases a Brigade Level S-6 section supports over 1,500 users across a minimum on two or three different networks so over 4,500 issues could potentially arise at one time. If it is a user and computer issue, then 13,500 issues could arise at one time. Adding all that together equals real problems 24-7 that are so important that shutting the S-6 shop down for a few hours a week to train, is a bridge too far.

New Equipment Training (NET) is the initial training that Signal Soldiers may or may not receive when fielding a new piece of communications gear depending on slots available for the training. Typically a unit is afforded the opportunity to participate in NET when fielding a new piece of equipment, but may only get one slot. With only having one slot you have one guy that now knows that piece of equipment, or does he? NET is an overview based on theory and operating in a perfect environment. The trainers teach you just enough to turn the equipment on. What happens when that equipment doesn't come on or breaks while in system? Good luck trying to get immediate support from the vendor when the equipment is inoperable and your Chain of Command is ready to fire you. Troubleshooting techniques during NET do not exist, but need to. I have asked about troubleshooting techniques during NET in the past. The answer I always receive is, "Well, the equipment is pretty new to us to, but if for some reason you need support here is the 1-800 number for customer support". This was definitely not the answer I was looking for, but it seems to be the re-occurring answer I receive every time during NET. Now, let's say for example

that the one Soldier you sent the NET did receive the full training and knows how to install, operate, maintain and troubleshoot that new piece of communications gear, when is he afforded the opportunity to train others? Some communications gear can take hours or days to get setup and placed into an operational state. Most communications equipment is not plug and play like most non-signaleers think.

The Army tried to combat the lack of training by throwing civilian contractors at the problem. The problem of lack of signal training is noticed by the "Big Army" and the contractor is supposedly the fix. The problem with this solution is that it is not being assessed properly. Most contractors work an eight hour shift by contract and if something were to become inoperable during their time off it becomes and problem for Signal Soldiers, who have little to no training on the piece of equipment that is currently not operational. During combat operations, inoperable signal equipment is not going to go over well with Commanders. Most Commanders won't even entertain the fact that Signal Soldiers can't fix a piece of equipment that they may have never seen or touched. Another huge problem with the contractor is that most signal equipment is under warranty and if touched by Soldiers, the warranty can become voided. The contractor for that particular piece of equipment is the only authorized individual to work on this piece of equipment. If the contractor is off duty because he or she put in their eight hours of work for the day, then that piece of equipment remains inoperable until the contractor comes back to work the next duty day.

In conclusion, Commanders need to get more involved in the Signal community and become more in tune with what the Signalers really go through on a day to day basis. Signal equipment these days are not plug and play, like most non-signaleers think. It is not as simple as throwing data on a PowerPoint slide and briefing it. If not afforded the proper training and time to train, it will only get worse as time goes on and the only individuals that really suffer are the Signal folks. Eventually, as time goes on Commanders will suffer and get involved, but will it be too late. It truly is in the Commander's best interest to support tough, realistic signal training. Units that support realistic training and give Signal Soldiers adequate, fenced time to train will only benefit as they will be better prepared to continue mission in full spectrum operations.

Military Justice is Not a Substitute for Leadership

by CPT Ted Allison
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The author takes the position that leaders have become over reliant on military justice as a means of conflict resolution. This parallels an overly litigious society at large, but the broader culture has attempted to address this concern by promoting alternative dispute resolution and Tort reform. Clearly, the United States Army is not driven by the same exigencies or cultural values as the society it protects. But it could take a lesson, and encourage leaders to substitute interpersonal skills for adverse action where reasonable and efficacious. This in no way suggests that leaders would be better served by excluding the use of adverse action. Instead, it should be used as a tool of last resort and also be balanced against the severity of objectionable behavior.

Leaders at all levels are faced with enormous pressure by their superiors to expedite legal processes. However, there are no set time constraints when working with a Soldier before things escalate to that point. Each Soldier is a long term investment, and a leader's job is to recognize the value of the individual causing a problem. Before contacting legal and filling out adverse paperwork, leaders should ask themselves if talking with Soldiers or even excusing otherwise unacceptable behavior would make sense under the circumstances. Obviously, there are certain actions that cannot be discounted and UCMJ action is both appropriate and mandated by Federal law. For all other conduct, there is a range of options available to Commanders and leaders at all levels. In fact the existence of nonjudicial punishment stands for the proposition that lawmakers understood that lesser means of redress are appropriate when disposing of relatively minor misconduct.

Just as Commanders must decide between pursuing Courts-martial and nonjudicial punishment; they must also decide between these forms of disposition and other corrective measures. Part V of the Manual for Courts-martial is instructive: "Commanders are responsible for good order and discipline in their commands. Generally, discipline can be maintained through effective leadership including, when necessary, administrative corrective measure." See paragraph 1-d(1), Part V, Manual for Courts Martial, United States (2008 edition). Federal law makers recognized that simply because a matter can be addressed through formal legal process, does not mean that it necessarily should. Moreover, the lawmakers provided for discretion in disposing of misconduct: "A commander who is considering a case for disposition under Article 15 will exercise personal discretion in evaluating each case, both as to whether nonjudicial punishment is appropriate, and, if so, as to the nature and amount of punishment appropriate." Id para 1-d(2). The message Federal lawmakers are communicating to commanders is that leaders do have discretion in deciding how to approach indiscipline. This is true not just in terms of the level of disposition but also in deciding the quantum of punishment awarded. By extension, this suggests that the United States Government wants its Officers to have as much flexibility in handling troops as possible. The underlying rationale was that each instance of misconduct should be judged in light of the individual committing the act, surrounding factual circumstances and seriousness of the offense.

In some cases, a cost benefit analysis is required before expending energy on a recalcitrant Soldier. There are people who have no desire to improve, and for these types of persons, adverse administrative action is probably the right way to approach them. In many cases, the Army is a gross mismatch for certain individuals struggling to comport their behavior with the established customs and traditions of military service. The decision to invest in an ostensibly poorly disciplined Soldier rests solely with the leader, and that is not always an easy judgment to make. A reasonable argument is that the default response to undesirable behavior or minor misconduct is to decide in favor of the Soldier. This means choosing developmental counseling and encouraging the Soldier over punishment. There are times this is still a worthwhile course of action. The same holds true even in the face of a seemingly defiant Soldier, whom refuses to "join the program". Almost every successful person has had the benefit of a mentor that believed in second chances. Most of us were lucky enough to be offered a third chance.

Leadership is inherently personal, and requires a superior to intimately engage a subordinate. Necessarily this requires learning about the Soldier that needs additional coaching. Instead of superficial banter, the conversation needs to be centered on the root of the issue(s) prompting poor behavior. Listening to the subordinate will in many cases reveal more than a file of paperwork. On the other hand, it is unwise to ignore a Soldier's record or documented issues that are ongoing. The leader must acquaint himself with all aspects of the Soldier, but more importantly take the time to see the misconduct as symptomatic of a greater concern. That doesn't mean playing therapist, but it means seeing past an incident and trying to appreciate the context in which it occurred.

In the Wolfgang Petersen film *Das Boot* we see an example of leadership that illustrates a concept of leadership that is individually tailored to the subordinate causing a problem. Against the backdrop of a German U-boat crew mercilessly rattled by the onslaught of a British destroyer dropping depth charges from the North Atlantic's surface; the viewer is witness to something remarkable. The Chief Mechanic, a Petty Officer named "Johann" lost his nerve and has a psychological breakdown. Members stationed at the conning tower look on as the mechanic clearly absented his post in the engine room, and did so during a critical moment. He is visibly shaken and the Commander orders him to return to his post. Johann hysterically attempts to make his way to the hatch as though to exit the ship, even though it is more than 100 meters below the ocean's surface. Repeatedly the Captain demands to know what is wrong and orders him to go back to the engine room. The Captain finally loses patience and races to his cabin to retrieve a pistol. Understanding the severity of Johann's situation, members of the crew hustle him aft of the ship before the Commander can summarily execute him. The Chief Engineer pleads with the Captain not to go any further because they had the Petty Officer under control. We see the Captain's real frustration once the situation is diffused. The Captain asks himself: "Out of all people, why Johann?" The British continue to batter the U-boat and later Johann redeems himself by keeping the U96's electric motor operable. He reports this welcomed news to an obviously pleased Captain who tells him as much: "Very good Johann, very good..." The Sailor then sincerely and apologetically asks if he will be Court-martialed. The Captain asked the Petty Officer how many patrols he has participated. Johann answered with apparent pride as he accounted for several times. In that moment the Captain stares at his Sailor and after an exaggerated pause dismisses him. He does this with the understanding Johann acquitted himself and that would be the last of the matter. Normally, the single act of disobeying an order by a German Officer in command of a vessel would have been a death sentence for a German sailor. Here, we see that the Captain pardoned the sailor, whom then goes on to perform very well. The Captain had the discretion to conduct a captain's mast, but knowing the sailor and understanding the underlying cause of Johann's insubordination, nevertheless chose to dismiss any potential charges.

To successfully lead troops without relying on the military justice system necessitates weighing the risk of continued poor performance against the probability of an individual correcting their future conduct. Leaders must decide whether disregarding minor misconduct is appropriate or immediately pursue adverse action against a Soldier. This can only be done on a case by case basis. Letting an instance of minor misconduct pass creates greater risk for the leader, and may ultimately prove futile in some cases. Indeed, it may even send the wrong message to other troops who might mistake the leader's magnanimity for weakness. Thus a leader pardoning a minor offense runs the risk of being "clowned" by a subordinate. This in turn could create a hardship for the senior commander in future dealings with the questionable Soldier. However, to safely assume more risk requires knowing more about the offender, and this requires fully understanding the individual at issue and not just the attending circumstances. When a leader knows an offending Soldier and has a rough idea of the probability that the Soldier will repeatedly commit similar acts of misconduct; it takes more of the guess work out of the process. Additionally, leaders should take steps to examine the Soldier's perspective rather than focus on the indignity of looking bad. There may be deeper issues that should be taken into consideration, and in some cases military justice may not be of much assistance.

The premise of this paper is that military justice is a tool to aid commanders, but is not a substitute for leadership. Military justice is used in the furtherance of a leader's objective, but it should not be applied as the exclusive means by which to maintain good

order and discipline or a sole means of redressing misconduct. As a practical matter, conserving legal resources, otherwise referred to as "economy of justice", frees legal personnel to apply their energies to processing the most egregious offenders. Contained within the Preamble of the United States Manual for Courts-Martial, one finds the purpose of military law is "to promote justice, to assist in maintaining good order and discipline in the armed forces, to promote efficiency and effectiveness in the military establishment, and thereby to strengthen the national security of the United States." Part I, MCM (2008). There can be no other interpretation than military justice is not the exclusive means by which leaders should discharge their responsibilities.

Within their first year of service, Soldiers will listen to several speeches on the topic of leadership, and all troops have heard at least one General Officer or distinguished dignitary eloquently tout the virtues of inspired leadership. In fact, Soldiers in-processing at Fort Campbell are required to attend just such a presentation. The author has listened to several dozen speeches by senior leaders discussing the importance of character based leadership at Fort Bragg, Iraq, Fort Benning, Fort Campbell and most recently in Afghanistan. The author cannot recall a single instance where these Officers or dignitaries referenced the UCMJ or military justice. Rather the substance of these orations are typically based on setting a personal example, responsibility, accountability, taking the initiative and admonishing leaders to place the needs of troops ahead their own interests. Most of the Senior Commanders talking to troops, be it at a graduation or pre-deployment pep rally, omit any reference to military justice primarily because they see it as the leader's failure. In other words, resorting to military justice implies an inability to motivate the Soldier and thus a shortcoming on the part of a leader.

Leaders all have different approaches to leadership and varying perspectives on leading troops in general. The one common denominator is that each leader is responsible for troops in their charge, and they are accountable to a senior leader. When a lower echelon commander fails to harness the potential of a Soldier, then the senior leader fails as well. Therefore, leadership is a joint enterprise, and moving immediately to adverse action cheats all interested parties, including the US Government. Consider how expensive it is for the United States Government to fund one Soldier from the time of enlistment. In economic terms, each Soldier discharged on less than favorable terms results in a dead weight loss that cannot be recouped. Before Soldiers are dismissed as unsalvageable, each leader should exhaust every means of bringing a wayward Soldier back in line. This is obviously more time intensive and inconvenient. However the burden is registered, it would be difficult to justify doing the minimum required when deciding on an individual's fitness for continued service. That kind of indifference would reflect poorly on the leader, and erodes any confidence Soldiers have in the system.

If troops see that their leaders manage them like chattel; then it is difficult for them to have confidence that they will receive a fair opportunity to repair themselves. This in turn fosters a sense of disloyalty and lost confidence in an establishment that was intended to take into consideration the reality Soldiers make mistakes. In fact, by not attempting to dispose of a matter before relying on the military justice system, leaders are falling short. Army Command Policy provides: "If leaders show loyalty to their Soldiers, the Army, and the nation, they earn the loyalty of their Soldiers. If leaders consider their Soldier's needs and care for their Well-being, and if they demonstrate genuine concern, these leaders build a positive command climate." Army Regulation (AR) 600-20, paragraph 1-5c(1).

None of this is to suggest that Soldiers should not be held responsible for their conduct. Rather, the method of dealing with misconduct deserves consideration. Clearly, leaders are required to redress undesirable behavior. A question becomes

what happens if the leader inaccurately gauges the situation and the Soldier given a second chance remains a liability to the unit? Lower echelon commanders rightly concern themselves with how they might appear to their senior commanders, and by taking a chance on a Soldier, they run the risk of some scathing commentary from the Senior Commander. Although, "[n]o superior may direct that a subordinate impose punishment under Article 15 or issue regulations, orders, or so-called "guides" that either directly or indirectly suggest to subordinate commanders that...predetermined kinds or amounts of punishment should be imposed for certain categories of offenders or offenses." AR 27-10, para 3-4(b), see also para 1d(2), Part V, MCM (2008 edition). It is true that a Commander will ultimately be held responsible for the failures of their subordinates. But it is equally true that Commanders are required to provide a "leadership climate in which all Soldiers are treated with fairness, justice, and equity ..." AR 600-20 para 1-5c(4)(c).

At times, a leader can expect that a Soldier will occasionally take advantage of any patience extended. This will be a source of frustration, but it is part of the job. Before writing off counseling and second chances as misguided and weak leadership better left to chumps, the leader should consider that the vast majority of Soldiers would appreciate the opportunity afforded to them. For those Soldiers, it would not be a waste of time, but an investment of time that is likely to yield dividends long after the Soldier leaves the unit. It would also serve as a model of leadership that the Soldier may refer back to in future dealings with more junior Soldiers. In accordance with Army Command Policy, a commander affording a second chance would still be taking "all necessary and proper measures, under the laws, regulations, and customs of the Army." Id at 1-5c(4)(d)4. Again, a leader is granted the discretion to handle problems at the lowest level of disposition appropriate under the circumstances.

Some forms of misconduct are categorically reserved for UCMJ action and cannot be deemed "minor offenses", e.g. rape, murder, desertion, etc. As common sense would suggest, the Commander does not have any discretion as to the means of disposition for these serious offenses and Senior Commanders have withheld authority. A good guide post is to consider the difference between conduct best corrected with non punitive measures and those better redressed by nonjudicial punishment. There is a greater

degree of flexibility in dealing with Soldiers whose misconduct results from "simple neglect, forgetfulness, laziness, inattention to instructions, sloppy habits, immaturity, difficulty in adjusting to disciplined military life, and similar deficiencies." AR 27-10 para 3-3a. Less flexibility exists (although there remains a degree of discretion) in the case of conduct where nonjudicial punishment would be appropriate. By way of example, this form of misconduct results from an "intentional disregard of or failure to comply with prescribed standards of military conduct." Id. Even in the case of this more serious misconduct, leaders may option to consider other forms of redress.

Commanders and other leaders failing in their efforts to correct a Soldier through counseling may still have an opportunity to reach the misguided troop. By way of example, the leader may direct that the Soldier receive extra training or instruction. If that proves ineffective, then a formal reprimand or admonition may be appropriate. In the event of further minor misconduct by a recalcitrant Soldier, a Commander may ultimately be forced to resort to adverse administrative action and/or nonjudicial punishment. The goal for each leader should be to use these tools sparingly, and match the misconduct with a proportionate response. When it becomes apparent that these lesser means of disposition are ineffective, then a commander would be correct in referring it to the next higher level of command commensurate with the needs of discipline.

There may be some question as to what is appropriate criterion in evaluating when second or even third chances would be appropriate over other forms of reproach. As a general proposition, leaders should take into consideration not just the nature and circumstances of the offense, but also the "age, previous record, maturity, and experience of the offender." AR 27-10, para 3-5a. These are not the only factors, and each leader should apply common sense and draw on their experience in dealing with Soldiers. One principle has stood the test of time, and that is the Golden Rule. Were the positions reversed, how would you expect to be treated under the circumstances? What measure of understanding and tolerance from your commander would you reasonably desire for the same or similar offense? If you would expect more consideration from your superior than you are prepared give, then it's wise to reassess your approach.

Fobette Medic:

Mass Casualty planning on large forward operating bases

by MAJ Deidre Lockhart
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As recently as the late 1700s, soldiers wounded on the battlefield were left until their comrades could retrieve and evacuate them to medical care in the rear, generally after the battle was over. Not surprisingly, there were very few wounded that made it back, many exsanguinating while waiting for aid. The role of medical support in combat changed forever in the 1790s when Doctor Dominique Jean Larrey, Surgeon-In-Chief of the Grande Armée, demonstrated the effects of forward medical care, tending to the most egregiously wounded on the battlefield first, regardless of rank. (JAMA 1962) Larrey organized “flying ambulances”, teams of medics, who would attend to the wounded during the fight, often performing first aid on-site, and returning the more seriously wounded to surgeons in the rear, saving time and lives. (Richardson 2000)

Not surprisingly, the American Medical Corps followed suit. Dr. Jonathan Letterman, the “Father of Battlefield Medicine”, adopted a similar methodology, establishing field hospitals, pushing medical assets far forward onto the battlefield, and assigning Aid Stations under fighting regiments. This initiative decreased the time it took for Civil War casualties to receive needed medical treatment, though the risk assumed by military medical personnel obviously increased.

This focus on pushing our medical assets into the fight never let up. Military medicine has been the proven leader in trauma treatment, with civil emergency managers following our lead. The concept of the Golden Hour, though under recent scrutiny, became a medical community standard in both the military and civilian sectors. Developed from our experiences in both Vietnam and Korea, where helicopters were used for medical evacuation and infantry units had medics in their ranks, the focus was on rapid transport to military hospitals. Soldiers with multi-system trauma had a greater chance of surviving if they were evacuated to surgical care within the first sixty minutes.

Vietnam also saw changes in the enemy we fought and how we viewed our own Soldier medics. In the evolution of the combat medic, when their recognition as a non-combatant member of the force became immaterial to the danger they faced, the military started arming them. This encouraged them not just to defend themselves, but to return fire on the enemy in defense of their casualty.

Despite the risk of the loss of medical assets, the benefit to units was unmistakable. During the Korean and Vietnamese War, when the use of air assets for evacuation was added to the equation, the died-of-wounds rates at military hospitals dropped to 24%, down six percent from World War II. (www.pentagonbrief.wordpress.com)

With the asymmetrical battlefield that we face in Iraq and Afghanistan, medical personnel are far forward in the fight by the necessity of geography as much as by design. Despite the pre-planned placement of medical assets to support the fight, 90% of combat deaths occur prior to the casualty reaching the medical treatment facility. Controlling hemorrhaging, and subsequent hypovolemic shock, is the key to treatment. As a result our timeline for care has become more restrictive, with the new focus on the Platinum 10. The military has turned from the standards set by Advanced Trauma Life Support (ATLS) to training that is pertinent to the current environment, such as Tactical Combat Casualty Care (TC3). With stages of medical treatment specific to care under fire, tactical field care, and combat casualty evacuation care, the military has come to respect that while the focus is on the casualty, at times, the mission has a vote. Having trained and equipped medics and corpsmen that are able to respond to a poly-trauma event within ten minutes is the difference between life and death for countless Soldiers and civilians on the battlefield.

This is particularly true in the new environment we’ve created, with mini-cities such as Balad, the BIAP complex, Kandahar and Bagram acting as centers for many airfield based activities. These mega-FOBs with populations that rival Orange, New Jersey, pose an entirely new challenge. Essentially urban landscapes, congested and diverse, these large installations are often heavily populated with civilian contractors that do not have the basic skill sets that we’ve come to expect from our Combat Lifesaver trained Soldiers. While the smaller FOBs and COBs work well within the guidelines of the doctrinal MASCAL plan, in these massive hubs, standard Casualty Collection Points (CCP) do not fit the reality of what would occur during an actual event. With a Role III supporting the local population, and being supported by the proximity of an airfield, hustling casualties back to a CCP that has Role I capabilities rarely happens. A casualty will generally be evacuated from Point of Injury directly to a medical treatment facility. To understand patient flow on these larger FOBs, one needs to equate movement to what you would see on a Regional Command map. From an AEROMEDEVAC/TACEVAC standpoint, if there is a Role I ten minutes away

from Point of Injury by air, and a Combat Support Hospital twenty minutes away, why would the pilot stop at the Role I?

Bagram Airfield, for example, has turned into a series of small village-like compounds, with 30,000 plus U.S. Soldiers, Sailors, Marines, and Airman, as well as Coalition forces, DoD civilians, foreign nationals, and even some local nationals taking up residence, often living literally on-top of one another over a eight square mile radius. Reminiscent of the old west, Bagram was thrown up like a mining town, with little forethought or planning. However, the war in Afghanistan has already lasted longer than the California Gold Rush, and leaders are left with the task of trying to organize and contain the chaos. With a robust civilian population that is larger than the resident military warfighter population, Bagram has evolved into a series of shantytowns, with people often double and triple stacked in milvan apartment buildings, and the rest living in often over packed (not to mention highly flammable) b-huts. The result creates a geographic stumbling block when it comes to identifying, treating, and evacuating casualties. The landscape, coupled with the diverse population, creates additional challenges when considering all the demographic and cultural variables.

The 101st Sustainment Brigade Medical Operation’s reach is small in the grand scheme of the healthcare mission in theater. Though our scope is narrow, the focus on taking care of Lifeliners forced our small group to truly look at the potential issues that could arise during the relatively frequent indirect fire attacks (IDF), and potential for Vehicle Born Improvised Explosive Device (VBIED)/Personal Born Improvised Explosive Device (PBIED) incidents in such a heavily populated area. The previous MASCAL plan for our area of operations, which encompasses four smaller communities with a population of approximately 1500 personnel, was based off of guidance from the 455th Emergency Management Plan (EMP). Focused on airfield support and 455th assets, the plan was not intended to direct the rest of Bagram on actions to take during a MASCAL situation. This was left to the battlespace owner, who, unfortunately, did not publish a MASCAL plan. Therefore, with the lack of any clear direction, units with medical assets would often fall back onto the 455th EMP. Bunker in place. Wait for the all clear to be announced over the WAVE system. Man the pre-designated Casualty Collection Points once the coast is clear. The problem, unfortunately, is that the average time it took for the all clear to be sounded in 2011 was 37 minutes. While a vast improvement over 2010 (91 minutes), when a casualty has suffered multiple shrapnel wounds, expecting combat medics to sit tight until they are guaranteed to proceed safely contradicts the training and history that encompasses who they are.

We expect our medics to accompany convoys, subjecting them to the threat of RPGs, small arms fire, and IED/VBIEDs, and yet when “safely” on the FOB, we limit their movements during indirect fire and potential ground attacks under the guise that they might hurt themselves. Threats of unexploded ordinance, enemy ground troops, or fratricide do exist, but the unequivocal answer to those threats is to ensure that your team is trained, and proceed with caution. While some would point to Combat Lifesaver (CLS) training for ground troops and subsequent buddy aid as the answer to the freeze on medic movement, a simple look at the population we face shows that it may not be a green-suiter that is your neighbor. The healthcare community has recently harped on the concept of the right interventions at the right time.

As Dr. S. Wards Casscells, former Assistant Secretary of Defense, Health Affairs has noted, the recent numbers in support of rapidly shrinking died-of-wounds rates is not about “what the doctors are doing. It’s Soldiers taking care of themselves; Soldiers taking care of each other. The best-trained medics we’ve ever had. The most courageous medics we’ve ever had.” (www.pentagonbrief.wordpress.com) The answer then would be to train Soldiers on combat lifesaver skills, but also, if you have organic medical assets, having them sit in a CCP that will more than likely see little action in the massive FOB environment is a tragic waste of a combat medic’s training and time.

In keeping with the 455th EMP, the Role III on Bagram had a similar mindset regarding IDF attacks. Craig Joint Theater Hospital is named in honor of SSG Heathe Craig of the 159th Air Ambulance Medical Company, who died of injuries sustained when his hoist failed him as he attempted to extract a casualty. SSG Craig was remembered by friends as a medic dedicated to getting his patients home safely, despite the risk that he assumed in the process. Ironically, when first hitting the ground on Bagram, Craig’s Medical Planners initially responded to a request to dispatch ambulances once Point of Impact (POI) and casualties were identified with shock. Vigorously shaking their heads back and forth, they insisted that their ambulance would not move until the all clear was sounded over the airfield WAVE system. They have since reconsidered this stance, and have agreed to move their evacuation assets (made up of an Army Ground Ambulance unit) if they feel the area they are responding to is generally safe.

In many ways, this may seem like I am assessing blame against the Air Force. In reality, they are the only ones with a published Bagram-wide plan, and are certainly not responsible for the current situation. When looking at the history and definition of combat medics, Air Force medics are not included in that grouping. That moniker is assigned specifically to Army medics and Navy Corpsmen, both of which have served the Sustainment Brigade during our tour. However, along with those Army medics, and corpsman, we also proudly serve along with eleven Air Force medical augmentees, who never shy away from convoys or emergency response, despite the potential that they themselves may become casualties as a result of their mission. Those junior airmen embrace the role of the combat medic. It is some the senior planners in both the Air Force and, more surprisingly, the Army that are struggling to come to grips with what those two words mean. Too many leaders have become to consider massive FOBs a garrison in theater. In some aspects it’s true, but the size should not lull residents into a false sense of security. We are simple a larger target.

Too many think the answer to an event is simply a call into the 911 call center. Likewise, with a Role III just a few minutes away, the Golden Hour seems like a given. However, the Platinum 10 is a target that is not an easy target to hit. Even with the hospital in such close proximity, during a recent IDF attack, it took over 30 minutes before the casualties were even TACEVACed, and closer to 45 minutes before the patients made it through Craig’s ER doors. Looking at the Platinum 10, one would think that with such a congested population and close quarters, finding casualties would be a simple task. Tools such as the Counter Rocket Artillery and Mortar (C-RAM) system help the Incident Command Center to quickly and accurately identify Point of Impact. However, the shrapnel blast patterns that develop after an attack are less

“The fate of the wounded lays with those who apply the first dressing.”
- Col. Nicholas Senn, 1844-1908

predictable. In the brief time our unit has been on the ground, we have seen ordinance punch through doors twenty feet away from the initial impact site, and pepper windows with shrapnel eighty feet away and eighteen feet up. While members of the Sector Defense Teams certainly understand that casualties may not be where the most obvious damage is, clearing buildings, fighting fires, directing and controlling traffic, and potentially fighting the enemy leaves little time to triage, treat, and transport casualties. Medics must be integrated into the Sector Defense Teams.

In order to perform these tasks and work as a unified team, these groups must train together. Too often, the medical side conducts training without the assistance of Base Defense teams, and vice versa. In our haste to address the challenges presented by the environment on Bagram, we incorporated Medical Sweeper Teams (MSTs) into the MASCAL plan, with little emphasis on their interaction with the elements moving to the right and left. This could have potentially left us ill-prepared in the event of an actual MASCAL, with clear lanes of responsibility not clearly established, and communication that would suffer as a result. After a real world event forced our sector clearing team and MSTs to work together, modification of the MASCAL plan reflected the working relationship between the two elements.

There also must be an emphasis on emergency management of high value targets (i.e. the Exchange and various marketplaces, dining facilities, etc.), and an effort to corral and direct medical

assets to respond to these locations in the case of a MASCAL situation. That involves coordination and training conducted between adjacent sector defense teams. Emergency medical rapid response to areas that could potentially wield a high casualty count is imperative to stemming died of wound rates specific to extremity hemorrhage and pneumothorax, the big killers on our battlefields. Additionally, the use of both ground MEDEVAC and TACEVAC vehicles is imperative to quickly moving large numbers to surgical care at the Role III.

In 1919, Colonel H.M. Gray noted that “the hemorrhage that takes place when a main artery is divided is usually so rapid and so copious that the wounded man dies before help can reach him.” Biological factors in the past 92 years have not changed, but our treatment and focus have. In order to address the types of casualties and potential scenarios we encounter on today’s battlefields, we must have medics that are not only trained on current trauma management techniques, but who are also trained to work side by side with base defense personnel. Likewise, despite the diversity we encounter on FOBs, plans and training must focus on a true joint environment, with the focus on reality of the demographics versus the historical doctrine. Maintaining our emphasis on evidence based medicine, integrating combat medics into sector defense teams, and overcoming the politics that hobble larger FOBs are essential components to getting America’s sons and daughters home alive.

The Challenges of the Embedded Training Team Medical Mentor

by 1LT(P) Sara Rodriguez
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As a Medical Service Corps (MSC) Lieutenant deployed to Afghanistan, I served as an Embedded Training Team (EET) mentor for a medical platoon for the 201st Combat Logistics Battalion (CLB) and garrison clinic for the Afghan National Army (ANA) Forward Operating Base (FOB) Gamberi. My team’s role is to assist the medical platoon in developing basic administrative skills, teach them their role within their battalion, and create a self-sustaining training plan that will ensure the medics’ skills are maintained. During the course of my deployment, I have noticed two trends that have a dramatic impact on our mission as a Medical Mentor Team: how the differences between the cultures impact both our relationship with our counterparts and our mission, and how our actions as mentors can create a dependency on us that is contrary to goal of transition. I will discuss both of these trends and how, from the perspective of my team, they may influence our successful transition of the medical support mission to the ANA.

Background

The ANA soldiers were trained as medics through their equivalent of Advanced Individual Training (AIT). The physician assistants (PA) have received formal training as a provider before they come to the unit, and in some cases have a couple rotations with military or contractor mentors. The platoon was responsible for managing a working battalion aid station and supporting the logistic battalion’s resupply or transportation missions.

Our focus was more administrative and basic medical skills, although we touch briefly on leadership because it often directly influences the overall mission. The training was based on their “medical decrees” which are the equivalent of our Army Regulations and Field Manuals. The Medical Mentor Team was comprised of a Medical Service Corps officer, a senior medical NCO and another medical NCO. I had the responsibility of developing the PA as a platoon leader, and the NCOs taught and coached the platoon sergeant and NCOs as well as taught medical skills to all the medics. Initially, we provided medical skills training to the ANA soldiers, but transitioned to more ANA lead training.

Impact of Culture

I believe that becoming part of an EET helps Soldiers feel like they are actually effecting change in the ANA and in Afghanistan’s future. However we encountered problems because we took the job with many pre-conceived notions and misconceptions of our actual mission. We arrived believing that we needed to teach them our doctrine and procedures when that is not always the right answer. Our mission is to make the ANA a self-reliant and self-sustaining force, not to make them a mirror image of the U.S. Army, even the U.S. Army in the 1980s. This may mean taking the

time to understand their culture, philosophies and existing policies in order to become better mentors to them.

In my experience, the Afghans are a family-based culture, which often bleeds into their professional lives. The ANA will prioritize how they see fit, despite our best efforts to get them to see otherwise. They may want to spend more time visiting friends, sitting and enjoying a cup of tea with each other, rather than attending training. This becomes a huge source of frustration when you have taken the time to gather the materials and prepare the lesson just to find you only have half of your students in attendance. It is not that they don’t want to participate and improve their unit, but this is part of their culture, and that is not something we are here to change. I sat down with them and addressed the concerns my team had with our ANA counterparts. I told them that we are here to help, but they needed to meet us half way. I was fortunate in that my ANA counterparts are very receptive and willing to work with us, but that wasn’t always the case I found that the best attitude to adopt is this: if there is someone that wants to learn, then that is who I am going to focus on teaching. The Afghan perspective of “success” in training may not be the same as ours. I found my greatest success came when, despite whatever frustration I felt as a mentor with a training event or mission, I let them see it as a “success” and then build off of that through an after-action review in order to make a teaching point (i.e. “It was a great mission. However, let’s review what we did and make it a better mission next time.”).

One particularly noteworthy “conflict of culture” I experienced was the challenge presented by the lack of automation in the ANA. What makes this noteworthy is that, to the ANA, a lack of automation did not seem to be a problem until we (the U.S. Army) made it one. It is difficult for us to really embrace the idea that an organization can be efficient and functional with little or no automation based on our own daily operations. Encouraging them to move in that direction is a positive step, but we must express patience in the matter and more importantly teach them to be creative with their current means of communication and instruction. This also means we have to be creative with our teaching methods for two reasons. First, they do not have the ability to pull up a PowerPoint for class as we have become accustomed to. The second is that we want to educate them in a method of teaching that they will be able to reproduce and repeat. Teaching them to adopt automation is not our focus, but it is an obstacle that must be overcome in order to accomplish our mission. These are just a few examples of where our working relationship with the ANA might strain, but it is a learning point for us as much as it is for them. Ultimately, it is a lesson in patience. Most days of the week I had discussions with my counterpart regarding the administrative process and ways to improve it, always with an explanation as to why it would help to start or change a process. I am prepared to accept their suggestion if it gets to the same goal because I believe it helps them take ownership of the process. However, this is sometimes easier said than done.

Impact of Dependency

I recently approached the platoon leader I mentor about tracking the platoon’s training. He agreed that tracking training would be beneficial, so I began to help him organize training folders for all his soldiers. He then asked me to make copies of data sheets for

all the packets. While this might seem like a harmless request, this is also not the first such “harmless request” for supplies. Our ANA counterparts will ask for photocopies, plywood, equipment, medication and anything else you can imagine. While granting these requests may seem like part of our assistance mission, we have to consider the implications of such actions. First, it depletes our own limited resources. Second, but more importantly, it creates a dependence on us. To us, such supply requests are relatively trivial because we have trust in the assumption that our military logistic system will resupply us. The ANA supply chain, however, is not that reliable. When this leads to poor quality supplies or no supplies at all, the ANA turn to us for assistance, and we often “give in” in the name of mission accomplishment. A notebook here and a photocopy there seems like nothing to us, so we become complacent and accept their requests for materials. By allowing this, however, we create a dependency on the US Military to supply them instead of forcing them to take responsibility for their own logistics system. When I refused to make the copies that my mentoree requested, one of the NCOs from the ANA platoon told me that, as I was their mentor, it was my job to help them. To this, I responded that I was indeed their mentor, which meant that I was to teach them and give guidance, but I was not there to do their job for them. My advice is to force them to use their own system and assist them as necessary in figuring out how to creatively push their system to work for them.

Our ultimate goal is to eventually transition operations to the ANA and leave them as a functional and independent entity. To this end, we have helped develop their regulations and policies and assisted them in building self-sustaining systems that are managed by the ANA, although most of them are still a work in progress. It can be frustrating as a mentor to not see change or improvement. My senior NCO recently went through a medical mentor manual written to coach mentors on how to be instructors to the ANA and came across a section on the stages of depression. It described the emotions mentors may feel when on the job and the difficulties they may experience in dealing with the cultural differences. It occurred to me that it was a very legitimate topic to address. As a mentor, I have found that I have felt disappointment or frustration with the lack of progress, which can get internalized and turn into anger or resentment towards our ANA counterparts. This negates our effectiveness as mentors. There is no one way to deal with the emotional rollercoaster that accompanies the job, but it is important to remember that we are professionals, and we will leave an impression with the ANA that they will take and mold into their own.

In summary, my recommendation on how to approach the Medical Mentor Team mission is to be patient, flexible and creative. Take the time to learn their perspective and their understanding of their role as a newly formed unit. Work together with them in achieving projects and missions in order to help ease transition and always use their regulations as a way to reinforce their own doctrine. Finally, but most importantly, never forget that your actions can have long term effects. In the end, we as mentors must remember that we are here to develop them into the Afghan National Army, not the US Army.

The Three Most Common Electrical Safety Issues in Deployed Environments

by James Jennings
Brigade Safety Officer

Electrical safety problems have bedeviled deployed US military forces for many years. Since 2008, electrocutions and electrical fires in Southwest Asia have been front page news in the New York Times and the lead story on CNN. Electrocutions of deployed Soldiers were the focus of Congressional hearings in 2009 and the Department of Defense Inspector General (DoD IG) conducted three investigations the same year to determine the scope of the problem and recommended solutions.

The DoD IG report addressing electrical problems in Afghanistan is posted online at http://www.dodig.mil/SPO/Reports/D2009-SPO-005%20FINAL_web.pdf. A key finding is “a lack of education for service members regarding electrical safety, incident reporting, and personal responsibility.” The report recommends training to resolve these issues and prevent future electrocutions, electrical shocks, and fires. This article, which draws from the author’s experience as a safety officer in Bosnia, Kosovo, Iraq and Afghanistan, identifies the three most common electrical safety issues for forces deployed in support of Overseas Contingency Operations.

Grounding. Any safety professional or electrician who has worked overseas will immediately highlight poor or non-existent grounding as the most serious electrical safety issue facing a deployed force. US military units often occupy existing facilities wired to a local standard, if such a standard exists. Unlike the US, Canada, Australia or Western Europe, there is little to no oversight to ensure electricians are qualified or certified. Grounding, generally considered to be the most important aspect of electrical installation and operation, is not a common practice in many countries in Southwest Asia and the Middle East. This is due in part to the poor earthing qualities of sandy soil. Color-coding of wires, standard procedure in western countries, is often ignored. In many cases, any available wire, regardless of color, is used. US military and contractor electricians often have difficulty determining which wire is the ungrounded, grounded (neutral) or grounding conductor. Actions by military personnel, usually borne of ignorance, compound the ground problem. These include: snipping off grounding prongs on plugs, cutting and splicing electrical wires, jury-rigging or altering circuit breaker panels, and failing to properly ground generators.

The January 3, 2008 electrocution of Staff Sergeant Ryan Maseth of the 5th Special Forces Group while he was taking a shower in the Radwaniyah Palace Base Complex in Baghdad tragically highlighted the grounding problem. The hot water heater, installed by Iraqi electricians before the arrival of US forces, was not grounded. In addition, the circuit breaker panel was inoperable. SSG Maseth was electrocuted in the shower when a short in the water pump electrified the water. The stray amperage was not channeled to earth through a grounding wire, as one was not installed. Subsequent Congressional hearings and DoD IG reports focused attention on the problem. In a contract execution with a remarkably quick turnaround, dozens of US-trained and certified Master Electricians were sent to Iraq and Afghanistan to fix electrical deficiencies. In addition, the establishment of Task Force for Safety Actions for Fire and Electricity (TF SAFE) in Iraq and Task Force Protecting Our Warfighters and Electrical Resources (TF POWER) in Afghanistan provided resources, tracking, and command attention to the problems. The IG reports identified 19 instances of electrocution in Southwest Asia. Although this full-court press mitigated thousands of life-threatening electrical hazards, the grounding problem remains. The continued use of local electricians by subcontractors and military units seeking ways to cut construction costs is a problem. Soldiers who ignore electrical standards or bypass grounds, especially in living areas, perpetuate the danger of electrocutions and fires.

Oversight by safety personnel is a partial answer to the grounding problem, but engaged first-line supervisors – usually E-5 or E-6 sergeants – who know “what wrong looks like” as they conduct unannounced living area inspections is the most effective solution. A First-Line Supervisor’s Safety Inspection Guide for Deployed Living and Work Areas is a reference developed by the 101st Sustainment Brigade in 2008-09. It is available to download at the US Army Combat Readiness/Safety Center website at: <https://safety.army.mil/groundsafety/SAFETYPROGRAMS/TacticalSafety/tabid/655/Default.aspx>

Unauthorized Power Strips. Although there are Standing Operating Procedures in Iraq and Afghanistan which mandate the country-wide use of electrical components approved by Underwriters Laboratories (UL), the Canadian Standards Association (CSA) or the European Economic Community’s European Conformity/Conformité Européenne (CE), poorly manufactured power strips continue to present major fire hazards in deployed environments. The primary source for these unsafe power strips is China. The China Compulsory Certification (CCC) logo is intended to be a quality control standard. However, electrical power strips with the CCC logo have consistently been shown to be of poor quality and often catch on fire. Chinese power strips are usually made of very thin plastic, have internal metal components which quickly

loosen with use, and have extremely small wire gauges unsuitable for the amperage the strip can draw. Hundreds of fires have been caused by these power strips. When multiple high-amperage-draw items are plugged in, they often melt down and ignite a fire. Chinese manufacturers have become skilled at counterfeiting and applying UL and CE logos, frustrating safety and fire professionals when procurement personnel locally purchase items which appear to comply with the UL or CE standard.

The primary reason US military personnel purchase and use Chinese power strips is their multiple-use outlets. Soldiers are familiar with the National Electrical Manufacturer’s Association (NEMA) Type A and Type B plugs, the standard American two-blade plug. (Type A has no grounding prong; Type B has one) Those who are serving or have served in Europe are familiar with the Type C, E and F prong-style plugs. (For an excellent summary of plug configurations, see http://en.wikipedia.org/wiki/Electrical_plug) However, the Type G, or British Standard (BS) 1363 plug, is prevalent in Southwest Asia and the Middle East. Soldiers are often mystified by these various plugs. The easy and readily-available answer is the unsafe Chinese components. Although Army Air Force Exchange System (AAFES) post exchanges only carry UL and CE-approved power strips and adapters, many of the outlying operating bases and outposts have limited access to the safe, approved versions. Unfortunately, local vendors usually only carry the Chinese strips. Units in outlying areas have a vested interest in keeping money flowing through the local area, and most outposts have a small shop or two operated by local merchants.

The problem is two-fold. As identified in the DoD IG report, the average military man or woman is unaware of the different plugs and their capabilities and limitations. As a result, removing grounding prongs (as stated in the previous paragraph) and plugging in 110-volt equipment in to 220-volt circuit (to be described in the next paragraph) are usually the result of ignorance, not a willful desire to break the safety rules. In many cases, the unsafe Chinese power strip “was there when I got here,” an unsatisfactory, but common response.

The solution is similar to the grounding problem: education, training, and oversight. A proactive safety professional, backed by the emphasis of the Commander to carve out time on the pre-deployment training calendar, is the key to educating and training Soldiers. Upon arrival in theater, periodic inspections by first-line supervisors, especially in living areas, will reveal whether unsafe power strips are hidden and present a fire hazard.

Last, this problem can be mitigated before deployment by purchasing and shipping UL-approved power strips and adapters. Pre-mission planning by the unit safety officer and/or staff engineer must include an assessment of the extent of anticipated electrical power strip needs, which can often be met by stocking the supply conex with power strips before shipment overseas.

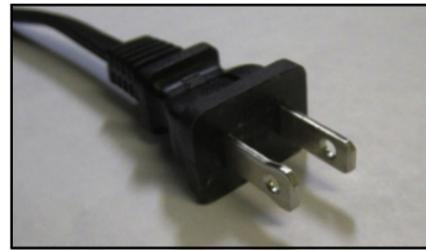
Different Voltages. As military units continue to draw down in Iraq, the extent of the 110 volt versus 220 volt problem will decrease. Iraq has a 220 volt electrical system. Soldiers in Afghanistan are usually on a 110 volt grid, although the Afghan commercial standard (where there is electricity) is 220 volts. Base camps constructed by European nations usually use the 220 volt standard and US military personnel on these camps must be aware of the differences. As many Soldiers discovered the hard way during an initial deployment to Iraq in the last eight years, a simple adapter will allow one to insert US blade-style Type A or B plug into a two-prong Type C, E or F outlet. The primary casualties of this lack of knowledge were US-built 110-volt-only printers, which were often fried by 220 volt outlets. Virtually every unit experienced some kind of adverse event involving 220 volts, most ended up with a smoking, burning piece of electrical equipment with a dumbfounded Private First Class standing beside it wondering how he would explain this to the First Sergeant. The author personally witnessed a Soldier plug in a desk top computer

without switching the red tab on the back from the 110 to 220 setting. The wisp of smoke and audible pop was the result of the fuse blowing, protecting the machine as designed. However, it was quite a while before a replacement fuse could be ordered and sent from the US and the computer was useless in the interim. And the Soldier who made the error was a Sergeant First Class, not a PFC. A 12-minute video summarizing these electrical challenges was produced by the 101st Sustainment Brigade and is posted at the US Army Combat Readiness/Safety Center website at: <https://safety.army.mil/multimedia/VIDEOLIBRARY/VideoPlayer/TabId/421/VideoId/213/Electrical-Safety-In-Iraq.aspx>.

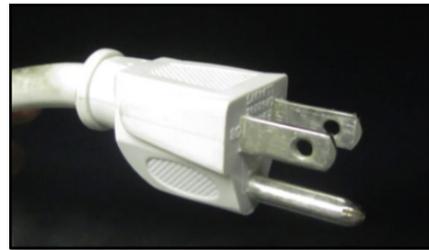
To prevent confusion, many units marked each outlet with 110 V or 220 V, but these labels or magic marker scribbles often fade or disappear over time. In one case, a contractor wired 220 volt service into an outlet with the US Type B blade-style plug-in, which caused a great deal of confusion and a few more fried components. Step-up/down voltage transformers provide a solution, but the primary source for these appliances is – you guessed it – China. After electricians employed by a US contractor in Afghanistan inspected new locally-purchased step up/down transformers, they were determined to be unsafe. Manufactured in China, they included a counterfeit CE logo carefully stenciled on the side. A visit to the company website revealed a link to the CE certificate, a handsome piece of paper with fancy script suitable for framing. It was counterfeit, there was no CE approval. When an electrician checked the transformer schematic posted on the website, he determined the ground was insufficient and the product presented a serious fire and shock hazard. A Google search of Unsafe Chinese Transformers reveals a wide variety of perspectives with most experts advising caution when purchasing Chinese electrical products and many highlighting the widespread counterfeit certification problem.

The primary solution to the 110 volt versus 220 volt problem is education and training. Soldiers must be trained on the differences between the two electrical systems. The hazard of using adapters is a key part of this education process and marking outlets is an excellent practice. Determining whether a step up/down power transformer is suitable for use is a more difficult problem. A blanket rule of “don’t buy Chinese products” is not feasible, as most Chinese goods are safe, despite widespread adverse publicity to the contrary in recent years. Purchasing American-manufactured transformers ensure excellent quality control, but they are difficult to find, as there is not a high demand for them in the US.

Most electrical safety issues in deployed environments can be solved with education and training. US military personnel do not normally have extensive exposure to different electrical systems unless they have been previously stationed overseas. Many are completely unaware that there are different voltages in different countries. Few know about UL or CE certifications. The addition of full-time civilian safety professionals on brigade staff is an excellent resource for educating and training Soldiers on these key issues. Training must not begin when Soldiers arrive in theater, it must be part of the pre-deployment process. Since the weeks before deployment are a blur of activity, command emphasis may be needed to ensure time is set aside for electrical safety training. Periodic refresher training sessions while deployed sustains awareness and combats complacency. Procurement personnel and S-4’s must also be educated on the UL and CE certification requirements, as they should be able to cut off local purchases which provide an entry route for unsafe electrical equipment, usually of Chinese origin. Last, and most important, unannounced inspections of living and work areas will identify unsafe practices and eliminate unsafe electrical components. First-line NCO leadership and supervision – with the continuous assistance of safety professionals – is the key to successful mitigations of electrical fires, shocks and electrocutions.



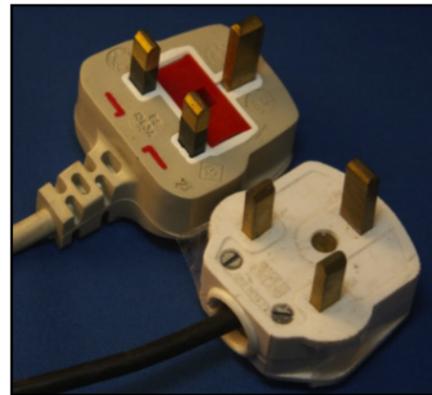
Type A two-blade plug with no ground



Type B two-blade plug with grounding prong



Type E/F Euro-plug with ground. Types D, E & F are very similar. This is also known as a Schuko, or grounded plug. "Schuko" is an abbreviation for the German Schutzkontakt, which means "protective (that is, grounded) contact."



Type G British Standard 1363 plug, often found in Southwest Asia and the Middle East. There is a fuse below the red cover which will blow and protect the circuit.



Adapter to allow Type A or B plugs to fit into a Euro-plug outlet. The round hole is designed to allow insertion of a ground which protrudes from the outlet in a French Type E connection.



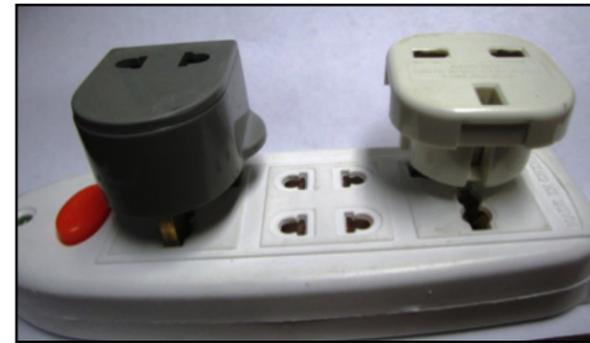
Adapter (left) with ground and CE-certified power strip (right). The metal ground on the adapter makes contact with the copper ground on the power strip outlet, completing a safe grounding path to earth.



The dilemma faced by US military personnel: how to connect a Type A or B US-style blade plug into unfamiliar outlet configurations.



Adapter to allow a Type G British Standard 1363 plug to plug into a Euro-plug.



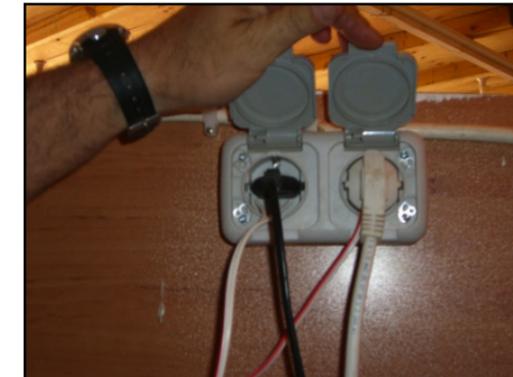
Chinese power strips are usually poorly constructed and often catch on fire. However, their multiple-use outlet configurations make them very user-friendly. They are not UL or CE approved and are not allowed on US military facilities in Southwest Asia.



Overloading Chinese power strips is a common cause of fires.



Chinese adapter which has multiple plug-ins. Although they are handy, they are poorly constructed and easily catch on fire, despite the fuse built into the component. This fuse did not prevent the fire.



Soldiers will often get very creative with outlets and cause electrical fires.



Stripping wires and putting them into outlets is a common method of bypassing adapters. It is illegal and extremely dangerous.

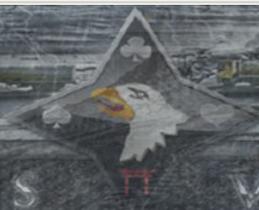


101ST SUSTAINMENT BRIGADE



LIFELINERS  VITA VERSUS



LIFELINERS  VITA VERSUS



LIFELINERS  VITA VERSUS



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