



REPLY TO  
ATTENTION OF

**DEPARTMENT OF THE ARMY**  
HEADQUARTERS, UNITED STATES ARMY MANEUVER CENTER OF EXCELLENCE  
1 KARKER STREET  
FORT BENNING, GEORGIA 31905-5000

ATZB-CIA

22 APR 2014

MEMORANDUM FOR RECORD

SUBJECT: TCM ABCT Sustainment Observations, Insights and Lessons Learned (OIL) for National Training Center (NTC) Rotation 14-04.

1. TRADOC Capability Manager-Armored Brigade Combat Team (TCM ABCT) personnel visited NTC Rotation 14-04 to collect data on the 3x36 cavalry formation and brigade sustainment operations. A separate Proof of Principle (PoP) which collected OIL about the 3x36 cavalry formation will be published separately. This report focuses on how the unit performed sustainment operations. Intent was to collect and identify trends and mitigate sustainment DOTMLPF issues.
2. The purpose of this memorandum is to highlight key observations presented by members of the brigade and observer controller/trainers (OC/T) during the visit. The comments in this executive summary (EXSUM) reflect an area of focus on decisive action trends observed during the rotation.
3. **Summary:** NTC Rotation 14-04 demonstrated BCT CDRs ability to tailor training at the NTC to start where home station training leaves off. The unit's aggressive home station training strategy enabled the ABCT to initiate the deployment with BN level STX lanes. The most significant challenges the BCT experience was: LOGSTAT reporting, Brigade Support Area Layout/Security and Sustainment Synchronization. TCM ABCT has observed the past five Armored Brigade Combat Team rotations to the National Training Center and there is common atrophy in sustainment skills. The past ten years of global operations have required Armor, Infantry and Artillery Soldiers to conduct dismounted or motorized missions on non-standard Modified Tables of Organization and Equipment (MTOE). The result has led to an atrophy of ABCTs ability to effectively conduct sustainment operations on the battlefield. Our observations, insights and lessons learned and recommendations to improve DOTMLPF issues are included in this report.
4. Point of contact(s) for this report is the undersigned at (706) 545-1170 or e-mail [william.t.nuckols.mil@mail.mil](mailto:william.t.nuckols.mil@mail.mil), or members listed on the collection team page.

WILLIAM T. NUCKOLS JR.  
COL, AR  
TRADOC Capability Manager-Armored  
Brigade Combat Team & Reconnaissance



**Report produced by  
TRADOC Capability Manager-Armored Brigade  
Combat Team and Recon (TCM-ABCT/Recon), Capability  
Development and Integration Directorate (CDID), Maneuver  
Center of Excellence**

**DESTRUCTION NOTICE.** Destroy by any method that will prevent disclosure or reconstruction of the document.

**DISTRIBUTION LIMITED to US Government agencies only in order to protect information and technical data that address current technology in areas of significant or potentially significant military application. Other requests for this document must be referred to Commander, US Army Maneuver Center of Excellence, Capability Development and Integration Directorate (CDID), 7533 Holtz Street, Building 70, Fort Benning, GA 31905.**

## Table of Contents

	Page
Chapter 1: Doctrine .....	3-5
LOGSTAT Reporting.....	3
Solid Foundation of Doctrinal Concepts.....	4
Brigade Support Area Layout and Security.....	4-5
Sustainment Synchronization.....	5
Chapter 2: Organization/Personnel.....	6-7
Maintenance Control and Platoon Sergeant.....	6
BSA Enablers.....	6
BSB (BCT) SPO.....	7
Chapter 3: Training/Leader Development.....	7-9
Sustainment.....	7-8
Casualty Collection Points (CCPs).....	8-9
BDE Maintenance Meeting.....	9
Chapter 4: Material.....	9-11
Combat Power.....	9-10
Wrecker Replacement.....	10
BSB wheeled platforms lacked ring mounts for convoy security requirements..	10-11
Information Paper on wrecker replacement BSB wheeled platforms lacked ring mounts for convoy security requirements.....	12-13

Name	Duty Position	Em	Phone Number
Stephen J Harper (Jacobs ASG)	Sustainment Analyst	<a href="mailto:stephen.j.harper.ctr@mail.mil">stephen.j.harper.ctr@mail.mil</a>	706-626-1148

ATZB-CIA

SUBJECT: TCM-ABCT Observations, Insights and Lessons Learned (OIL) for NTC

## Chapter 1 Doctrine

### 1. LOGSTAT Reporting/LOGSYNC Matrix should to be trained at home station:

TD01 to TD07 LOGSTAT reporting was reported up to BDE. TD08 to TD10 the BDE only received 68% of the required daily LOGSTAT reports. Reports were due to the BCT S4 by 1200/0000 everyday. LOGSTAT reports sent to BDE in most cases were missing some of the following commodities: ice, bulk water, Class III and Class V current and future requirements (50% of LOGSTAT reports were accurate). Additionally, starting TD 11 LOGSTAT reports were sporadic throughout the BDE. SPO did not have SA of maneuver BN internal LOGPAC/ LRP OPS for the next 24/48/72 hours which hindered his predictive forecasting ability. Execution of LOGPAC/LRP resupply OPS were time based driven and not event or trigger point driven events. No PACE plan for upper TI, Lower TI, JCR or FM – not rehearsed or practiced. LOGSTAT reports were submitted by the following means: verbal, e-mail, BCS3, hard copy, cell phone and FBCB2. The proper flow for LOGSTAT reports follows; the BN S4 receives LOGSTAT from the Companies in the form of the Logistics Readiness Tool (LRT). Then the BCT S4 receives the LRTs from the BN S4 via NIPR. The LRT can be best sent over FM, NIPR/SIPR VOIP, NIPR E-mail, Jabber Chat Room, LRC or FBCB2. The last three methods are not as effective. Once the BCT S4 receives all the NIPR LRT products he/she opens BCS3 and inputs the data. This is the step that changes the LRT from NIPR to SIPR within the BCS3 system. This information is required to be submitted to 52ID G4 daily and CCed to the BCT SPO at 0500 and 1700. 52ID G4 only received the BCS3 LOGSTAT report status 6% of the time for the entire rotation. Majority of units did not know how much Class V they had on hand, expenditure reports were rarely recorded. LOGSYNC matrix also overlooked required enablers or the enablers were not tried in to the plan. Additionally, there were no more than 12 Hrs forecast/predictive analyses of requirements. BN and BDE Standard Operating Procedures (SOP) should reflect two or three primary means of submitting LOGSTAT reports.

**Trend Analysis:** This has been a common, recurring observation during majority of the NTC rotations observed by the TCM-ABCT and the NTC OC/Ts.

**Recommendation:** PLT LDS, Co XOs, BN XOs and BN S4s should be reviewing and taking responsibly for LOGSTAT reporting. The XO integrates and synchronizes the BN's/BCT's sustainment efforts. The XO ensures sustainment needs of the BN/BCT enabler attachments are met. Recommend SOP reflect the use of the following systems: FM, NIPR/SIPR VOIP, or NIPR E-mail for LOGSTAT reports. LOGSTAT reports must be complete and reported on time. Metrics not clearly defined in SOP. BDE SOP must define metrics. Reports must be sent to 52ID G4 and the SPO during required timeframe. Routinely practice LOGSTAT reporting at home station.

ATZB-CIA

SUBJECT: TCM-ABCT Observations, Insights and Lessons Learned (OIL) for NTC

**2. Foundation of Doctrinal Concepts:** Leaders should have a firm foundation on Decisive Action (DA) doctrine before deploying to the NTC. References are per FM 3-90.6, Brigade Combat Team (BCT) and ATP 4.90, Brigade Support Battalion. Per ATP 4.90 the lead planner for the BCT sustainment is the BCT S4, assisted by the BCT S1, the BCT surgeon and the BSB support operations officer (SPO). What was observed and validated by an OC/T was the BCT S4 would collect the data by BN LNOs which were located within the BCT TOC. The BN LNOs would update the BCT S4 on classes of supplies (LOGSTAT reports). However, the BCT S4 was not tracking any BDE ammo requirements. The BCT S4 was passing known requirements to the SPO IAW ATP 4-90, but rarely to 52ID G4. Per ATP 4-90, the BSB SPO is the principal staff officer for synchronizing BSB distribution operations for all units assigned or attached to the brigade. The BCT S4 identifies requirements through daily logistic status reports, running estimates and mission analysis. The BCT S4 is the log planner for long range planning. The SPO straddles mid and short range planning of future operations. No observation was made of any long term planning in the BCT S4 shop. Additionally, Annex F of the OPOD (14-07) stated units will coordinate for bulk fuel resupply with the 115<sup>th</sup> BSB SPO based on unit requirements as demanded by daily LOGSTAT reports. Again the BCT S4 was taken out of the proper reporting procedures.

**Trend Analysis:** There is a breakdown or misunderstanding of duties between the BCT S4 and the SPO. This has been a common, recurring observation during majority of the NTC rotations observed by TCM-ABCT and the NTC OC/Ts.

**Recommendation:** Update all company, battalion and brigade SOPs to reflect responsibilities outlined in IAW FM 3-90.6 (Brigade Combat Team) and ATP 4-90 (BSB).

**3. Brigade Support Area Layout and Security:** During this rotation the unit's inability to secure the BSA was due to lack of berms (obstacles), wire, and failure to properly incorporate ground mounted weapon systems. Failure to have an evolving security plan for available personnel within the BSA had catastrophic effects. FOB/COB mentality has been a huge problem. IAW ATP 4-90 the BSA S3 assigns a perimeter to each unit in the BSA. The BSA TOC was dug in with razor wire however the remainder of the BSA was exposed to the enemy. The BSA TOC entrance guards did not use challenged/password to gain entrance to the BSA TOC. The enemy took advantage of the BSA being un-secured. To make matters worse most vehicles were parked in a line and not in a 360 degree formation. By TD10 the BSA still had no security and did not have movement contingency plan in place if the BSA had to jump. This is something that can be practiced at home station.

**Trend Analysis:** BSA security has been a tremendous predicament for every ABCT DA rotation to the NTC in the past year; noted by the TCM-ABCT and the NTC OC/Ts.

ATZB-CIA

SUBJECT: TCM-ABCT Observations, Insights and Lessons Learned (OIL) for NTC

**Recommendation:** Continue efforts by TRADOC and FORSCOM to educate leaders on sustainment doctrine. We as an Army have been fighting a COB/FOB based environment for over 12 years. It has always been noted that the BN/BDE sustainers need to refresh themselves on sustainment operations. SOPs are outdated reflecting a COB/FOB mentality. Recommend reviewing and make SOP changes IAW ADP 4-0 (Sustainment), ADRP 4-0 (Sustainment), FM 3-90.6 (Brigade Combat Team), ATP 4-90 (BSB), ATP 4-91 (Army Field Support Brigade) and ATP 4-93 (Sustainment Brigade) operations.

**4. Sustainment Synchronization:** The logistic status report is an internal status report that identifies logistics requirements, provides visibility on critical shortages, projects mission capability, and provides input to the common operating picture. In order to provide support, BSB commanders coordinate closely with supporting and supported units using a logistic status report. It was noted that most of the BCT level sustainment sections were operating more frequently on Upper TI. Most BN level sustainment sections were operating more frequently on lower TI. How do we bridge the Mission gap between BCT/BN/CO level sustainment? The LRT is the Army standard for submitting routine logistics status reports from the unit and supply point level. Developed as an independent web-based service of the BCS3 suite of software, the LRT is intended to augment mission command Warfighting function systems data by focusing on the commander's critical sustainment information and/or items of equipment. It provides a snapshot of on-hand stock status, personnel, equipment and projected future requirements. The LRT provides the logistician information from the "bottom-up" with the flexibility to be rolled-up or aggregated at each level of command. The LRT allows users to submit and view reports using a separate downloadable application, with or without a BCS3 laptop. Sustainment synchronization concern has been noted by TCM-ABCT and the NTC OC/Ts.

**Trend Analysis:** This has been a common, recurring observation during majority of the NTC rotations observed by the TCM-ABCT and the NTC OC/Ts.

**Recommendation:** Bridge the gap by recommending the SOP reflect the use of the following systems: FM, NIPR/SIPR VOIP, or NIPR E-mail. Practice sustainment synchronization reporting at home station.

ATZB-CIA

SUBJECT: TCM-ABCT Observations, Insights and Lessons Learned (OIL) for NTC

## **Chapter 2 Organization/Personnel**

**1. Maintenance Control and Platoon Sergeant:** Warrant Officers (WO) and Maintenance Control Sergeants (MCS) recommended that the two SFC positions in the FSC maintenance platoon are combined into one MSG MToE position. There is no longer a MSG position authorized by MToE to serve as a Battalion Motor Sergeant and Maintenance Platoon Sergeant in the FSC. Currently two SFC perform the duty that one MSG performed under the Army of Excellence (AoE) structure that ended over a decade ago. The SFC Platoon Sergeant in the FSC has personnel responsibilities. The MCS serves as BN motor sergeant mentoring of six SFC NCOs assigned to Company Teams. He serves as the senior sustainment NCO for maintenance operations, and leads six company field maintenance teams. Being the senior NCO in the maintenance platoon he is also responsible for the Maintenance Collection Point (MCP) set up and security in the field. This has been voiced to TCM-ABCT during every NTC rotation and umbrella week. During 14-04 even a FSC 1SG agreed this MToE change is needed. The MCO/PLT SGT would be responsible maintenance and the FSC 1SG is responsible for the company personnel welfare.

**Trend Analysis:** 98% of the WOs and MCS have all voiced their opinion that the MCO/PLT MSG (E8) change is needed during NTC rotations and lesson learned conferences.

**Recommendation:** Recommend CASCOM consider replacing the two SFC 91X40s positions with one MSG 91Z50 position to serve as the Maintenance Control Sergeant and Maintenance Platoon Sergeant.

**2. BSA Enablers:** The BSA is the BDE rear support area and last line of defense for the BCT. Therefore being the rear support area it was recommended that some additions would enhance the BSA S3 shop. If not added to the BSB MToE then recommend the following officers be LNOs from there respected unit.

- Engineer Officer. Having an engineer officer would coordinate BSA and CSSB routes, to include route clearing operations. No one was tracking BSA route clearing movements.
- Aviation Officer. Medevac and sling load operations.
- Electronic Warfare Officer. He/she would assist the BSA S2 and SASMO when needed.

ATZB-CIA

SUBJECT: TCM-ABCT Observations, Insights and Lessons Learned (OIL) for NTC

**3. BSB (BCT) SPO:** The BSB SPO is the sole source of sustainment synchronization from the sustainment BDE/CSSB to BSA to FTCP/CTCP/CO Trains and to FLOT at the tactical level. The BCT SPO was an Armor CPT who was not trained and received very little guidance or mentorship. He did the best he could with the limited knowledge he had and he was very motivated. He tried to do everything: CUOPS/FUOPS/SYNCRONIZATION and COORINATION, with very little dissemination of information or delegation of authority to accomplish tasks in his absence. Lack of NCOs in the SPO section severely hindered the SPO section SME capabilities. The NCOIC was the only trained CPOF operator. Additionally, the SPO MAINT Tech had no NCOIC or SAMS clerk.

**Recommendation:** All BCT SPOs should attend the Support Operations Course (Phase I & II) at Fort Lee, VA. To assist the SPO shop it is recommended that four 91As can be pulled internally from the BSB or have the BSB MToE changed. Recommend taking two 91A Soldiers from the General Supply and Maintenance Control Section Platoon.

### **Chapter 3 Training/Leader Development**

**1. Sustainment.** In the past decade ABCTs have not routinely planned or executed maintenance on unit MToE equipment in garrison or in a DA training environment. Units have performed maintenance and services at COB/FOB hard stands at fixed sites with sustainment support provided mostly by contractors on site. In cases where units did perform maintenance when deployed many times it was conducted on non-standard vehicles (MRAPs) vice Abrams and Bradley's. NCOs and officers of all MOS have degraded skills required to plan, execute and supervise maintenance activities in garrison or in DATE.

**a. Maintenance Management and Knowledge of Sustainment.** Command maintenance, Preventive Maintenance Checks and Services (PMCS), semi-annual services and single equipment services are required to be placed on the unit's training schedule. During this past rotation OC/Ts said that vehicle crews turned in 5988Es, but units need improvement on having a sound maintenance plan that includes proper QAQC. The BDE SOP addressed turning 5988Es during log pack operations. However it was noted that in majority of cases 5988Es were returned to Unit Maintenance Point (UMP) without any National Stock Numbers (NSNs). This was caused by not having enough of maintainers forward to identify the repair parts needed. The key to preparing for the speedy repair of damaged vehicles (real world and MILES) is to identify the fault, reference the NSN needed and predict when they will arrive to the MCP. 1/7 Cavalry's FSC accomplished this through effective use of mission command systems. Two points stand out: the maintenance command post had a working FBCB2/BFT w/TOC kit and used an OE-254 antenna which provided long-distance FM communication to speak directly with their company-sized elements on A/L nets. This allowed the FSC to receive



ATZB-CIA

SUBJECT: TCM-ABCT Observations, Insights and Lessons Learned (OIL) for NTC

reports on vehicles with real world damage or MILES destroyed vehicles and receive follow- on information to aide in determining what the major faults were in order to secure parts and alert mechanics.

**Recommendation:** All BSB FSC MToEs be reviewed and a FBCB2 with TOC kit is assigned to the maintenance shop van, too include an OE-254 antenna with radio.

**b. Logistics Resupply Point (LRP) Operations.** LRP Operations from company to battalion need improvement. LOGPACs and LRPs were poorly executed. LOGPAC/LRP resupply Ops were time based driven events, not event or trigger point driven events for execution.

**Trend Analysis:** During the last six NTC Rotations this is a reoccurring challenge. LRP is more than just a resupply; it is a means to communicate (5988 distro, LOGSTAT, Combat Power). CO/BN have to do a better job at consumption reporting.

**Recommendation:** First Sergeants, Command Sergeant Major, and executive officers need to work as a team to ensure that LOGPACs and LRPs are planned and executed effectively to support unit classes of supply. Units SOPs should address LOGPAC and LRP procedures. LOGPAC and LRP operations should be rehearsed by sustainment planners at all levels.

**2. Casualty Collection Points (CCPs).** Units must conduct detailed planning for proper placement of Casualty Collection Points (CCPs), include their location and purpose in rehearsals, and ensure operational graphics are on every vehicle, both digital and analog. The exact positioning of the CCPs while conducting a defense was challenged by the unit's ability to quickly consolidate litter patients. The site selections appeared to have been chosen without conducting either a map analysis, or an actual ground and route reconnaissance or rehearsal. Terrain, time, and distance between point of injuries, and the separation of CCPs from the Medical Treatment Facility (MTF) contributed most to the challenges.

- Ensure that medical evacuation assets are in close proximity to supported elements to enhance response time, increase Soldier confidence and be a combat multiplier.
- Medical planners must ensure the medical evacuation system is responsive to changing requirements and tailored to effectively support the forces within an assigned area of operations (AO). Since medical evacuation resources are limited, it is essential that medical control and influence be retained at the highest level consistent with the tactical situation.

ATZB-CIA

SUBJECT: TCM-ABCT Observations, Insights and Lessons Learned (OIL) for NTC

- Medical personnel may not be available to staff these CCPs, and CLSs and ambulatory patients may be required to perform self-aid, buddy aid, or enhanced first aid.

**Recommendation:** The best way to mitigate the DOW rate at the CTCs is to plan diligently, then rehearse. The CASEVAC plan must be included in the service support paragraph of the OPORD. Command Sergeants Major, First Sergeants, and the medical support staff must attend and brief their portion of the operation. A terrain model rehearsal should be followed by a mounted rehearsal on the actual ground, if possible. Graphic control measures for the CASEVAC effort must be disseminated to every vehicle in the BCT. Unit TACSOPs should include a stand-alone annex for casualty evacuation.

**3. BDE Maintenance Meetings:** BDE should conduct daily maintenance meetings with all key leaders. The meetings that were conducted had limited involvement from maneuver BN, maintenance tech co-located in TAA attended in person. No PACE plan for upper TI, lower TI, JRC or FM. This was not practiced or rehearsed. There was limited SA of recovery missions. Enablers not tied into the SAMS box. There was limited cross talk by maneuver BNs or SSA of on hand parts in each FSC. SPO maintenance had to force cross leveling of parts to improve combat power.

**Trend Analysis:** Key leaders not always in attendance during maintenance meetings were the BN XO, BN S4, FSC CDRs, MCOs, and Maintenance Technicians.

**Recommendation:** That the BDE XO, BN XO, FSC CDRs, MCOs and maintenance techs start holding weekly maintenance meetings at home station. At least once a month at home station use upper TI, lower TI, JRC or FM. This way the leadership gets practice on using those systems and creates an environment of ease once in the field. Recommend pull upper/lower TI systems from platforms and place with TOC kits/radio mounts within each respected work area. Practice maintenance meetings while in a garrison environment using upper TI, lower TI, JRC or FM monthly.

## Chapter 4 Material

**1. Combat Power:** It was evident that this NTC rotation had a higher ground platform pacing item Combat Power (CP) rating than recently observed rotations. The M2A3 and M2A3 had a combine CP rating of 94%. The Abrams only had a CP rating of 78% and the M2A2 had a 75% CP rating. The overall CP rating for the entire BDE (Abrams, Bradley's and Paladins) was 86%. The CP rating for the BDE could have been better. 1<sup>st</sup> CD had recently converted over to Global Combat Support System – Army (GCSS-A), however the NTC Director of Logistics (DOL) has not converted to GCSS-A. As a result of this the BCT utilized a high number of CLIX walk thru(s).

ATZB-CIA

SUBJECT: TCM-ABCT Observations, Insights and Lessons Learned (OIL) for NTC

Additionally the BDE did not bring their ASL from home station, but some units within the BDE had a healthy Shop Stock List (SSL). Another factor was that the SPO shop was shorthanded and the BDE Maint Tech served as the senior tech, the SAMS clerk, and the PowerPoint slide maker. Effect on the BDE Maint Tech - he did not get out and visit the FTCPs and look at the M1s and M109A6s that were NMC in the BSA. Add to this the battalion maintenance techs were forward along with their lift assets and not where they could effectively manage the maintenance status of their BNs. The hard deadline items were back in the BSA. The maintenance line of effort was never synchronized.

**Recommendation:** Empower the BSB Commander as the Chief of Sustainment and to be in charge of that WfF. Home station units should bring their complete ASL and SSL. Unit's that have converted to GCSS-A must work with the NTC DOL on how Class IX requisitions will be ordered and repair part flow until the NTC converts to GCSS-A.

**TTP:** 1/7 Cavalry Maintenance Collection Point (MCP) had maintained over a 90% CP rating over the entire rotation. The FSC Maintenance Technician employed some great communication innovations. His shop van had a TOC kit with an FBCB2, an OE-254 antenna with radio and monitored the A/L net. He mounted his VSAT on top of the shop van which only took minutes to set up. Due to the FSC Maint Tech's innovations, his shop was able to receive faults from his maintainers out front and have the proper repair part ordered within minutes. Once the parts would arrive he would focus his team to repair his BN platforms.

**2. Wrecker Replacement:** Replace the Medium Tactical Vehicle (MTV) Wrecker M1089 with the Heavy Expanded Mobility Tactical Truck (HEMTT) Wrecker M984A4 within the Armored Brigade Combat Team (ABCT) Brigade Support Battalion (BSB) formation. TCM-ABCT observers noted during every umbrella week and National Training Center (NTC) rotation, that Soldiers and leaders have voiced their opinion and operational expertise that the M1089 is very rarely used and should be replaced by the M984A4 wrecker. The M984A4 has a great deal more capabilities for recovery, towing and lifting operations.

**Recommendations:**

- Have CASCOM requirements division in conjunction with USAMSA approve and document this recommendation.
- Have DA G8 support this action with M984A4 wreckers.
- Information paper dated 21 January 2014 attached in report.

**3. BSB wheeled platforms lacked ring mounts for convoy security requirements:**

The unit did not deploy with weapon ready wheel platforms. The wheeled platforms the unit signed for did not have the ability to mount ring mounts and did not have an

ATZB-CIA

SUBJECT: TCM-ABCT Observations, Insights and Lessons Learned (OIL) for NTC

opening in the top of cabs to allow a gunner to mount a weapons system. This resulted in the BSB lacking internal assets for convoy protection platforms for securing their own Tactical Assembly Area (TAA) or providing security during convoy protection.

**Trend Analysis:** All distribution HEMTTs and MTVs at home station should have ring mounts mounted on platforms which would provide self convoy security.

**Recommendation:** The TCM-ABCT recommends that the Combat Training Centers provide and install serviceable ring mounts on all wheeled platforms which require ring mounts.

**END OF REPORT**

ATZB-CIA

SUBJECT: TCM-ABCT Observations, Insights and Lessons Learned (OIL) for NTC

## INFORMATION PAPER

**SUBJECT:** Replace the Medium Tactical Vehicle (MTV) Wrecker M1089 with the **Heavy Expanded Mobility Tactical Truck (HEMTT)** Wrecker M984A4 within the Armored Brigade Combat Team (ABCT) Brigade Support Battalion (BSB) formation.

1. **Purpose.** To provide the MCoE and SCoE Commanding General's the rationale for replacing the MTV wrecker (Line# T94709) with the HEMTT wrecker (Line# T63093) within the ABCT BSB formation.

2. **Rationale.** TCM-ABCT observers noted during every umbrella week and National Training Center (NTC) rotation (12 total), that Soldiers and leaders have voiced their opinion and operational expertise that the M1089 is very rarely used and should be replaced by the M984A4 wrecker. The M984A4 has a great deal more capabilities for recovery, towing and lifting operations.

- The M1089 cannot lift or flat tow anything except the **High Mobility Multipurpose Wheeled Vehicle (HMMWV)** or **Medium Tactical Vehicle (MTV)**. The M984A4 does majority of recovery missions and lift within the ABCT formation.
- The M1089 cannot be used for lift missions because the crane is located in the center of the chassis. The longer the boom is extended, the less weight can be lifted over the rear of vehicle. The M1089 lifts mostly over the side, always using outriggers. The M984A4 can lift loads over the rear. The M1089 has reduced lift capabilities vs. the M984A4.
- The M984A4 can lift all track power plants, except the Abrams power plant, the M1089 cannot.
- M984A4 has been tested to tow select track vehicles. The M1089 cannot flat tow any track vehicles. NOTE: The M984A4 can tow a Paladin/FASSV and M113A3 safely on a limited basis.
- The M1089 cannot keep pace with convoys when towing heavy loads. The M984A4 has no problem keeping pace with convoys.
- When Soldiers are called for a wheel recovery mission the M984A4 is used. The M984A4 wrecker can do recovery missions with ease and complete the recovery mission faster.

3. **Replacement.** Under the ABCT 2020 Force Design each ABCT BSB would replace nine (9) M1089 wreckers with nine (9) M984A4 wreckers, total for Active Component (AC) would be eighty one (81) M984A4 wreckers. National Guard (NG) total would be forty nine (49) M984A4 wreckers. 11<sup>th</sup> ACR would only need two (2) M984A4 wreckers. Total M984A4 wreckers needed: 132. AC BSB TOE number: 63025R000 and NG BSB TOE number: 63325R100 were used.

ATZB-CIA

SUBJECT: TCM-ABCT Observations, Insights and Lessons Learned (OIL) for NTC

**4. Recommendations.**

- Have CASCOM requirements division in conjunction with USAMSA approve and document this recommendation.
- Have DA G8 support this action with M984A4 wreckers.

5. **Other.** The Chief of Ordnance, the Ordnance Regimental Chief Warrant Officer and the Ordnance Recovery Director concurs with this recommendation. Vehicle turn in would be one for one. No New Equipment Training (NET) would be necessary. No personnel growth would be required.

Authored by: Stephen J Harper/ATZB-CIA/706-626-1148

Approved by: COL William Nuckols/ATZB-CIA/706-545-1170