Strategy Research Project

EXCESS MATERIAL SUPPORT: THE UNRECOGNIZED OPERATIONAL RISK

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EXCESS MATERIAL SUPPORT: THE UNRECOGNIZED OPERATIONAL RISK

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Excessive material support to the Theater Operations carries strategic risks. Whether the risks are those experienced by LTG Heiser in the congested rail yards of France and Korea or as suggested by Clausewitz as an encumbrance of little use in rapid operations, we must assess our stock levels, account for them in our planning, and determine the risk they impose on our force. This paper will define some of the associated risk to our operations and offer practices to reduce those risk. Complementary material to this research project is extracted from published historical works, on line sources, and interviews conducted with 1st Sustainment Command (Theater) logisticians.

EXCESS MATERIAL SUPPORT: THE UNRECOGNIZED OPERATIONAL RISK

> Since the wars of French Revolution armies have given up tents because of the mass of baggage they involve. It is now thought more advantageous for an army of 100,000 men to have another 5,000 cavalry or several hundred extra guns instead of 6,000 tent horses. Besides, a large baggage train is a great encumbrance and of little use in extensive and rapid operations.
>
> —Carl Von Clausewitz
> On War[1]

In the reference above we see Carl Von Clausewitz, the noted European Military Strategist of the post Napoleonic period, depicting an early example of an army's tradeoff between material support and operational capability, identifying the excess support structure as an encumbrance when rapid maneuver is essential.

The baggage trains of Clausewitz's early nineteenth century armies have evolved into the enormous logistics organization found in the US Army's forces in Iraq today. Balancing the "Tooth-to-Tail" ratio, those who fight and the material essential to the battle verse those who support and the material required to sustain the army in the field, ensures a flexible and maneuverable combat force. As we begin preparations to withdraw our forces from Iraq we find ourselves face to face with Clausewitz's encumbrance. After five years of combat and stability operations throughout Iraq the Coalition and US Joint Forces have massed approximately 106,000 truckloads of equipment, supplies, and munitions in Iraq.[2] Regardless of the desired withdrawal timeline sought by the Obama administration, the volume of excess materials will slow the withdrawal of forces from Iraq. In order to provide recommendations on reducing our volume in Iraq, we should first focus on how we built our current material situation and its associated risks.

The Iron Mountain

Material excess became a problem for the US Army during the Second World War. In each major operation since, logisticians struggle with the problems caused by the glut of material our national industrial base pushes to the battle field. The forward stocks of munitions, fuel, and supplies are the lifeblood of any army in the field. Without its material support an army becomes lifeless. Armies starved of material resources are unable to advance for lack of fuel, struggle to resist due to shortages of munitions, and their strength fades as illness sweeps through the poorly sustained ranks. The US Army is arguably the world's best armed, maintained, and resourced ground force. History provides few examples of our Army suffering for material shortfalls in combat during the last 70 years, and even those were quickly resolved. Conversely when the volume of material stocks increase to levels often associated with the US Army, new problems emerge. The field depots and the transport system become choked with volumes of nonessential material causing a delay in the delivery of critical materials to the correct troops and ultimately hindering the rapid strategic or operational maneuver. This delay triggers another requisition for critical materials and exposes units to needless risk from the excessive high explosives and flammable material now in close proximity at the overstocked field depots and transit nodes. The rise in the level of support that creates these conditions is often referred to as an "Iron Mountain," and is often used in military accounts. It is not the composition of material that defines an Iron Mountain, rather it is the quantity. Our ground operations in the Gulf War lasted only 100 hours, yet our stock objectives exceeded 60 days of high operational consumption.[3] This material included ammunition, fuel, food, water, replacement vehicles, and spare parts, all of which were procured and shipped thousands of miles away for consumption, only to be unused.

LTG Joseph M. Heiser, an US Army logistician who served through America's wars of the mid twentieth century, authored the book "A Soldier Supporting Soldiers." In his work, Heiser presents numerous cases of excess material and their impact on operations. In the following passage, Heiser describes the Normandy lodgment immediately following the invasion of Europe in 1944. Here the Allies are conducting offensive operations against a well prepared German deliberate defense of western France.

> After the first few days of Normandy our troops were subjected to little air attack, so we could allow ammunition supplies to accumulate, sometimes at truck pools and on railcars at railheads. That gave us the flexibility to move supplies quickly without unloading them, keeping track of them, picking them backup, reloading them onto railcars or trucks, and moving them forward to the combat unit requiring them. Ammunition was also stacked along roads for maybe 200 miles.[4]

In fact the beach, roads, and fields of Normandy were awash in war materials. Heiser later describes logistics teams spending countless hours searching for and recovering ammunition and material sinking into the muddy fields and roads once the fall rains arrived. These were the same stocks which were pushed into Normandy following the assault forces. Not only were vessels misallocated early in the fight pushing excess material into theater, but the unneeded stocks reduced maneuver and staging space for the invasion force. This mountain of material further delayed sustainment efforts to the advancing forces as logistics troops searched roads and fields for the needed munitions mixed with tons of nonessential material.

Heiser further recounts efforts to improve logistics responsiveness in the European theater of operation. These efforts, however, came with both unrecognized and unaccounted risk. The following example illustrates these efforts at a time while the Allies were engaged in defensive operations near the border of Germany.

> I remember that during the Battle of the Bulge we had moved 1,500 carloads of ammunition into the large railhead at Soissons (France), close to our major depot. We planned to retain the ammunition in the cars so that we could dispatch these cars as a rolling inventory to wherever they were needed to eliminate local transportation and double handling of ammunition. This was fine until a German aviator, who had been circling the railhead for three nights running, came back to drop incendiary bombs in the middle of the cars. In the ensuing havoc we not only had to salvage the ammunition, we also had to evacuate a base hospital that had been established right next to the railhead.[5]

Here we find our army building forward stocks without considering the risk these same stocks presented to our logistics operation. Additionally the logistics plan failed to account for the capability of the enemy to attack this concentration. Too much hazardous material in too small of a space, without adequate protection from attack poised a significant risk not only to sustaining the combat force, but to support operations in the vicinity. The Soissons rail yard, however, is not an isolated incident in Heiser's career. In the same book, he describes a similar incident during his service in Korea.

> We once almost lost all the resupply ammunition stored near the 7th Division area because of a fire that resulted when some Korean troops were unloading Japanese ammunition at Chech'on. This railhead was being used as the ammunition supply point for the 7th Division, which at the time was in a tight battle and needed the ammunition… We had to try to save the ammunition that was not exploding or burning by moving it away from the fire. In addition to that, the POL supply point for the division was on the edge of the railhead. We had to act promptly, or we would lose both the division's entire ammunition and POL resupplies.[6]

Heiser provides additional accounts of the Army's supply mismanagement. In the following account he moves from problems found in austere field locations to an example of management problems in a developed distribution system.

> Since 1965 the support buildup for U.S. combat troops in Vietnam had had top priority throughout the Army. Unfortunately, Vietnam was not ready to handle the tremendous load pushed its way. The resulting backup in shipping around Vietnamese ports prompted Washington authorities to

> give highest priority in 1966 to unloading supplies, some of which had been awaiting discharge for months. This sudden unloading of ships overwhelmed port facilities, depot facilities that were supposed to back up the ports, and the transportation net that was supposed to move the discharged cargo to the designated storage areas. The logistical nightmare was further complicated by the lack of proper communications between CONUS and Vietnam and between port authorities in Vietnam and the designated storage facilities and the lack of inventory accounting.[7]

It is apparent in all of Heiser's examples that the US Army tends to build excessive stocks but consistently fails to assess the ability to manage the flow of material within the systems capabilities. Heiser summarized this problem by saying, "The logistic problems we faced in Vietnam were problems that had occurred repeatedly in the past. It must be understood that the Army can easily overload any combat theater's capacity to absorb support, if that support is not carefully controlled."[8]

Any logistician present in Saudi Arabia during the Gulf War will undoubtedly confirm that this legacy of overwhelming material support has continued well past LTG Heiser's career. During the buildup of Desert Shield, the port of Daman in Saudi Arabia was over crowded with unit equipment, supplies, and material. At one point arriving units were sent into the desert with whatever equipment they could find. Both the port and the staging areas where filled with disorganized masses of supplies and equipment. The volume of arriving vessels simply exceeded the capabilities of the port's commercial and military capability.[9] This situation was the by-product of a lack of deployment planning and the late arrival of logistics units designed to handle the reception, staging, and onward movement mission. Each day, newly arrived units would send teams to the port and various staging yards searching for and retrieving misplaced equipment and containers. As coalition forces transitioned to their Desert Storm positions the same problems reappeared in the Corps container yards. Lacking

manpower and automation to match the wave of arriving trucks these logistics activities were unable to maintain visibility of their stocks. The yard's container inventory continued to grow daily until the end of the ground war. After four months in the desert many containers were simply sent back to Daman having never been opened and accounted for. Handling and delivering large volumes of material is a high-risk activity and as is often the case more soldiers were lost to accidents in the Gulf War than combat.

In 1994 the US Army Safety Center's Ground Safety Course used the Gulf War Port of Daman as a logistics operational risk case study. On a single pier during the deployment surge over a thousand troops were temporarily billeted in a warehouse. On the landside of this pier, hundreds of 500 - 1000 lbs USAF general-purpose bombs were stacked awaiting onward movement. On the opposite side of the warehouse helicopters discharged from arriving vessels were assembled, fueled, tested, and then flown inland. Along the pier, berthed vessels continued to discharge vehicles around the helicopter, troop, and munitions staging areas. Students assessed the hazard radius of each activity and found the troops were billeted within multiple overlapping high-risk hazard zones. With so much traffic in a confined, crowded area the units risked reliving Heiser's experience at Soisson or Chech'on. In this case, use of the pier rapidly evolved over time adapting to the demands of an overwhelming wave of arriving material and units, leaders failed to consider the accumulating operational risk at the port associated with this evolvement.

In the 1990's the Army's Training and Doctrine Command (TRADOC) launched a two prong approach to prevent future Iron Mountains. The first control measure

employed was formal education and training. Formal education concerning material management was suggested in LTG Heiser's book, and though recommended for all field grade officers[10], TRADOC focused its educational efforts on a smaller population of the Army's Logisticians. The Army Logistic Management College at Fort Lee, Virginia incorporated into the Logistics Executive Development Course a brief study of the Iron Mountain problem while the Army Safety Center provided risk analysis training for officers and Non Commissioned Officers (NCOs) to better plan and assess operations. Risk management is now taught in both the Officer and NCO Professional Development Courses and is identified as a common task for all units to properly execute. Unfortunately these tracks of education and training were not purposely tied together and disseminated throughout the greater officer Corps. New logistics doctrine was TRADOC's second approach. Distribution Based Logistics (DBL) was to be the primary answer: a supply chain management system that evolved from the Toyota Production System[11] "Just in Time" logistics. The Army would rely on routine deliveries of the right material at the right time and place. When maneuver and support units trusted the reliable flow of supplies, material requested would match the actual mission requirements. Assuming a tailored flow of material logistics units, primarily transportation and supply functions, could be reduced in both capabilities and density in the operational theater. Shrinking both levels of stocks and the logistics units needed to manage and move the material would reduce operational cost and make the force more agile. DBL would not only prevent the Iron Mountains from forming, but also correct the growing imbalance in the "Tooth-to-Tail" ratio in the US Army.

The OIF Iron Mountain

Given the rapid advances in automation and improved satellite communications, better-trained and educated leaders armed with the new logistics operational concept had many expecting that the Iron Mountain problem would be solved. This was not the case, however, as our materiel management techniques and advanced technologies had not removed Clausewitz's "fog of war"[12] from the battlefield. The first large-scale test of our new doctrine took place in the opening phase of Operation Iraqi Freedom. As cited in numerous studies, both by RAND[13] and a US Army War College Strategic Research Project,[14] DBL fell far short of expectations. Early in the campaign, material levels dropped to critical levels in many forward units. Serious organization design problems were identified in the logistics units. DBL required reliable communication to coordinate support for the forward deployed units and the logistics units were under resourced in long range communication capability. The flow of logistics data was the first element in our new logistics operational doctrine to fail.[15] To maintain an adequate flow of support required rapid movement and return of trucks from the forward units in Iraq to the logistics bases in Kuwait. As seen in the engagements to maintain open lines of communication at An Najaf and untimely sand storms, both the enemy and Mother Nature frustrated the transportation plan during the opening phase of OIF.[16] These delays created a significant shortfall in truck transportation which became painfully obvious as the combat force reached the outskirts of Baghdad. The lack of long-range communication systems and the inadequate number of transportation units prevented the DBL envisioned function.[17] Fearing disruption in the flow of material forward deployed logistics commands switched to and continued to operate under a "Just in Case" or the legacy logistic concept. Under the legacy concept stocks are maintained

at levels which permit continued operations without resupply for extended periods. The loss of confidence in our logistic system is a legacy that remains today as seen in the munitions and fuel levels maintained by Multi-National Forces Iraq. "Just in case" stocks were the leading edge of the current OIF Iron Mountain.

A contributing cause to our current logistic problem is found in the procurement systems. In 2007 1st Sustainment Command (Theater), to be referred to as 1st TSC, staff, was confronted with an increasing number of low priority containers arriving into Kuwait. Further investigation found that this was the leading edge of over 1000 inbound containers. These containers consisted of building material orders from 2005 - 2006 to build base infrastructure in camps located across Iraq. Between the time of the initial orders and the arrival of the stocks, the bases had matured. Rapidly transitioning from tent billeting and austere support areas to prefabricated buildings, much of the arriving material was no longer needed. It appeared that the status of the material requested had been lost as commands rotated during the intervening 18 to 24 months.[18] Again the "Just in Case" logistics mind set appeared. The Command found the task of stopping the unnecessary inbound material to be monumental for once a request is made, stopping or redirecting stocks is a significant management feat. After much deliberate and painstaking staff coordination, some of the excess building material was redirected and shipped to Afghanistan to support Operation Enduring Freedom. A second example witnessed by the 1st TSC during this period was tied to the fielding of the Mine Resistance Ambush protected vehicles (MRAP). With Congressional interest, the flow of MRAPs arriving into theater rapidly accelerated. The inbound flow created a backlog of vehicles waiting to be issued to units in Iraq. Many of the limited staging yards and issue

and turn-in facilities quickly became congested. Transportation assets, both air and ground, were committed to pushing material forward regardless of the actual demand. This push of MRAPs fielding further limited the available manpower used to process the vehicles being replaced thereby creating a second backlog of vehicles in the logistics hubs. As often the case the MRAP fielding concept did not balance the Army's ability to push material into theater with the forward units' ability to draw the equipment.

A new phenomenon contributing to our material mass in Iraq is tied to the unprecedented quality of life provided our deployed soldiers. The vast majority of soldiers' live in trailers or semi-permanent structures, not tents. Many work in maintenance shelters and offices and enjoy Post Exchanges, gyms, and Morale, Welfare, and Recreation facilities. Their living spaces are air-conditioned and have many of the conveniences the soldiers would enjoy at home. The soldiers are provided latrines that have hot showers and flush toilets and their dining facilities offer a quality and range of meals better than most of our CONUS facilities. All of this is possible due to government owned and contractor provided equipment. This is all equipment which must be accounted for in the redeployment planning. Unlike the Gulf War force were only a few Common User land transport (CULT) trucks were allocated to relocate a company size unit, a similar OIF unit will need a convoy of thirty or more trucks to lift it and its life support equipment.

Standard in US Army are the Green, Amber, Red, and Black readiness briefing charts. Logisticians use colored bubble charts to report the status of material inventories. Colors depict the current required and projected stock status: Green is 100-75%, Amber is 74-50%, Red is 49-25%, and Black is equal to or below 24% of the stock

objective levels. With units already factoring in adequate stocks to sustain operations when resupply is delayed or interrupted there was little reason to expedite material into Iraq. Throughout our 2007 - 2008 material was expedited into Iraq for the purpose of changing the color of a briefing chart from amber to green. On the 1st TSC staff this was referred to this as the “Chasing Color” logistics. Further, this simplistic management tool fails to identify significant excess therefore directing the senior commander’s attention only to shortages. Frequently bases in Iraq remained well over 100% of their planned requirements and so routine excess led to the expansion of storage areas and facilities in order to handle the influx of material. Transportation systems then started to drag as the convoy staging, trans-shipping, and storage sites struggled to handle the excess workload and truck traffic. Like the rail yards cited by Heiser, convoy staging yards across Iraq are packed nightly with hundreds of fuel, munitions, and combat vehicle laden trucks all within easy range of insurgent rockets and mortars. Due to the size of our Convoy Support Bases these staging yards frequently sat adjacent to troop concentration areas and refueling points. Apparently assessing overlapping hazards have become a forgotten task in the US Army’s logistics operational art.

It should be recognized that Iron Mountains imposes risk beyond the realm of military operations. Recently our massive material foot print in Iraq took center stage in the Presidential contest. As there was little doubt that the US would withdraw forces under a new administration, the question posed to the military was, “How long would it take to get out of Iraq?” Military estimates ranged from 24 to 36+ months depending on enemy activity and weather conditions. During the Presidential campaign the withdrawal strategy was openly debated in newspapers, business and political magazines, as well

as countless websites. Countering the Pentagon's announced withdrawal projection of two plus years was a common theme during the campaign. Some of the common options were to move the pile to Kuwait, and what I refer to as the "Burn, Blow up, and Sale" strategy.

In September 2007, Dr. Lawrence Korb, a noted National Security Scholar, former Assistant Secretary of Defense, and retired Naval Officer joined with Max Bergmann, a prolific writer on National Security topics in publishing an article titled "How to withdraw quickly and safely."[19] In this article they argue that withdrawal of forces within 12 months was possible with the acknowledgment that their plan was likely to create a backlog of equipment in Kuwait waiting processing and shipment back to the states. They correctly identify the lesson LTG Pagonis wrote of in his book that the critical constraints in moving forces from Iraq are the wash points and vessel berths at the departure port.[20] Korb and Bergmann's article did not provide details of what and how much material was to be left behind or laws either violated or waived by Congress to meet the time line.

Through a survey of internet articles the common theme of "Burn, Blow Up, and Sale" was offered as an approach to withdrawing US Forces from Iraq in less than 6 months.[21] Generally the writers assume that the Iraqis would be happy to buy much of what we have brought into their country and that either Congress would reimburse our contractors for their lost equipment or these private companies would use the losses as corporate tax write off. Finally, whatever was not bought would simply be burned or blown up to prevent future use. These arguments posed to refute the official estimates lack serious analysis. The assumption that the Iraq government could come to terms

with the purchase of billions of dollars worth of military and contractor material to support a rapid withdrawal is seriously flawed. Sales of Iraq-based US material to other friendly regional governments still leave the issue of moving it out of Iraq. Sale of our scrap material in Iraq has taken several years to develop and likely would struggle to absorb the amount of material required in our rapid withdrawal. Had our troops continued to occupy thousands of tents and live as we did during the 1990's Gulf War, the disposal of canvas by burning would be easy. However, since most now live in containerized or trailer housing units, this technique would attract worldwide condemnation. The images of our excess fuel and munitions storage sites exploding and burning for days would serve as the most powerful terrorist recruiting tools since 911. In short, a withdrawal strategy based on "Burn, Blow Up, and Sale" amounts to wishful thinking and does not provide a sound policy option. Regardless of which policy is taken to withdraw our OIF force the military must recognize that our management of material levels in Iraq has created significant drag in our strategic and operational maneuver.

The costs of excess support are felt throughout the greater logistics system and as funds are allocated to the highest priorities, that being "troops-in-contact," all other theaters and programs economize. With a finite quantity of material, any excess in one theater places needless constraints on others. Robert Lyman's book illustrates these constraints. While England was engaged in the global struggle of World War II, British Field Marshal Slim led a combined Army in the Allies' lowest priority effort: Burma. While stocks were massed in England for the Normandy invasion, transferred to the

Russians for the Ukraine offensive, and pushed forward in the Pacific for the attack of Bougainville, Slim fought to defend India with what material support remained.

> No boats? Asked Slim rhetorically to the Press Club in 1946. We'll build'em! No vegetables, we'll grow'em! No eggs? Duck farms! No parachutes? We'll use gully! No road metal? Bake our own bricks and lay'em! No air strips? Put down bithess! Malaria, we'll stop it! Medium guns busting? Saw off three feet of the barrel and go on shooting! Their motto, "God helps those who help themselves."[22]

Neither Lyman nor Slim's book entitled, "Defeat to Victory" accounted incidents of congested supply and transportation hubs in the Indian-Burma Theater. As indicated above Slim substituted adequate national support with local improvisation to maintain his army in the field. It is impossible to determine the cost his Army paid as a result of its' low priority of support, but a case could be made that the excesses found in Normandy would have been better used elsewhere. The same could be said about the excesses found in Iraq today.

In this contemporary period, with a new administration and a failing economy, it is hard to envision that the nation will continue to support the Global War on Terror at the same levels. In the later phase of the Vietnam War, while testifying to Congress, LTG Heiser responded to the question, "Did it (logistics support) entail unnecessary, hence avoidable costs?...Yes…Supply support to Vietnam was at once a demonstration of superb performance and appalling waste."[23] I suspect our incoming 2009 US Congress is likely to hear the same critical assessment of the war in Iraq. Consequently, like the US Army of the 1970's, we will be forced to economize.

With the newly approved SOFA agreement, the imminent withdrawal of our forces from Iraq is just around the corner; many of our Coalition Forward Operating Bases (FOBs) in cities and villages throughout Iraq must be cleared by June 2009.

Concurrently with the SOFA mandated realignment we will witness the withdrawal of some of our Combat Forces as well as a majority of our Coalition Partners. The supporting time table will require the rapid transfer of munitions and material stocks to the large major logistics hubs already burdened with excess stocks. With units in the FOBs lacking adequate manpower to provide security and properly close the FOBs a wave of improperly cleaned, packed, and labeled material will accumulate in the large bases in Iraq or arriving into Kuwait.

The logistics bases in Iraq were frequently overwhelmed with normal brigade rotations and MRAP fielding programs. Without significant augmentation to handle the added work and dedicated managers the bases could resemble the rail yards of Soissons or Chech'on. The logistics hubs, already routinely subjected to insurgent rocket attacks, congested and unable to disperse hazardous stocks, present a growing risk to our troops and logistics support operations. Bases in Kuwait are the primary relief valve for the US Army's growing excess material problem in Iraq. Without extraordinary support in the way of customs documentation waivers authorized by the Kuwait government, the Army would see increasing shipments become stalled at the border. At various times customs issues at the border slowed convoys, idled trucks, and created congestion in our Southern Iraq bases.

During a December 2008 interview with the logisticians of the 1st TSC at Fort Bragg, NC positive steps to handle this increased workload are underway.[24] To stem the flow of incoming material, greater effort is being made to properly cancel pending requisitions of units preparing to depart Iraq. Materiel Management Teams originally developed to find and account for property on OIF bases have been augmented with

additional personnel and programmed to assist in FOB closures. Supplies are moved by truck from FOBs to the nearest Supply Support Activities for classification, determining if it is either serviceable or unserviceable, and then either placed in the local inventory, prepared for retrograde back to Kuwait, or disposed of locally. Munitions follow the same general process as other supplies, just process through Ammunition Supply Points. Of all the commodities bulk fuel is the best managed with stocks reduced by constricting deliveries and relying on usage to prevent relocating significant quantities. To prevent delays of Coalition retrograde convoys at the border, the Government of Kuwait recently posted customs agents at the military crossing point to assist in resolving issues immediately instead of by appointment, as was the normal practice. In spite of these efforts concerns persist, historically transportation activities within Iraq struggled to support the normal troop rotations and sustainment operations. In addition, recent reports indicate an increasing number of containers are arriving in the Kuwait Supply Activities with material not properly cleaned, sorted or processed in Iraq. The additional demands associated with FOB closures and the withdrawal of BCTs will ultimately require much better integration of the Multi-National Corps Iraq and Theater Army transportation and logistics assets.

Recommendation

At this point, the steps taken in theater will improve the current performance, but in order to ensure the successful drawdown of OIF forces and withdrawal from Iraq, recommend the following 5 measures be implemented: 1) Add restrictions on the push of material and force units to seek solutions within Iraq first, thus causing material stock levels to be drawn down. 2) In the near term, Materiel Management Teams and

Defense Reutilization and Marketing Operations in Iraq and Kuwait must increase manpower and expand to cover numerous operational sites. This is a prudent move considering the need to identify material for future use in Afghanistan and recovery of the residual value from material the Army no longer needs. 3) Brigade logisticians must assess and advise their commanders of the manpower and support requirements to retrograde or liquidate inoperable or excess material in their FOBs. Without this knowledge, local Commanders cannot re-mission units or expand existing contracts to meet the requirements. The time for detailed assessments and preparations for FOB closures is now. Too often material is “discovered” in the FOB closure process, thus generating crisis action and leading to delays and inefficiencies. 5) In 2007 the use of barges from Kuwait to the Iraqi port of Umm Qasr with onward movement by Iraqi truck and rail delivered low priority containers throughout south and central Iraq. Much of what must be withdrawn could be hauled by Iraqis simply by reversing this flow. This has the additional benefit of generating needed revenue and work for the population as well as contributing to the stability while we withdraw. It is in the best interest of our nation and our Army to ensure that our withdrawal is well resourced and executed.

Conclusion

Based on the last 70 years of our Army’s logistics history, preventing the Iron Mountain may not yet be possible. Our nation, and the Army in general, has a tradition of providing overwhelming support to the soldier in the fight. In the opening phase of any operation or campaign, material is rushed to the conflict. Responsibility for controlling the growth and then building down the stocks is the responsibility of the logisticians. The fielding of the Theater-level Sustainment Command with their enduring

mission and greater personnel stability may provide the depth of operational experience needed for addressing the strategic logistic issues.

For the long term, Army logisticians at all level, must convey to their commanders both the benefits and inherent risk associated with material levels. Commanders are not routinely briefed when the Ammunition Supply Points approach or exceed the safe Net Explosive Weight limits, thereby placing their soldiers and operations in jeopardy. The convoy soldiers' risks are not compared with the operational benefit of the 5-10% increase in the supply levels needed to move the briefing chart from Amber to Green. Within every class of supply, there is a hidden cost associated with excess and at a point additional stocks should change our statue from Green back to Amber or Red as they place our troops or operational maneuver at excess risk. It is the logisticians' responsibility to provide the commanders with this balanced report of their stock status.

Few armies are faced with the problem of excess material support. As far as problems go, excess is greatly preferred it over one of chronic shortfalls. Material excess is a problem formed by our nation's willingness and ability to support the soldiers in the field and our Army's risk adverse logistics philosophy. In all aspects of war, the professional soldier must balance benefit and risk, and sustainment is no different. The problem we face in Iraq today will be the same problem we face in Afghanistan tomorrow if we do not learn to balance our capability to support with our actual requirements. Whether the risks are those experienced by Heiser in the rail yards of France and Korea or as suggested by Clausewitz as an encumbrance of little use in rapid operations, we must assess our stock levels, account for them in our planning, and determine the risk they impose on our force.

Endnotes

[1] Carl Von Clausewitz*, On War*, trans. Michael Howard and Peter Paret (New Jersey: Princeton University Press, 1976), 312.

[2] Mitch MacDonald, A Realistic Timetable for Withdrawal, http://www.develocity.com /viewpoints/?column=outbound, (accessed November 4, 2008)

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[4] Joseph M. Heiser, Jr., *A Soldier Supporting Soldiers* (Washington, DC: Center of Military History, 1991), 41.

[5] Ibid.

[6] Ibid., 75.

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