

## BRIGADE SUPPORT BATTALION ORGANIZATIONAL CHALLENGES IN THE CONTEMPORARY OPERATING ENVIRONMENT

BY

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**BRIGADE SUPPORT BATTALION ORGANIZATIONAL CHALLENGES IN THE  
CONTEMPORARY OPERATING ENVIRONMENT**

by

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## **ABSTRACT**

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The combat-zone environment poses unique challenges to a Brigade Support Battalion that are not readily apparent in peacetime, in a garrison environment. Those challenges impact the level and quality of sustainment that the BSB provides to the Infantry Brigade Combat Team that it supports. This paper will examine in detail the equipping and manning shortfalls and their impact on IBCT logistics and will provide recommended solutions and/or mitigation steps, based on current operations in Iraq. Development of recommended solutions will focus on not only IBCT logistics but also provide more effective support in today's Joint/Interagency/Intergovernmental/Multi-national (JIIM) environment.





## BRIGADE SUPPORT BATTALION ORGANIZATIONAL CHALLENGES IN THE CONTEMPORARY OPERATING ENVIRONMENT

The purpose of this research paper is to highlight organizational shortfalls in manning and equipping within the Brigade-Support-Battalion structure that became apparent during the conduct of combat operations in Iraq and to identify potential mitigation steps and solutions to these shortfall challenges. The start point for this subject is a multi-functional support battalion that provides direct-support logistics to an Infantry Brigade Combat Team (IBCT) that has completed transformation to the modular design.

In the late 1990s, Army senior leadership began to recognize a fundamental change in the strategic environment that significantly impacted how the United States would apply military power in the future. “No-notice” conflicts across the globe required shorter response time and a tailored force package that could provide full-spectrum agility. This shift in global conditions provided the impetus for the Army to “transform” to meet these new challenges. The 2001 Quadrennial Defense Review (QDR) articulated a capabilities-based approach in concept and a movement toward modularity designed to dominate future conflict. These concepts became the major focus of Army transformation.<sup>1</sup>

Prior to transformation, an Army heavy brigade was organized with two armor battalions, one mechanized infantry battalion, a reconnaissance troop, and a brigade headquarters company. Combat Support (CS) and Combat Service Support (CSS) enablers for the heavy brigade came from other organizations within the divisional structure. Tactical communications, mobility/counter-mobility/survivability, and tactical

intelligence came from the division's separate battalions while a Forward Support Battalion (FSB), task organized under the Division Support Command (DISCOM), provided logistics support. Enablers generally had a habitual support relationship with a specific brigade and for training or deployment purposes would be temporarily task-organized under the brigade in a direct support role.

As part of transformation, the focus of the Army's capabilities moved from a division-based organization in which a brigade received those enabling capabilities prior to a deployment, to a modular, brigade-based organization in which these enablers were organic. Instead of having eight different brigade designs, the Army created three brigade structures: Heavy, Stryker, and Infantry, each interchangeable between division and corps headquarters, thus providing increased strategic flexibility. These organizational changes migrated division and corps capabilities to the brigade level; created adaptable headquarters capable of integrating Joint operations; achieved common organizational designs across the Army; were "organized as they fight," requiring minimal augmentation; and significantly improved the agility and versatility of the organization.<sup>2</sup>

The 2<sup>nd</sup> Brigade Combat Team, 2<sup>nd</sup> Infantry Division transformed from a heavy brigade to an Infantry Brigade Combat Team (IBCT) in 2004 and 2005 and the 2<sup>nd</sup> Forward Support Battalion (FSB) transformed into 2<sup>nd</sup> Brigade Support Battalion (BSB) simultaneously. The 2<sup>nd</sup> IBCT deployed to eastern Baghdad in support of Operation Iraqi Freedom (OIF) 06-08 in September 2006 and redeployed in January 2008 after fifteen months. The brigade was task organized in Iraq with 2<sup>nd</sup> BSB; two (attached) light infantry battalions, not its organic light infantry battalions; and two (attached)

combined arms battalions; a field artillery battalion; a Reconnaissance, Surveillance, Targeting, and Acquisition (RSTA) squadron; and a Special Troops Battalion (STB). The 2<sup>nd</sup> BSB also provided logistics support to a co-located Military Police (MP) battalion and 27 eleven-man Military Training Teams (MiTTs) and National Police Training Teams (NPTTs) on an area basis. These elements were geographically separated in six different locations in eastern Baghdad. The BSB consisted of a distribution company (A Company), a field maintenance company (B Company), a medical company (C Company), a headquarters company (HHC), and four Forward Support Companies (FSCs) that were attached to the RSTA squadron (D FSC), two light infantry battalions (E and F FSC), and field artillery battalion (G FSC) that they habitually supported. The two infantry battalions and two combined arms battalions that were attached to and task organized under 2<sup>nd</sup> IBCT in Iraq came to the brigade with attached FSCs from their parent organizations. BSB authorities to re-task organize equipment and personnel within the battalion spanned HHC through C Company only, based on the existing command relationship.

Through fifteen months of combat, 2<sup>nd</sup> BSB experienced manning and equipping challenges that impacted support to the IBCT. Those challenges originated from a transformation process with admittedly evolving and “tentative” authorization documents, both the Table of Organization and Equipment (TOE) and the Modified Table of Organization and Equipment (MTOE). These could not anticipate all aspects of the rapidly-changing global environment and dynamic mission set of the light Brigade Support Battalion in combat.

While there are numerous equipping and manning issues that affect IBCT logistics, this paper will focus on six that are key in the contemporary operating environment (COE) of Iraq and arguably elsewhere. These manning and equipping issues are based on MTOE #FC 63335GFC02, *Brigade Support Battalion w/FSC*<sup>3</sup>, the authorization document that 2<sup>nd</sup> BSB used as a sourcing and authorization document at the time. A newer MTOE with a 16 September 2008 effective date (EDATE) superseded this document but, no changes in the new document affect the issues addressed in this paper.

The six issues are:

- The lack of an organic, mobile, security element for Combat Logistics Patrols (CLPs), time-sensitive recovery, and BSB security.
- Military Occupational Specialty (MOS) 92M Mortuary Affairs Specialist<sup>4</sup> manning in the IBCT.
- The lack of a vehicle “sanitization” capability.
- MOS 45B Small Arms Repairer<sup>5</sup> manning in the Infantry and RSTA FSCs.
- Material handling equipment (MHE) in the BSB.
- Small-arms protection for time-sensitive, recovery crews.

#### Lack of Organic, Mobile, Security Element

The battalion deployed fully prepared to provide all organic security for BSB operations in support of the IBCT as no other security element was available from the BCT. Based on the known mission set, 2<sup>nd</sup> BSB conducted mission analysis at home station, prior to the Mission Rehearsal Exercise (MRE), and determined a need for a small, mobile, security element that could secure BSB movements between two

locations. However, the BSB's security requirements increased significantly as their predecessors in country determined a need to secure multiple combat logistics patrols (CLPs) that would resupply geographically-separated brigade elements and time-sensitive, recovery teams that had the ability to respond on short notice anywhere in the brigade's area of operation (AO) to secure and recover damaged or destroyed equipment.

The battalion also needed to be able to provide a quick reaction force (QRF)-type capability to address other, unplanned events. Expecting the BCT to resource a security element specifically for the BSB is unlikely so this capability must be internal. The battalion's MTOE possessed no authorization for an organic, mobile, security element or assets for such an element, necessitating the creation of an ad-hoc organization from internal, battalion assets. In planning for this mobile, security element, the battalion prepared for the potential that they would have to conduct both CLP and recovery operations simultaneously, as a worst-case scenario, and determined a need for a platoon-sized force, consisting of fourteen vehicles and forty-four personnel who could function as two, separate, maneuver elements if required.

The battalion determined that platoon size was appropriate given the assets available -- pulled "out of hide" from the battalion -- and the impact on other battalion responsibilities, e.g. core BCT sustainment tasks. The planned CLP frequency and CLP density also had an impact on this decision. The battalion planned for two CLPs, one with twenty-two to twenty-six vehicles and one with nine to eleven vehicles, including security, based on known operating tempo and missions, resupplying two other FOBs every other night, on average. The 2<sup>nd</sup> BSB also considered the electronic counter-

measure (ECM) support necessary to provide adequate protection/coverage for the planned CLP densities and the security requirements deemed necessary to respond to enemy contact from an Improvised Explosive Device (IED) or from a direct-fire engagement. These requirements include the ability to secure the site, evacuate casualties, and continue the CLP.

The battalion's base companies, HHC through C Co., were authorized fifty-three High Mobility Multipurpose Wheeled Vehicles<sup>6</sup> (HMMWVs), though the battalion was equipped with up-armored variants, Models M1114<sup>7</sup> and M1151<sup>8</sup>, in Iraq to improve force protection and counter the increasing IED threat. Crew-served weapons, communications equipment, and ancillary equipment to resource the security element's requirements came from the base companies. Forty-four Soldiers from across the base companies manned the mobile, security element. The element's key tasks were to provide effective command & control, first responder/casualty treatment and evacuation, hasty-vehicle repair and recovery, and point & area security, mounted & dismounted.

The security element consisted of a headquarters element with one Captain and Staff Sergeant (Promotable), serving as Platoon Leader & Platoon Sergeant, and two sections each with a Staff Sergeant in charge as Section Sergeants. Each section had one senior Sergeant, Team Leader, and four other Sergeants as Vehicle Commanders. Each vehicle crew consisted of the afore-mentioned NCO plus two Soldiers from various MOSs as gunner and driver. Each section also had an attached medic.

All mobile-security-element Soldiers left those companies with personnel shortfalls and impacted their company's ability to provide logistics support to the IBCT. In most cases, the BSB mitigated those shortfalls by cross training, accomplished

during the pre-deployment phase and reinforced early in the deployment. However, the battalion was unable to counter the total personnel loss in the companies, which challenged each company's ability to accomplish doctrinal and non-doctrinal missions on a daily basis.

As the mobile, security element was ad-hoc, it had no doctrinal command, administrative, or support structure to guide daily operations. The battalion offset the absence of this structure by formally attaching it to the Headquarters & Headquarters Company for administrative purposes and task organizing it under the control of the Battalion Operations Officer/S3 for mission purposes. The mobile, security element became another battalion asset, similar to the base companies.

There are several mitigation techniques to offset the loss of personnel and equipment for the mobile, security element. Cross training personnel allows companies to continue to provide effective support, albeit at a reduced level of manning. This reduced manning equates to extended duty days. Though not a significant impact given the 24-hour, round-the-clock nature of combat operations, the shortages could challenge sustainability over the long term. Personnel augmentation above MTOE authorization prior to deployment could offset the loss in manpower, though the request must be well in advance of the deployment. On a multi-brigade installation with a large manpower pool from which to draw, post-wide support for this action is potentially feasible without significant impact and could occur more quickly than a formal request for overage from Human Resources Command (HRC). Designating a specific company with responsibility for security is also an option though managing, equipping, and training the security platoon remains a battalion effort to ensure success and minimize



the impact of the disruption in service to the BCT during security operations. The battalion determined that creating an ad-hoc formation was the most viable option.

As no single company in the BSB possesses the requisite equipment for a mobile, security element, sourcing equipment by either cross leveling from the companies in the battalion, within the BCT, or from non-deploying units at home station is necessary. As a last resort, drawing in-theater from Army Pre-positioned Stocks (APS) or redeploying organizations that will not be backfilled, i.e. no replacement unit for them in theater, are potential sources. Ideally, sourcing would occur at home station, giving the mobile, security element ample opportunity to gain familiarity and proficiency on the equipment and afford them time to train on and become proficient in the non-doctrinal, dismounted and mounted, security-related tasks prior to deployment. The battalion determined that HMMWVs were the most versatile platform for the known BSB missions and the terrain in eastern Baghdad. Other logistics units in Iraq used tactical 2.5-ton and 5-ton trucks for the same tasks and missions with success, which could mitigate sourcing challenges if HMMWVs are unavailable.

#### MOS 92M Manning in the IBCT

During OIF 06-08, 2<sup>nd</sup> BSB provided mortuary-affairs support on an area basis in eastern Baghdad, supporting all forces operating in the 2<sup>nd</sup> IBCT battle space. There is currently one authorized Mortuary Affairs (MA) Specialist in the IBCT and due to the criticality of this capability in the current operational environment, the Army ensures that this position remains filled at all times. The one 92M authorization is specified for a Staff Sergeant (Skill Level 3, E-6) and is found in the Support Operations Section of the BSB<sup>9</sup>; however, 2<sup>nd</sup> BSB's MA Specialist was a 92M40, Sergeant First Class.

Doctrinally, the Mortuary Affairs Specialist performs duties relating to deceased personnel to include the following: Area searches for unburied dead; hasty, isolated, or unmarked graves; personal effects; and identification media. He disinters remains; records personal effects; evacuates remains and personal effects to designated points; determines and records recovery locations on maps, sketches, and overlays; and he establishes and records tentative identification.

He assists in preparation, preservation, and shipment of remains. He also inventories, safeguards, and evacuates personal effects; assists in mass casualty burials; and plans and supervises search-and-recovery operations of deceased personnel, personal effects, and identification media. He instructs in special handling, marking, and shipping of contagious-disease cases and processing of contaminated remains; supervises receipt, storage, and issue of supplies and equipment; accompanies remains and personal effects to designated locations; and assists with arrangements for military honors at place of burial. He advises commanders and headquarters staff on mortuary-affairs activities and coordinates activities of subordinate units; establishes and maintains liaison with support and combat units, and coordinates transportation requirements for deceased personnel.<sup>10</sup>

In Iraq, the Mortuary Affairs Specialist served as the single point of contact in the BCT to process remains and personal effects with the BSB Support Operations Officer assisting him as required. He also provided direct oversight in the recovery of remains from the battlefield. The battalion operated the only remains collection point in all of eastern Baghdad and in fifteen months received, processed, and evacuated sixty-five sets of human remains, including US military, US contractors, Local Nationals (LNs),

and Third Country Nationals (TCNs). Additionally, the battalion Mortuary Affairs Specialist conducted remains and personal effects recovery from fifty-four battle-damaged vehicles, supervised vehicle “sanitization,” and trained mortuary-affairs teams from new-in-country BCTs to ensure they were prepared for the complexity of the recovery tasks in Iraq. For each MA event, he conducted detailed inventories of personal and professional gear for every set of remains and accompanied every set of remains to the Mortuary Affairs Collection Point (MACP) at Baghdad International Air Port (BIAP), where he then conducted a joint inventory and accountability handover with MACP 92M personnel.

In eastern Baghdad during OIF 06-08 the most significant threat to US and Coalition forces was the Explosively-Formed Penetrator (EFP) version of the Improvised Explosive Device (IED). In fifteen months, the BSB conducted sixty-nine, time-sensitive recovery operations with fifty-two of those recoveries being the result of EFP strikes. The battalion’s experience with EFPs was that their effects on the human body were largely catastrophic and that many of them led to a loss of life and/or traumatic wounding. Based on the Pre-Deployment Site Survey (PDSS), the battalion identified the need to conduct 24-hour, mortuary-affairs operations that included remains and personal-effects recovery from vehicles and/or point of death, assisting and supervising company sanitization teams as they processed catastrophically-damaged vehicles prior to classification and turn-in, and remains and personal effects escort to the MACP at BIAP.

The amount of time and manpower required to remove remains and personal effects from a damaged or destroyed vehicle is difficult to quantify -- the extent of the

vehicle damage and the condition and number of sets of remains are the most significant factors affecting this timeline. In over fifteen months of operations, clearing a single set of relatively-intact remains from an intact vehicle and preparing them for evacuation to the Theater Mortuary Evacuation Point (TMEP) in one to two hours is feasible once the damaged vehicle is moved from the point of incident to the BSB's remains removal/sanitation point, a discrete BSB-maintained location on the Forward Operating Base (FOB). A catastrophically-destroyed and burned vehicle with multiple sets of remains, the worst-case scenario often repeated during the BSB deployment, could take eight to ten hours for MA to clear. On eight occasions in fifteen months, MA recovered multiple sets of remains from a single vehicle and, on more than half of the incidents, remains were removed from catastrophically-damaged vehicles.

Given the anticipated volume of mortuary affairs work the battalion would experience during the deployment and the fifteen-day, Environmental Morale Leave (EML) period that each Soldier took during their deployment, only one MA specialist to support the IBCT for fifteen months was simply not adequate. The battalion identified a non-92M Soldier who was interested in MA at home station, prior to the MRE, and attached him to HHC with duty as the Assistant MA Specialist. Under the direct supervision of the assigned 92M40, this Soldier trained on core-task proficiency on Skill Level One through Three tasks prior to deployment and assisted the 92M40 during every MA event while deployed. Having two, trained MA personnel in the battalion gave the organization some flexibility in allowing the 92M to leave the FOB for extended periods, e.g. for EML and to train other MA personnel on other FOBs, while still

providing MA support to the BCT. Having two, trained personnel also became essential in the cases of recovery of multiple sets of remains.

#### The Lack of a Vehicle “Sanitization” Capability

In the battalion’s experience over fifteen months, IED attacks on vehicles that resulted in loss of life or catastrophic wounding often left “human residue” in the affected vehicle. This material had to be removed prior to either repair or disposal of the vehicle. As part of the vehicle MA clearing process, the MA team would remove human remains, disassociated parts, and personal effects. However, in many cases, there would still be evidence of the event, e.g. blood and minute quantities of human tissue requiring removal prior to repairing or disposal of the vehicle. This human residue was in all cases too small or diffused to be collected efficiently by the MA team as this process is extremely time-consuming but still must be removed prior to vehicle disposition to minimize any potential, biological hazard and to minimize the psychological impact on the owning unit. The supporting maintenance facility determines final disposition of the vehicle regarding repair or disposal. However, regardless of the vehicle’s fate, it still has to be cleaned and the BSB accomplished this task in east Baghdad.

As there is no specified “sanitization team” authorized in the MTOE, the BSB created ad-hoc teams internally using BSB base-company assets. Initially, the BSB created only one team, mirroring the unit 2<sup>nd</sup> BSB replaced, consisting of eight Soldiers of all MOSs and grades. After over twenty sanitization missions and with over eight months left in the battalion’s rotation, that team began demonstrating signs of “mission fatigue,” e.g. loss of effectiveness and efficiency. At that point the battalion created similar teams in each of the other three base companies and each company conducted

sanitization missions on a rotating basis. There was no formal, train-up process to gain proficiency in this task as it is completely non-doctrinal and requirements-based. The new teams worked with the veteran team for three missions. The existing team's key leaders then supervised the new teams when they conducted the operation until those leaders determined that the new team had a thorough understanding of the process.

As sanitization requirements varied during OIF 06-08 from BCT to BCT, depending on frequency and level of enemy contact, and because this task is combat-zone specific and not necessary in peacetime, justification of a permanent, organizational-structure change in the BSB is problematic. The most supportable mitigation technique for this shortfall would be to identify personnel with prior vehicle sanitization-type experience to use as a training cadre, create ad-hoc teams prior to the deployment, have them become familiar with the different types of vehicles in the BCT, establish a discrete location on the FOB for sanitization, and rehearse the vehicle reception and staging process until proficient. If possible, the BSB should coordinate for sanitization key leaders to observe other organizations conducting this mission as well.

There is no formal, Army doctrine that addresses either vehicle sanitization-team organization or key tasks. Each organization responsible for it within a BCT accomplishes this mission uniquely. During OIF 06-08, each BCT in Multi-National Division – Baghdad (MND-B) that suffered casualties as a result of IED attacks on their vehicles had to complete this task prior to the repair or evacuation of the affected vehicle and no two BCTs accomplished this task the same way. In 2<sup>nd</sup> IBCT, sanitization was the BSB's responsibility. In other BCTs, the affected maneuver units accomplished the task. In each case, units accomplished the task without formal training and through

the use of an ad-hoc capability. Even though this requirement only exists in a combat zone, it is enduring. The Army should address it formally and establish doctrine for deploying organizations to reference as they prepare for combat.

#### MOS 45B Manning in the Infantry and RSTA FSCs

Under the current MTOE authorization for an IBCT BSB, the Infantry and RSTA Forward Support Companies have one Skill Level 1 (E-4/Specialist or below) Small Arms Repairer. In a Light Infantry battalion, that single 45B10<sup>11</sup> provides small arms repair capability for a density of 761<sup>12</sup> weapons (M2 Heavy Barrel .50 Cal machine gun, M240B machine gun, M249 Squad Automatic Weapons (SAW), M4 rifle, M9 pistol, Mk-19 grenade launcher, and M107 / M24 sniper rifle) in the supported battalion plus 169<sup>13</sup> weapons within the FSC. In a RSTA Squadron, that 45B10<sup>14</sup> supports a density of 487<sup>15</sup> of the same-type weapons in the supported squadron plus 119<sup>16</sup> within the FSC. The 45B10's primary duty is to provide direct support/general support maintenance to the supported battalion on small arms and other related equipment.

Under the modular design of the transformed Army BCT, the FSC, while assigned to the BSB, provides direct-support logistics to a specific battalion and in Iraq, 2<sup>nd</sup> BSB's FSCs were collocated with the battalions they supported and attached to them for command & control and administrative purposes. In the two Infantry FSCs, the battalions they supported were detached from the parent, 2<sup>nd</sup> IBCT and cross attached to other BCTs in other parts of Iraq. No formal, command relationship between the detached battalion FSCs and the gaining BSB existed, though the BSB provided oversight and direct support logistics to those FSCs.

This lack of formal, command relationship inherently affected the level of emphasis the gaining BSB placed on the newly-arrived FSC as the BSB tended to focus primarily on their permanent task organization first, then on attachments. The absence of BSB “love” in this relationship placed the responsibility for small arms repair within the attached battalion almost completely on that E-4/Specialist in the FSC. The detached IN FSC 45B10s indicated that the same effort was not in effect in the BSBs which supported them.

In 2<sup>nd</sup> BSB, the assigned 45B10s had an average of seven months in the battalion prior to deployment, as they had all arrived as individual replacements to fill vacancies created by Soldiers who had departed the organization once Stop Loss/Stop Move from the previous Iraq deployment ended. Because these Soldiers were fairly inexperienced, their ability to troubleshoot, diagnose, and repair small arms in a timely manner without qualified supervision was extremely limited and this limitation led to a reduction in the quality of small-arms repair support provided to the supported battalions.

The 2<sup>nd</sup> BSB’s leaders made a conscious decision to assume risk in the base companies by assigning the most senior and experienced 45B10s to the FSCs, knowing that their competence and ability to operate independently were crucial to the supported battalion’s success. The 2<sup>nd</sup> BSB also made a deliberate outreach effort with the B Co. Armament Tech and Armament Non Commissioned Officer In Charge (NCOIC) to ensure that the FSCs which 2<sup>nd</sup> IBCT gained as attachments did not have to operate without competent, trained, small-arms-repair supervision.



The existing organizational structure sets conditions for sub-optimal, small-arms-repair support. The FSC lacks the depth in manning to allow that Soldier to depart for an extended period without severely impacting the maneuver battalion's ability to sustain combat operations. The authorized junior grade of the authorized 45B ensures that the FSC's sole small arms repairer will be relatively inexperienced and constrained in independent action. This issue has been an ongoing one since the Army implemented the modular design, as highlighted in *Army Logistician* in June 2006.<sup>17</sup> Temporary augmentation by B Co. might mitigate the 45B absence but would further impact B Co.'s ability to support other BCT units.

Because the IBCT BSB is only authorized seven<sup>18</sup> MOS 45B Soldiers, across all grades, including only two NCOs (E5s), cross leveling the experienced (read as "senior") 45Bs to the FSCs only helps two of the four at best, still leaving two FSCs with a junior Soldier as their only repairer. With an Armament Tech (913A) and a 45K30<sup>19</sup> authorized in the BSB's B Co., this cross leveling of senior 45Bs to the FSCs leaves only junior 45Bs in B Co. under their supervision, requiring the company to accept minimal risk in support. The Support Operations Officer must focus his section's maintenance-management effort to monitor the two FSCs with junior 45Bs for potential periods of delay, backlog, or sub-optimal support, shifting repair resources as necessary to mitigate those periods as required. The BSB, through the BCT, division, and/or installation, can also request a personnel swap with non-deploying units or the installation to trade junior, inexperienced Soldiers for more senior, experienced 45Bs for the FSCs.

### Material Handling Equipment (MHE) in the BSB

In the IBCT BSB MTOE there are seven 10,000 pound capacity, Variable Reach (VR) Rough Terrain (RT), All Terrain Lifter Army System (ATLAS) forklifts in the BSB A Co. (Distribution Company): three in the General Supply Section, two in the Class IX Section, and two in the Ammunition Transfer & Holding Point (ATHP) Section to provide material handling support to the BCT.<sup>20</sup> All seven are capable of moving 463L pallets and ISU-90 containers. In Iraq, almost all supplies, except major assemblies or bulk, arrive at FOBs on either 463L pallets or in 20' shipping containers or ISU-90 containers. There are no other forklifts organic to the BCT capable of handling 463L pallets and ISUs effectively or lifting major assemblies.

There are numerous, recurring, materiel-handling requirements across the BSB outside the distribution company that require MHE, especially in a deployed environment. All of the FSCs require MHE to upload and download supplies during CLP operations; to upload, download and move major assemblies during maintenance activities; and during deployment and redeployment activities, moving ISU-90 containers and 463Ls. They also provide much of the same MHE support to the maneuver and fires battalions that they sustain in their direct-support role.

Like the MOS 45B issue, forklifts in the FSCs have been an issue since the Army implemented the modular design. *Army Logistician* highlighted this issue in June 2006.<sup>21</sup> In the field maintenance company, MHE moves major assemblies and oversized items and assists in vehicle repair daily. The FSCs and other BSB companies have no organic forklifts, which further hinder their ability to handle and move material. In the absence of MHE, companies resort to either breaking the pallets and off-loading supplies by hand -- very manpower intensive and time consuming -- or using non-standard MHE like the

M984 Heavy Expanded Mobility Tactical Truck (HEMTT) Wrecker boom -- also time consuming and potentially dangerous -- or attempt to borrow MHE from co-located contractors like Kellogg, Brown, & Root (KBR) on an as-needed basis. While these “work-arounds” accomplish the task, they are sub-optimal.

#### Small-Arms Protection for Time-Sensitive Recovery Crews

During the deployment, 2<sup>nd</sup> BSB executed sixty-nine, time-sensitive recovery missions in eastern Baghdad in support of the BCT. The M984 HEMTT Wrecker was the primary means of recovery in almost all cases involving wheeled vehicles. The M984 has an organic two-Soldier crew who is armed with M4 rifles for personal protection. During all recovery operations both crew members are actively engaged: rigging vehicles for towing or lifting, securing loads, recovering personal equipment, moving chains and tow bars, etc., while other forces provided area security in a perimeter around the site.

In an urban environment like Baghdad, civilian personnel routinely moved about in proximity to the recovery site and the foot traffic, especially in the densely-populated mahallas (neighborhoods), poses a significant security challenge. The recovery crews thus found that they were unable to maintain their rifles in a ready-to-use posture for close-in protection as they were fully engaged with recovery tasks. They had to choose between accomplishing the vehicle recovery or maintaining their rifles at the ready. The battalion identified this equipment shortfall early in the deployment and temporarily solved it by cross leveling pistols from battalion staff personnel to the recovery crews while processing a request for a Department of the Army temporary loan. Approval and

sourcing of the loan occurred quickly and all recovery-crew personnel were equipped with pistols for close-in protection.

### Conclusion and Recommendations

This document has explored six organizational shortfalls in manning and equipping that impact how a light Brigade Support Battalion sustains an Infantry Brigade Combat Team in the Contemporary Operating Environment of Iraq and identified potential mitigation techniques to overcome those shortfalls.

Five of the six areas addressed: the lack of an organic, mobile-security capability; MOS 92M manning; MOS 45B manning; material handling equipment; and small-arms protection for recovery crews have existing, operational, Army solutions for ready implementation through the use of TOE change document requests in the near term that would greatly enhance BSB support provided to the IBCT.

Unfortunately, a review of the latest MTOE for UIC WAJEEA (704<sup>th</sup> BSB, formerly 2<sup>nd</sup> BSB) confirmed that there has been no change to the authorization in the most current version.<sup>22</sup> The optimal solution to the mobile, security element shortfall is to create and authorize this element within the organizational structure of the IBCT BSB using the Army Organizational Life Cycle Model (AOLCM)<sup>23</sup> and, in accordance with Army Regulation 71-32,<sup>24</sup> through submission of a request for doctrinal change and a TOE change document request, using a DA Form 2028. This process can be a long one, five to forty-six months,<sup>25</sup> and cannot happen quickly in a time-constrained environment. However, pursuance is appropriate as the long-term solution if operating conditions similar to 2<sup>nd</sup> BSB's experience continue -- as currently expected.

In mitigating the impact of having a single MA Specialist, there are a number of possible options. The long-term solution is to submit a TOE change document to create the authorization for additional 92M personnel in the battalion IAW with AR 71-32; however, that process takes an extended period to accomplish and will not help in the near term. A near-term solution is to request augmentation from either the installation, higher headquarters, or from the Department of the Army. This immediate solution to identify a Soldier in the organization who is interested in MA operations and begin cross training them has challenges. For a candidate to succeed in 92M-type work, he or she must be very interested in this type of work as human remains recovery as a result of combat action is unpleasant at best and not for the squeamish or faint of heart. The candidate selected in 2<sup>nd</sup> BSB decided to reclassify from his current MOS in to MOS 92M as a result of his experience.

The optimal, long-term solution for the 45B shortfall is to increase the authorization in both quantity and grade of 45Bs in the IBCT BSB FSCs using the formal TOE change request. Additionally, an increase in authorization for the small arms repairman tool kit (Para 609, LIN W51910<sup>26</sup>) must accompany the increase in personnel authorization to ensure adequacy of tool availability; however, there is no other special-tool impact of these changes.

The Distribution Company does not require seven ATLAS forklifts to sustain operations. If the field maintenance company, Supply Support Activity (SSA), and ATHP are located on the same FOB as is ordinarily the case, five ATLAS can accomplish this support. The remaining two are available to cross level to two of the FSCs. Cross leveling two forklifts obviously would not solve the MHE problem in the remaining two

FSCs but reduces the number of non-MHE supported companies, increasing overall BSB productivity and improving support to the BCT. The longer-term solution would be to request an increased authorization, via TOE change request, of ATLAS so that each FSC and the field maintenance company had at least one. This increased authorization and sourcing ensures that this capability is organic to all maneuver elements in the BCT. The most current MTOE<sup>27</sup> confirms that no change in the ATLAS authorization or distribution has taken effect.

Regarding the pistols for recovery crew protection, the DA loan solved the equipping problem temporarily. Cross leveling weapons between Soldiers in the battalion based on their job would also temporarily solve this problem. The long-term solution is to submit a request for TOE change, increasing the authorization for M9 pistols in the field maintenance company for the recovery section.

The sixth area, the sanitization team, requires institutional-level resolution as no doctrine for this capability currently exists. Though this issue is temporal, requirements-driven, and specific to combat, it becomes a major undertaking for responsible units and cannot be overlooked.

There are a number of other organizational challenges. The six addressed in this paper, however, had the greatest impact on the level and quality of support that the BSB provides. In some cases, the challenges required the Soldiers and leaders of 2<sup>nd</sup> BSB to identify non-doctrinal and non-traditional solutions to overcome them. In all cases they required key leaders to devote energy, time and resources to problems that, if addressed prior to deployment, might have led to better use of time, and improved support.

The Soldiers and leaders overcame these challenges through ingenuity, team work, and commitment. Such flexibility enabled 2<sup>nd</sup> IBCT to conduct combat operations in Iraq for fifteen months, achieving tremendous success in eastern Baghdad, unconstrained by logistics.

## Endnotes

<sup>1</sup> US Department of the Army, *2003 U.S. Army Transformation Roadmap* (Washington, DC: US Department of the Army, 2003), 1. <http://www.army.mil/2003transformationroadmap/FwdAndExecSum.pdf>, (accessed October 22, 2008).

<sup>2</sup> US Department of the Army, *Army Transformation and The Army Campaign Plan* (Washington, DC: US Department of the Army, 2006), 7. <http://wikileaks.org.uk/leak/us-army-transformation.pdf>, (accessed October 22, 2008).

<sup>3</sup> US Army Force Management Support Agency (USAFMSA), "Brigade Support Battalion w/FSC (IBCT) – MTOE," [https://www.usafmsardd.army.mil/WebTAADS/Frame\\_DocTypes.asp?GUID=1208582848](https://www.usafmsardd.army.mil/WebTAADS/Frame_DocTypes.asp?GUID=1208582848) (accessed October 27, 2008). 2<sup>nd</sup> IBCT, 2<sup>nd</sup> ID reflagged April 16, 2008 to become 4<sup>th</sup> IBCT, 4<sup>th</sup> ID. 2<sup>nd</sup> BSB reflagged to become 704<sup>th</sup> BSB at the same time. Only the name changed – 704<sup>th</sup> BSB retained 2<sup>nd</sup> BSB's Unit Identification Code (UIC) WAJEA and the table of organization and equipment (TOE).

<sup>4</sup> About.com Home Page, "92M Mortuary Affairs Specialist," <http://usmilitary.about.com/od/enlistedjobs/a/92m.htm> (accessed October 24, 2008).

<sup>5</sup> About.com Home Page, "45B Small Arms Repairer," <http://usmilitary.about.com/od/enlistedjobs/a/45b.htm> (accessed October 24, 2008).

<sup>6</sup> US Army Force Management Support Agency (USAFMSA), "MTOE 63335GFC02 Brigade Support Battalion w/FSC, EDATE 16 October 2006," [https://webtaads.belvoir.army.mil/protected/WebTAADS/Frame\\_DocTypes.asp?GUID=1611959618](https://webtaads.belvoir.army.mil/protected/WebTAADS/Frame_DocTypes.asp?GUID=1611959618) (accessed October 26, 2008).

<sup>7</sup> Army Guide Home Page, "M1114 Up-Armored HMMWV (UAH)," <http://www.army-guide.com/eng/product1431.html> (accessed November 17, 2008).

<sup>8</sup> Army Guide Home Page, "M1151 Up-Armored HMMWV (UAH)," <http://www.globalsecurity.org/military/systems/ground/m1151.htm> (accessed November 17, 2008).

<sup>9</sup> US Army Force Management Support Agency (USAFMSA), "Brigade Support Battalion w/FSC (IBCT) – MTOE," [https://webtaads.belvoir.army.mil/protected/WebTAADS/Frame\\_DocTypes.asp?GUID=1611959618](https://webtaads.belvoir.army.mil/protected/WebTAADS/Frame_DocTypes.asp?GUID=1611959618) (accessed October 29, 2008). Reference MOS 92M30 Authorization in the BSB, Para 105, Line 19.

<sup>10</sup> The US Army Info Site Home Page, "92M: Mortuary Affairs Specialist," <http://www.us-army-info.com/pages/mos/quartermaster/92m.html> (accessed December 08, 2008).

<sup>11</sup> US Army Force Management Support Agency (USAFMSA), "Brigade Support Battalion w/FSC - MTOE," [https://webtaads.belvoir.army.mil/protected/WebTAADS/UIC\\_Frame.asp?GUID=1611959618&DOC\\_TYPE=MTOE&Update=GETSQL&MACOM=FC&DOCNO=63335GFC02&CCNUM=4308&CID=LPEXT&DOCST=A&UIC=WAJEAA&EDATE=9/16/2008](https://webtaads.belvoir.army.mil/protected/WebTAADS/UIC_Frame.asp?GUID=1611959618&DOC_TYPE=MTOE&Update=GETSQL&MACOM=FC&DOCNO=63335GFC02&CCNUM=4308&CID=LPEXT&DOCST=A&UIC=WAJEAA&EDATE=9/16/2008) (accessed December 02, 2008). Reference MOS 45B10 Authorization in the IBCT IN FSC, Para 609, Line 08.

<sup>12</sup> US Army Force Management Support Agency (USAFMSA), "IBCT Light Infantry Battalion Small Arms Weapon Density," [https://webtaads.belvoir.army.mil/protected/WebTAADS/Frame\\_DocTypes.asp?](https://webtaads.belvoir.army.mil/protected/WebTAADS/Frame_DocTypes.asp?) (accessed December 15, 2008).

<sup>13</sup> US Army Force Management Support Agency (USAFMSA), "Small Arms Authorization in the IBCT IN FSC," [https://webtaads.belvoir.army.mil/protected/WebTAADS/UIC\\_Frame.asp?GUID=1968214857&DOC\\_TYPE=MTOE&Update=GETSQL&MACOM=FC&DOCNO=63335GFC02&CCNUM=4308&CID=LPEXT&DOCST=A&UIC=WAJEAA&EDATE=9/16/2008](https://webtaads.belvoir.army.mil/protected/WebTAADS/UIC_Frame.asp?GUID=1968214857&DOC_TYPE=MTOE&Update=GETSQL&MACOM=FC&DOCNO=63335GFC02&CCNUM=4308&CID=LPEXT&DOCST=A&UIC=WAJEAA&EDATE=9/16/2008) (accessed January 13, 2009). Reference Equipment Recapitulation, Para 600.

<sup>14</sup> US Army Force Management Support Agency (USAFMSA), "MOS 45B10 Authorization in the IBCT RSTA FSC," [https://webtaads.belvoir.army.mil/protected/WebTAADS/UIC\\_Frame.asp?GUID=1968214857&DOC\\_TYPE=MTOE&Update=GETSQL&MACOM=FC&DOCNO=63335GFC02&CCNUM=4308&CID=LPEXT&DOCST=A&UIC=WAJEAA&EDATE=9/16/2008](https://webtaads.belvoir.army.mil/protected/WebTAADS/UIC_Frame.asp?GUID=1968214857&DOC_TYPE=MTOE&Update=GETSQL&MACOM=FC&DOCNO=63335GFC02&CCNUM=4308&CID=LPEXT&DOCST=A&UIC=WAJEAA&EDATE=9/16/2008) (accessed December 16, 2008).

<sup>15</sup> US Army Force Management Support Agency (USAFMSA), "IBCT RSTA Squadron Small Arms Density," [https://webtaads.belvoir.army.mil/protected/WebTAADS/Frame\\_DocTypes.asp?](https://webtaads.belvoir.army.mil/protected/WebTAADS/Frame_DocTypes.asp?) (accessed December 15, 2008).

<sup>16</sup> US Army Force Management Support Agency (USAFMSA), "Small Arms Authorization in the IBCT RSTA FSC," [https://webtaads.belvoir.army.mil/protected/WebTAADS/UIC\\_Frame.asp?GUID=1968214857&DOC\\_TYPE=MTOE&Update=GETSQL&MACOM=FC&DOCNO=63335GFC02&CCNUM=4308&CID=LPEXT&DOCST=A&UIC=WAJEAA&EDATE=9/16/2008](https://webtaads.belvoir.army.mil/protected/WebTAADS/UIC_Frame.asp?GUID=1968214857&DOC_TYPE=MTOE&Update=GETSQL&MACOM=FC&DOCNO=63335GFC02&CCNUM=4308&CID=LPEXT&DOCST=A&UIC=WAJEAA&EDATE=9/16/2008) (accessed December 20, 2008).

<sup>17</sup> Thomas J. Foster, "Modular BSBs in Operation Iraqi Freedom," *Army Logistician* 38, No. 3, May-June 2006, [http://www.almc.army.mil/alog/issues/may-june06/mod\\_BSB\\_oper.html](http://www.almc.army.mil/alog/issues/may-june06/mod_BSB_oper.html) (accessed 20 January 2009).

<sup>18</sup> US Army Force Management Support Agency (USAFMSA), "MOS 45B Authorization in the IBCT BSB," [https://webtaads.belvoir.army.mil/protected/WebTAADS/UIC\\_Frame.asp?GUID=1968214857&DOC\\_TYPE=MTOE&Update=GETSQL&MACOM=FC&DOCNO=63335GFC02&CCNUM=4308&CID=LPEXT&DOCST=A&UIC=WAJEAA&EDATE=9/16/2008](https://webtaads.belvoir.army.mil/protected/WebTAADS/UIC_Frame.asp?GUID=1968214857&DOC_TYPE=MTOE&Update=GETSQL&MACOM=FC&DOCNO=63335GFC02&CCNUM=4308&CID=LPEXT&DOCST=A&UIC=WAJEAA&EDATE=9/16/2008) (accessed January 07, 2009).

<sup>19</sup> US Army Force Management Support Agency (USAFMSA), "913A and 45K30 Authorization in the IBCT BSB," [https://webtaads.belvoir.army.mil/protected/WebTAADS/UIC\\_Frame.asp?GUID=1968214857&DOC\\_TYPE=MTOE&Update=GETSQL&MACOM=FC&DOCNO=63335GFC02&CCNUM=4308&CID=LPEXT&DOCST=A&UIC=WAJEAA&EDATE=9/16/2008](https://webtaads.belvoir.army.mil/protected/WebTAADS/UIC_Frame.asp?GUID=1968214857&DOC_TYPE=MTOE&Update=GETSQL&MACOM=FC&DOCNO=63335GFC02&CCNUM=4308&CID=LPEXT&DOCST=A&UIC=WAJEAA&EDATE=9/16/2008)



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<sup>20</sup> US Army Force Management Support Agency (USAFMSA), "MHE Authorization in the IBCT BSB," [https://webtaads.belvoir.army.mil/protected/WebTAADS/UIC\\_Frame.asp?GUID=1968214857&DOC\\_TYPE=MTOE&Update=GETSQL&MACOM=FC&DOCNO=63335GFC02&CCNUM=4308&CID=LPEXT&DOCST=A&UIC=WAJEAA&EDATE=9/16/2008](https://webtaads.belvoir.army.mil/protected/WebTAADS/UIC_Frame.asp?GUID=1968214857&DOC_TYPE=MTOE&Update=GETSQL&MACOM=FC&DOCNO=63335GFC02&CCNUM=4308&CID=LPEXT&DOCST=A&UIC=WAJEAA&EDATE=9/16/2008) (accessed December 12, 2008).

<sup>21</sup> Thomas J. Foster, "Modular BSBs in Operation Iraqi Freedom," *Army Logistician* 38, No. 3, May-June 2006, [http://www.almc.army.mil/alog/issues/may-june06/mod\\_BSB\\_oper.html](http://www.almc.army.mil/alog/issues/may-june06/mod_BSB_oper.html) (accessed 20 January 2009).

<sup>22</sup> US Army Force Management Support Agency (USAFMSA), "Brigade Support Battalion w/FSC (IBCT) – MTOE," [https://webtaads.belvoir.army.mil/protected/WebTAADS/Frame\\_DocTypes.asp?GUID=1968214857](https://webtaads.belvoir.army.mil/protected/WebTAADS/Frame_DocTypes.asp?GUID=1968214857) (accessed January 20, 2009).

<sup>23</sup> US Army, *The Army Organizational Life Cycle* (Washington, DC: US Army, 2008) <http://www.carlisle.army.mil/usawc/dclm/linkedtextchapters/htar2008Ch2.pdf> (accessed December 07, 2008).

<sup>24</sup> US Department of the Army, *Force Development and Documentation – Consolidated Policies*, Army Regulation 71-32 (Washington, DC: US Department of the Army, 1997), 16.

<sup>25</sup> Ibid , 17.

<sup>26</sup> US Army Force Management Support Agency (USAFMSA), "Tool Kit, Small Arms Repairman, LIN W51910," [https://webtaads.belvoir.army.mil/protected/WebTAADS/UIC\\_Frame.asp?GUID=1968214857&DOC\\_TYPE=MTOE&Update=GETSQL&MACOM=FC&DOCNO=63335GFC02&CCNUM=4308&CID=LPEXT&DOCST=A&UIC=WAJEAA&EDATE=9/16/2008](https://webtaads.belvoir.army.mil/protected/WebTAADS/UIC_Frame.asp?GUID=1968214857&DOC_TYPE=MTOE&Update=GETSQL&MACOM=FC&DOCNO=63335GFC02&CCNUM=4308&CID=LPEXT&DOCST=A&UIC=WAJEAA&EDATE=9/16/2008) (accessed January 20, 2009).

<sup>27</sup> US Army Force Management Support Agency (USAFMSA), "Truck Lift, Fork Variable Reach Rough Terrain, LIN T73347," [https://webtaads.belvoir.army.mil/protected/WebTAADS/UIC\\_Frame.asp?GUID=1968214857&DOC\\_TYPE=MTOE&Update=GETSQL&MACOM=FC&DOCNO=63335GFC02&CCNUM=4308&CID=LPEXT&DOCST=A&UIC=WAJEAA&EDATE=9/16/2008](https://webtaads.belvoir.army.mil/protected/WebTAADS/UIC_Frame.asp?GUID=1968214857&DOC_TYPE=MTOE&Update=GETSQL&MACOM=FC&DOCNO=63335GFC02&CCNUM=4308&CID=LPEXT&DOCST=A&UIC=WAJEAA&EDATE=9/16/2008) (accessed January 20, 2009).