TCM ABCT Trip Report (7 JUL 16)

SUBJECT: TCM ABCT Visit to a Combat Training Center (CTC)

PURPOSE: Visit ABCT training to document observations, insights and lessons learned in support of DOTMLPF-P Integration efforts. This report does not specify a unit or CTC rotation. The intent is to inform stakeholders of persistent observations in order to improve ABCT performance and inform capabilities development efforts.

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1. Evaluation of Mission Essential Task List (METL) Tasks:

a. **Problem Statement** - For over a decade units have operated with a wide range of METL to meet mission requirements, however, in order to effectively focus training for decisive action changes to METL and evaluation criteria are necessary. External evaluation criteria for determining training status (T/P/U) and USR reporting of METL proficiency has not been a requirement. Units and Combat Training Centers (CTCs) have documented performance but have not captured METL proficiency.

b. **Way Ahead** - On 20 June 2016 the Army adopted a Standard Decisive Action METL for like type units and echelons down through company level, to enable commanders to more accurately and objectively build and assess training readiness, to ensure that like units are reporting readiness, and to ensure that like units are reporting readiness on the same capabilities. The unit's METL represents the fundamental collective tasks the unit was designed to perform for decisive action during Unified Land Operations. Units can begin to apply these Standard METL immediately to focus their training. Approved METL will be promulgated using the Army Training Network, the Digital Training Management System, and included in Department of the Army Pam 350-1 when published. METLs will be incorporated in NetUSR for readiness reporting units no later than November 2016. The approval memorandum from HQDA G3/5/7 is at https://www.milsuite.mil/book/docs/DOC-291284

c. **Actions to Date** - TCM-ABCT in support of the Maneuver Center of Excellence (MCoE) Directorate of Training and Doctrine (DOTD) are revising collective tasks for each METL task. Each METL task contains supporting collective tasks, and each collective task contains supporting individual tasks. Our team is complete reviewing >80% of these tasks. Collective task standards in Training and Evaluation Outlines (T&EOs) are more challenging and include: a required percentage of leaders and Soldier present for training, conditions for night and live fire environments, and quantitative performance metrics (note Figure 1).

Plan and Prepare			Execute						Assess
Operational Environment		Training Environment (L/V/C)	% Leaders Present at Training / Authorized	% Present at Training / Authorized	External Eval	Performance Measures	Critical Performance	Leader Performance	Task Assessment
CO & BN									
Dynamic & Complex (4+ OE Variables & Hybrid Threat)	Night	Live Training Environment	≥85%	>80%	Yes	>90% GO	All	>90 %	T
			75-84%			80-90% GO		80-89 %	T-
Dynamic (Single Threat)			65-74%	75-79%	No	65-79% GO			P
	Day		60-64%	60-74%		51-64% GO	<All	<80 %	P-
Static (Single Threat)			<60%	<60%		<50% GO			U

Figure 1 – Example of Collective Task Standards Common to all T&EOs

Recommendations:

ABCTs - During homestation training conduct after action reviews (AARs) utilizing T&EOs contained in training circulars (TCs), the Combined Arms Training Strategy (CATS) and the Army Training Network (ATN). Units can find the supported collective tasks under their METL tasks. A technique that worked well in the past is evaluators carried printed lane books for their echelon that contained T&EOs for each collective task. These same lane books can be provided in digital format to units prior to training events. After each battle period evaluators use the results to guide their after action reviews (AARs), i.e. unit received an untrained for failing to meet a critical task, etc. The METL task "Conduct Expeditionary Deployment Operations" can be evaluated during deployment readiness

exercises (DRE) and reception, staging, onward movement and integration (RSOI) activities.

> "All BCTs are expected to deploy to their rotation proficient on their METL (T2 for AC BCTs, T3 for RC BCTs) and receive their execution order to begin the mission planning process during reception, staging, onward movement, and integration."
>
> "During this year's transition to Objective-T, tough, realistic training remains the cornerstone of building readiness. UTPs must address the resource requirements and provide a single plan for the organization. During execution of the UTP, commanders use their organizational inspection programs (OIP) and deployment readiness exercises (DRE) to maintain the necessary oversight of their readiness across all four measured areas. At a minimum, all operational units execute level 1 DREs semi-annually and level 2 DREs annually."
>
> *FORSCOM Command Training Guidance (CTG) - Fiscal Year (FY) 2017 available at https://www.milsuite.mil/book/docs/DOC-289553.*

CTCs - In order to provide commanders with feedback on METL performance recommend Combat Training Centers (CTCs) consider revising AARs and take home packages (THPs) to include an assessment of unit METL proficiency by echelon (CO-BCT) utilizing T&EOs.

Note - An ABCT rifle company has 25 collective tasks associated with their five METL tasks (~50 pages if printed front and back). Example structure below for a rifle company OC/T Lane Book to use to evaluate training:

Section 1 –

- Instructions for METL Crosswalk
- Directions for assessing and documenting task, conditions and standards, task steps and performance measures, GO/NO-GO, and supporting collective/individual tasks.

Section 2 – Unit METL

Section 3 – T&EOs -

Conduct a Movement to Contact (07-2-1090)

- Integrate Direct Fires (07-2-3027)
- Conduct Support by Fire (07-2-3000)
- Integrate Indirect Fire Support (07-2-3036)
- Conduct a Cordon and Search (07-2-9051)
- Conduct Troop Leading Procedures (71-2-5100)

Conduct an Attack (07-2-9001)

- Conduct an Attack by Fire (07-2-1256)
- Conduct Support by Fire (07-2-3000)
- Integrate Direct Fires (07-2-3027)
- Integrate Indirect Fire Support (07-2-3036)
- Conduct Troop Leading Procedures (71-2-5100)

Conduct an Area Defense (07-2-9003)

- Integrate Indirect Fire Support (07-2-3036)
- Integrate Direct Fires (07-2-3027)
- Employ Obstacles (07-2-1396)
- Employ Deception Techniques (07-2-6045)
- Conduct Troop Leading Procedures (71-2-5100)

Conduct Area Security (07-2-1324)

- Conduct a Security Patrol (07-3-9022)
- Secure Routes (07-2-1450)
- Secure Civilians During Operations (07-2-4054)
- Integrate Indirect Fire Support (07-2-3036)
- Conduct Roadblock and Checkpoint (19-3-2406)
- Conduct Troop Leading Procedures (71-2-5100)

Conduct Expeditionary Deployment Operations (55-2-4830)

- Plan Unit Deployment Activities Upon Receipt of a Warning Order (55-2-4828)
- Perform Staging Activities (55-2-4826)
- Perform Deployment Alert Activities (55-2-4801)
- Conduct Troop Leading Procedures (71-2-5100)

Section 4 – Battle and Crew Drills

For a full list of CO-BCT METL go to https://www.milsuite.mil/book/docs/DOC-260042.

Figure 2 – Example Lane Book Format

2. Command Post (CP) Operations: The majority of units training at the NTC continue to experience challenges with CP Operations from CO-BDE level regarding configuration, setup, operations, and synchronization.

Observation 1 - The unit configured their Brigade CPs for better mobility and survivability but sacrificed synchronization between staff sections. The BDE CDR expressed that he had read about challenges other BDEs have had at NTC regarding the DRASH tent's huge footprint, lack of survivability and mobility, and extensive set up time. BDEs routinely require upwards of 24-36 hours to relocate and establish the BDE Main CP when using the DRASH tent. The unit's BDE Main CP was set up in individual tents by warfighting function (WfF), instead of a layout that contributes to an effective common operating picture (COP) to enable staff collaboration, i.e. current operations was in an expando van, fires/intel was in a separate tent, S6 in second tent, sustainment in 3rd tent, etc.

Observation 2 - The BDE did not position the Main, TAC and MCG in locations to best control deep, close and security areas of operation. For the first few days of force on force the M-TAC-CP was positioned only a few hundred meters from the Main. On other occasions the different CPs were positioned more lateral than in depth. This reduced the ABCT ability to push the Main to a location outside of enemy fires and limited the BDEs ability to retain mission command across the unit's area of operations. FM 3-90.6, (Brigade Combat Team) explains the BCT Main CP, TAC and Mobile Command Group (MCG) are broken into different nodes to maintain survivability, and recommends that the BCT Main either remains outside medium range artillery or co-locates within a subordinate units area of operations (AO) depending on the environment. The implication is to provide concealment and to prevent identification as a higher command node.

Observation 3 - All CPs across the BDE employed camouflage. Feedback from OC/Ts suggests this is the best camouflage they have observed in 17 DATE rotations, and it is the best our team has observed since 2012. The last unit observed at the Joint Multinational Readiness Center (JMRC) also employed camouflage very well. The FY 17 FORSCOM Command Training Guidance requires units to employ camouflage on CPs. A great tactic, technique and procedure (TTP) that Blackhorse uses to inspect their AOs concealment is flying UAS with a data feed over their own CPs.

Figure 3 - Camouflage - BDE Mobile Tactical Command Post (M-TAC-CP)

Observation 4 – BCT leaders and OC/Ts expressed a need for like mission command capabilities for each WfF in the various BDE and BN CPs. One challenge addressed is a single Tactical Airspace Integration System (TAIS) that resides in the Main CP.

A second TAIS capability can be created by dedicating a laptop with installed software connected thru a JNN/SIPR connection. In order for both TAIS to communicate they must have the same software version. A previous BCT established two TAIS and the system in the TAC could not receive an air picture due to recent updates with TAIS software version 15. The new TAIS software version update was only funded for one of two TAIS, any additional updates require additional funding.

The TAIS is utilized for management of airspace. The TAIS assists in Army Airspace Command and Control (A2C2) planning, A2C2 operations, and with Air Traffic Services. Information from various input sources allows for real-time tracking of aircraft. The TAIS has the ability to receive input from Airborne Warning and Control System (AWACS), Moving Target Indicators (MTI) from Joint Surveillance Target Attack Radar System (JSTARS), and from traditional Air Traffic Services (ATS) radar systems.

Observation 5 – All CPs and AAs displaced during the rotation. On some occasions, units did not reposition their CP to a location that ensured continuous mission command. When CPs and AAs displaced they often conducted a recon of the new location with an advanced party, but rarely conducted a quartering party to standard. Most quartering parties observed did not establish and maintain security, check for CBRN contamination, setup CBRN detection equipment, or provide guides to properly

position vehicles. Units took too much time to uncoil from AAs resulting in late crosses of the line of departure (LD). Units did not accurately account for the time it took to uncoil or travel to the LD.

Observation 6 – A difference in versions for the FBCB2 across the formation led the unit to rely more heavily on an analog COP for mission command, i.e. wheeled platforms and TOC kits had received JCR and tracks had not. The BDE CP was not able to synchronize staff sections due to their configuration, however, BN CPs were effective collaborating with staff sections around an analog map. A disadvantage to analog systems is it more challenging to distribute timely updates down to company level. Companies often did not receive updated analog situation or intelligence reports in time to inform decisions prior to the objective.

> "We have had a mix-match of FBCB2 versions for three years now and it is killing our ability to communicate. AR and IN Companies have 1-2 JCRs and tracked vehicles do not."
>
> Leader Feedback, FY 16

Observation 7 – The BDE utilized effective terrain models at CO, BN and BDE levels. The BDE terrain model was a 20 x 30 white tarp with a superimposed map of NTC. BNs collocated terrain models within their CPs under camouflage nets. This technique proved very productive for rehearsals in 122-degree temperatures, and served the staff well during war gaming and execution. Companies constructed multiple large-scale terrain models (20x40 meters) within their AAs with a large depiction of the objective and use of scale models, i.e. models of Infantry Soldiers in wedge, etc.

Observation 8 – Combined Arms Battalions encountered challenges operating with only one RETRANS. On several occasions, BN Main CPs could not communicate with all maneuver elements or the TAC even if they relocated forward based upon the unit's dispersion across restrictive terrain (mountains and urban areas). Even if the unit had additional RETRANS platforms they only have the capability to transmit two nets instead of the five required (Digital Fires, FM Fires, Command, Admin & Logistics, and Operations and Intelligence). This limitation forced commanders to assume risk and select which nets are the most important. For this unit the digital fires and command nets were selected for the RETRANS. As a result, all warfighting functions were degraded when the unit lost the ability to synchronize efforts during the attack. Leaders and OC/Ts continue to express that one RETRANS platform per CAB is not enough to provide the ABCT uninterrupted mission command.

Observation 9 – There are too many mission command systems in CPs and the systems are too large, too complex, and do not collaborate. Unit feedback suggests the WIN-T is too heavy and staff members expressed they can push more data from their home computers. Staff members said they cannot access some portions of their computers until the WIN-T is setup and operational as they must login using this system. This resulted in delays in the MDMP and staff functions when the CPs had to jump.

Recommendations:

CDID - Consider authorizing the ADAM/BAE two TAIS capable systems, including software license updates, so units have the ability to control airspace when CPs reposition.

ABCTs –

Setup and test smaller footprint CP configurations at homestation that provide the best survivability and mobility, ensure staff synchronization, while maintaining the functionality described in CATS 71-8-5200.

Outline responsibilities in SOPs that ensure duplication of WfF efforts when one CP repositions.

Establish an SOP checklist to prioritize efforts by time or condition when occupying AAs/CPs, i.e. 1st 15 minutes security, 30 minutes PMCS, 1-hour range cards, etc. Include a standard battle rhythm, timeline, and sample priorities of work.

Train SOPs at homestation, validate successes and capture challenges at CTCs, and then revise SOPs.

3. Fires - Digital fires capabilities were severely degraded by the lack of operational digital systems at the company/troop level.

Observation 1 - No BFIST SCUs communicated with AFATDS at BN.

Observation 2 - Some companies did not have a serviceable BFIST and the FSO operated from a M2A2 ODS-SA Bradley.

Observation 3 - Some PFEDs could not acquire digital capability. On other occasions, scouts were serving as the observers for fires and they did not have the FSO's PFED.

Observation 4 - The BFIST SCU was outside of FM range. The limitation of only one RETRANS organic to the combined arms battalion made this more difficult.

4. Navigation - Mounted and dismounted land navigation with analog systems continues to be one of the most recurring challenges most units encounter. Army forces will likely execute land campaigns in Denied Degraded Disrupted Space Operational Environment (D3SOE). New generation warfare and near peer threat capabilities increase the need for our Soldiers to possess mastery of skills related to analog land navigation.

Observation 1 – OC/Ts and leaders interviewed all agreed that reliance and confidence on digital technology is a leading factor to degraded navigation skills with a map and compass. Although this skill-set has been one of the most documented trends in

magazine articles, surveys and field reports Soldiers need much improvement in this area. Feedback suggests that this degraded skill-set is resulting in:

- Crossing the line of departure late
- Lack of understanding of terrain to plan routes that maximize cover and concealment
- Movement on routes that do not position friendly forces in points of advantage during the movement to contact and attack
- Reduced ability to employ the characteristics of the offense: surprise, concentration, audacity and tempo
- Inaccurate call for fire missions
- Increased fratricide
- Increased died of wounds rates as units experience difficulties locating AXPs
- Units who do not conduct night drivers training and land navigation training prior to NTC typically do not perform well at night, and in some cases do not move vehicles at night to reduce the risk of accidents.

Observation 2 - The team interviewed infantry and cavalry Soldiers who graduated OSUT in FY 17 and inquired as to whether or not institutional training provided them with a basic knowledge of land navigation skills. Cavalry Soldiers stated that they conducted land navigation in OSUT in two man teams. Infantry Soldiers stated they conducted land navigation in three man teams (1 pace man, 1 compass, 1 map), and did not rotate responsibilities between navigation points. When asked if this technique taught them all three responsibilities they all expressed it did not. All Soldiers and leaders interviewed expressed an individual land navigation requirement would have been the most beneficial.

Observation 3 - The last time the unit conducted an EIB competition or land navigation training was in 2011. Most units interviewed since 2012 are not conducting the EIB often enough to build and retain expert infantry skills in their formations. Most express that they must consolidate NCOs from multiple BDEs or the entire installation to conduct the training. Units also express challenges with enough compasses on hand to conduct EIB or land navigation training.

Observation 4 - NCOs continue to suggest that NCOES consider an incremental training strategy for land navigation building from the foundation Soldiers receive in OSUT. The most common recommendation is require dismounted land navigation in ALC and mounted land navigation in M-SLC (Live environment; not in CCTT).

Observation 5 – During unit interviews conducted by TCM-ABCT since 2013 leaders consistently report that they do not have enough compasses to provide analog navigation capabilities to all maneuver elements. The CDID T&AO surveyed units in the past year (A, I, and S) and the statistics related to compasses available in units are in figure 4.

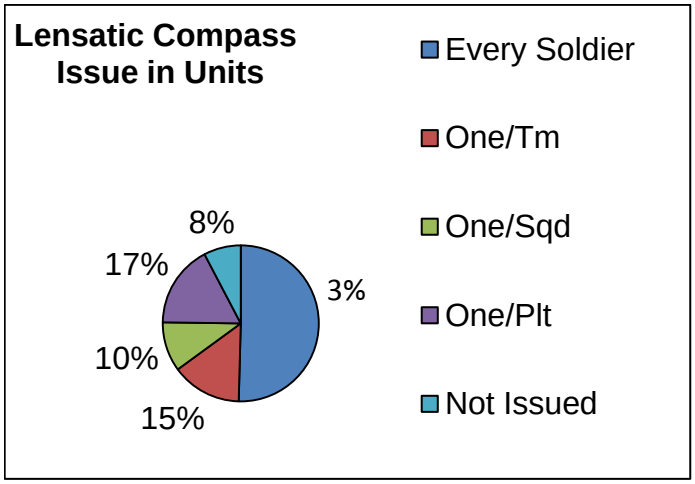

Figure 4 – Compasses Available in Units, CDID T&AO Soldier Survey, 2016

Observation 6 – Units continue to express concern over how to acquire maps. Units are capable of ordering enough maps for installations, training areas, ranges and CTCs. Units report no challenges printing maps to a reduced distribution list with plotters in the BCTs. Units members interviewed expressed that it may be difficult to print enough maps down to team level, especially if the unit moves into an adjacent map area requiring mass printing in a field environment. This issue needs more research to determine the scale regarding Army capabilities to support mission surge requirements.

Recommendations -

ABCTs -

Conduct land navigation training IAW TC 3-25.26.

Increase proficiency through repetitive opportunities for Soldiers to earn their EIB, EFMB and EIA.

Order enough compasses to equip at least one per team/vehicle.

Train with analog/digital land navigation systems (map, compass, DAGR, JCR, etc.).

Include maps and compasses in packing lists, predeployment inspections, and PCCs/PCIs.

Identify capabilities for internal reproduction of analog maps to enable mission command in satellite denied environments.

Incorporate a degraded scenario during a homestation FTX to train analog skills. Exercise PACE across the formation (Mission Command, Navigation, Range Estimation, etc.)

In order to reduce the risk of loss of digital navigation capabilities units need to install COMSEC in their DAGRs. To enable automatic DAGR COMSEC updates via satellite follow the instructions found in the April 2016 of PS Magazine at https://www.milsuite.mil/book/docs/DOC-273771. Over-the-air key distribution (OTAD), limits the requirement to key COMSEC to only once per year. The OTAD software release is part of MWO 11-5820-1172-23-1. Units can get a copy of the MWO and the software at the PNT website https://www.pmpnt.army.mil

For strategies to improve land navigation proficiency, recommend institutional course developers and unit leaders review the Infantry Magazine article *The Lost Art of Dismounted Land Navigation*, OCT-DEC 15 at http://www.benning.army.mil/infantry/magazine/issues/2015/OCT-DEC/pdf/4)%20Vickery%20-%20Land%20Nav.pdf

EIB USAIS Pamphlet 350-6, MAY 16 - http://www.benning.army.mil/infantry/eib/content/pdf/USAIS350-6.pdf?24MAY2016v2

EIB Resources Page - http://www.benning.army.mil/infantry/eib/Resources.html

EIA Resource Page - http://www.benning.army.mil/armor/OCOA/Excellence%20in%20Armor.htm

D3SOE JLLIS site - https://www.jllis.mil/apps/index.cfm?do=cops.view&copid=1038

TRADOC Center of Excellence –

Continue to address institutional strategies to increase land navigation proficiency.

Assess D3SOE content in POIs and ensure Soldiers receive the right individual and leader training associated with analog and digital navigation skills. Ensure effective content resides in OES, WOES, NCOES, OSUT, BOLC, ILE, USASMA, BSNCOC, SDMGC, and SSD.

TCMs/CDID – Participate in the Army Lesson Learned Forum (ALLF) GOSC on 12 July 16 to continue to address strategies to improve capabilities in D3SOE environments. Continue to identify BCT capabilities to maintain and produce adequate maps during D3SOE. Research Army capabilities to support theatre entrance requirements for analog mission command products. Assess the feasibility of common table of allowances (CTA) 50-900 issue of compasses for SGT and up through the central issue facility (CIF) vice various standards on company property books (0-100%).

5. Actions at the Breach - During the BDE attack the unit did not mass forces at the decisive point to provide overwhelming fires necessary to breach the obstacle, secure the far side, and defeat the enemy.

Observation 1 - The unit outnumbered the enemy in prepared defense positions 2:1, however, the unit only massed 1/3 of their combat power at the breach. The successful historical ratio for friendly to enemy is 3:1 when attacking a defended position, so a CAB was insufficient to complete all three breaching tasks (support, breach, assault). Based upon the threat the mission required a CAB for each task. For this mission, one CAB continued to serve all three roles, with each company assigned a different task.

Observation 2 - After the support force has occupied its support by fire positions and the commitment criteria of the breach force have been met (achieved necessary suppression and obscuration), the higher commander orders the breach force to begin reduction. The unit did not meet commitment criteria for the breach force. While one CAB served as the support, breach and assault force, another CAB was positioned five kilometers back in column formation.

Observation 3 - While conducting the breaching fundamentals: suppress, obscure, secure, reduce, access (SOSRA), the CAB suppressed the enemy with direct and indirect fires but did not employ obscuration at the breach or reduce the obstacle or assault the far side of the objective.

Observation 4 - Maintaining the momentum of an offensive operation requires the attacking force to quickly pass through obstacles as it encounters them by applying rapid synchronization of direct and indirect fires. The CAB was attrited by enemy forces and unable to secure the far side of the breach or follow on forces.

Recommendations - Maximize homestation training opportunities to train breaching operations using available LVGC systems IAW ATP 3-90.4 Combined Arms Mobility, MAR 2016. The combined arms breach is one of the most difficult tasks requiring multiple iterations to synchronize and master.

6. Information Collection - The BDE and squadron did not have NAIs tied in with the central corridor. The result is the unit did not have observers positioned to provide early warning and inform the commander of the enemy axis of attack during the movement to contact.

7. Reference Material for Operator Level Maintenance & Doctrine - The unit possessed technical manuals (TMs) for operator level preventative maintenance checks and services (PMCS) but did not have TMs on hand for other equipment (CBRN, radios & mission command equipment, weapons, NVDs, etc). This prevented operators from being able to reference steps for PMCS and operating/troubleshooting procedures. This same observation is common among AC ABCTs observed in the past six months. Although units receive TMs when new equipment is fielded, most observed are not replenishing stock once manuals become unserviceable.

Update from ADP → On 1 July 2016 APD released a new version of their website. The update includes a new search function to enable the user to search by keyword or reference #. This update removed several previous capabilities that were very useful for the user including a search by Series (TC, ATTP, FM, etc.) and a search by Branch (Armor, Infantry, etc.). TCM ABCT expressed this concern to APD and they intend to reintegrate that capability in a future enhancement. TCM ABCT was invited to serve in APD requirements sessions as a user community representative for their FY 17 project, migrating Point & Click into Armypubs. If you have any questions, comments or suggestions for APD regarding this new update please send inquiries to email usarmy.pentagon.hqda.mbx.apd-subscription-manager@mail.mil.

Recommendations -

ABCTs -

Maintain Hard Copy References. Unit publication officers order printed TMs and doctrine from the APD Point and Click Ordering System at https://dol.hqda.pentagon.mil/ptclick/index.aspx.

Access Digital Manuals: Official websites for units to access digital doctrine and TMs are:

U.S. Army Official Web site http://armypubs.army.mil
Army Publishing Directorate http://www.apd.army.mil
AMC LOGSA https://www.logsa.army.mil/etms/online.cfm
Central Army Registry http://www.adtdl.army.mil/
U.S. Army Corps of Engineers http://www.usace.army.mil
TSG and MEDCOM http://www.armymedicine.army.mil
DOD Forms Management Program
http://www.dtic.mil/whs/directives/infomgt/forms/formsprogram.htm

Services/Command Maintenance: Include PMCS of all equipment in during scheduled services and command maintenance Mondays that requires operators to perform maintenance by the book. i.e. dedicate one command maintenance Monday a month to completing 5988-Es on mission command equipment, etc. Ensure Services SOPs include all unit equipment.

Publication Directorates - Continue to address ways to provide references to the point of need in the appropriate format (paper, digital, etc.) Feedback suggests platoon level units require printed versus digital references in order to train Soldiers and maintain equipment.

Institutional Course Managers - Consider revising professional military course (PME) lesson plans for the existing training management class to incorporate processes to access digital manuals and to order printed manuals. Provide a list or CD containing the most current doctrine relevant to the branch or MOS of the student.

8. Defensive Operations: The unit demonstrated challenges maximizing time to emplace obstacles during defensive operations. This is a result of a few factors: lack of an execution matrix to task and track engineer efforts, engineers did not always receive instructions from the maneuver unit at the obstacle location, engineers did not receive a priority of work, and the unit did not move the earth movers from one location to the next.

Observation 1 - Engineers did not initiate digging until 10 hours after the start of the defense lane. At noon on day two of the defense engineer assets sat awaiting guidance from the unit as to where to dig. The unit could have established better protection by maximizing the time of engineer assets. Units were ~50-100% dug in by the NLT defend time, dependent on the unit.

Observation 2 – CABs emplaced turning obstacles to turn the enemy into their engagement area (EA). This prevented the enemy from using cover and concealment during their attack, and positioned them in the open. The CABs did not maximize the EA with blocking or fixing obstacles. This allowed the enemy to more rapidly reach their weapons effective ranges. It also reduced the friendly forces time to engage at standoff ranges.

Observation 3 – BDE leadership was very aggressive regarding range cards and sector sketches. During the BDE CAR the S3 stated “If we don’t have range cards and sector sketches then we don’t have a defense, get it done.”

Observation 4 – Although the CAR needs some improvement it served a good purpose of defining the commander’s intent and CAB CDRs articulated simple easy to understand plans. The unit conducted the CAR on a hilltop where all could observe the area of operations.

Observation 5 – The unit reported 3/9 Javelins in one CAB and 5/12 in another CAB. This degraded the unit’s ability to maximize the effects of fires at the decisive point. Maximum utilization of Javelins is a persistent observation among most ABCTs since 2012. Commanders expressed the primary concern is limited JAVELIN SMEs in the BDE.

Observation 6 - One company had very few vehicles positioned with engagement areas beyond 800 meters. This prevented the friendly forces from having weapons standoff with the 120mm and TOW missile.

Observation 7 – The BDE staff did not accurately portray unit strength to the commander. Units initially only reported combat power (SLANT) at 0800 and 1600 daily. During the defense, the commander envisioned that he had two equal BNs facing the threat on the defense. He would have been able to better direct subordinate units with accurate combat power. Following this event the commander directed increased reporting of combat power and overall situational awareness improved as a result.

Actions to Date - Heavy Weapons Master Gunner Course (HWMG) replaced the Heavy Weapons Leader Course (HWLC) to better prepare NCOs to serve as unit Javelin trainers. The HWMG is an ASI producing course designed to train selected NCOs to assist unit leaders in maintenance and employment of all heavy weapon systems assigned to combat arms organizations.

Recommendations –

BN and BDE staff must demand information from units and track the progress of EA development.

Train individual and collective defense tasks at homestation using LVCG resources.

Units conduct the Javelin training program IAW DA PAM 350-38 and FM 3-23.37. Units send master trainers to the HWMG course.

Divisions and corps with ABCTs transmit their requirements for training at the HWMG Course during TACITS annually to inform DA resourcing decisions, and to build/preserve institutional training capacity. If FORSCOM does not request the seats through TACITS, TRADOC and the Army G3/5/7 will not validate the requirement.

9. Urban Operations

Observation 1 – During the CAR the S2 mentioned there was an AT threat in one of the towns. The unit still selected a dismount point within 200 meters of the town in open terrain. Upon arrival to the town platoons were positioned in column formation instead of the wedge or line formation. Once friendly forces received IDF they broke out of column formation and spread out. The enemy AT weapons were positioned within the city to destroy friendly forces. The BN delivered smoke to cover the dismount approach into the city and the enemy was unable to engage the Bradleys with AT weapons. A technical rehearsal of fires during MDMP was key to the success of the smoke.

Observation 2 – Once in the city infantry squads within each company demonstrated that they knew where they were going. However, companies independently cleared their sectors of the city without communicating or marking the buildings they cleared. Adjacent units were unequipped with direct fire control measures or situational awareness to prevent fratricide. Units could have cleared the same buildings twice since they were not marked. No common SOPs were communicated to ensure adjacent units understood marking standards. Unit leaders expressed they had marking systems but PCCs/PCIs were not tailored based on the specific need for this mission.

Observation 3 – The BDE deployed a SHADOW above the city but could not differentiate friendly from threat vehicles. Leaders recommended a marking SOP to provide this capability.

10. HF Proficiency

Observation 1 - Scouts and staff across the BCT did not demonstrate proficiency on operating the high frequency (HF) beyond line of site (BLOS) wave form radio to meet mission command communication requirements. The HF BLOS wave form radio provides a capability that mitigates battalions having only one retrans vehicle. Operational positioning of CPs sometimes exceed the Line of Sight (LOS) capability of the very high frequency SINCGARS radios and retrans. Brigades utilize the HF BLOS wave form capability of the AN/VRC-104 to meet BLOS mission command communication requirements.

Observation 2 – When CABs fail to maximize the capability of HF and also only have one RETRANS they almost always have challenges with mission command.

Recommendations:

Armor School - Review ways to increase HF in POIs.

Cyber Center of Excellence - Consider incorporating HF into institutional training for Cyber Soldiers.

ABCTs - Seek additional opportunities to train the trainer on HF at homestation, and support attendance to RSLC IAW the Recon Career Timeline. Issue 5988E-s for all mission command equipment and require operators to conduct PMCS. Issue TMs for all equipment. Add HF operations to TACSOPs and TOCSOPs.

11. UAS Operations: No Ravens were observed by the team being flown by the brigade. This trend has consistently been observed by our team at CTCs since 2012. The major barrier reported is lack of trainers and operators followed strict or long clearance procedures for pre-planned ROZ.

Recommendations:

Units increase the number of trained UAS operators by either sending Soldiers to the Small UAS Raven Master Trainer Course at Fort Benning, GA. Master trainers have the ability to conduct train-the-trainer activities to increase the number of qualified UAS operators. Information is available at the Fort Benning web page at http://www.benning.army.mil/infantry/197th/229/SUASMT/

Units seek opportunities to incorporate Ravens into the Information Collection Plan.

12. CBRN

Observation 1 – The unit demonstrated challenges with CBRN detection, protection, avoidance, and decontamination.

Observation 2 - Since CBRN NCOs are no longer on CO/TRP MTOEs, the unit did not have trained personnel at company and troop levels to maintain assigned equipment and train individual and collective CBRN tasks. Unlike AC units ARNG units do not have a CBRN training course at homestation.

Observation 3 - The majority of Soldiers were not wearing protective masks. M9 paper was not emplaced on vehicles for early identification of contamination.

Observation 4 - Quartering parties did not initially check for CBRN or establish early warning with chemical agent monitors. The BCT did not possess organic capabilities to conduct a deliberate decontamination.

Observation 5 – The unit discussed CBRN in rehearsals and orders more often than previous units observed. The BCT discussed dirty routes and provided CBRN graphics to subordinate units.

Observation 6 – The unit did not receive JLIST until 90 days prior to NTC so it made training more difficult.

Actions to Date - Technological advances have led to a new CBRN decontamination capability the Army is testing now called the SAM Bag. The bag is about the size of a back pack or small ruck. The kit has an agent identification spray, a decon solution, and equipment wipe, along with protective gear. This kit can decon about two combat vehicles and requires a two man team. The agent identification spray is about the size of an Armor-All spray bottle. The Decon solution is about the size of a hand-held garden pump sprayer, and the equipment wipe is about the size of a chami- cloth used to dry vehicles. When a unit has been contaminated, they can conduct an operational decon with this capability in about two hours vice 24-36 hours for a deliberate decon. The agent identification spray is applied to the vehicle and turns colors upon detection of a persistent agent. The areas of decontamination are marked. The decon solution is then applied to those areas and takes about 30 minutes to render an operationally safe surface. The equipment wipe is designed to decon exterior crew-served weapons. The CBRN School is current testing this capability and anticipates in early CY17 the testing will be complete and allow them to move to the next step.

Recommendations

All Centers of Excellence (CoEs) review programs of instruction to ensure that Soldiers are trained to execute CBRN operations, and that non-commissioned officers and officers are trained to plan, execute, train, and lead CBRN operations.

For a sample CBRN Smart Card created by a unit Chemical Officer (CHEMO) visit the TRADOC Capability Manager, Armored Brigade Combat Team (TCM-ABCT) milsuite page at https://www.milsuite.mil/book/docs/DOC-196717?sr=stream.

Appendix C, FM 3-11, July 2011, Multi-Service Doctrine for CBRN Operations, discusses the basic standards for individuals, selected personnel, CBRN staff, commanders, and organizations. The appendix also discusses the medical CBRN training requirements established in 2004 under the direction of the Assistant Secretary of Defense for Health Affairs.

13. Medical Operations

Observation 1 – The unit did not always have a medical common operating picture (MEDCOP) shared from BDE→BNs→COs. Companies often did not know where Role 1 locations were located to evacuate casualties.

Observation 2 – The unit positioned Ambulance Exchange Points (AXPs) too far from Role 2 locations to ensure Soldiers arrived in time to provide treatment. The unit suffered high died of wounds rates (59%) as a result. Note figure 5 for a way to plan casualty evacuation (CASEVAC).

Observation 3 – Medical officers often did not participate in logistics synchronization (LOGSYNCH) meetings.

Observation 4 – The unit covered medical operations very well in rehearsals. The unit provided casualty estimates by phase of the operation and identified medical locations.

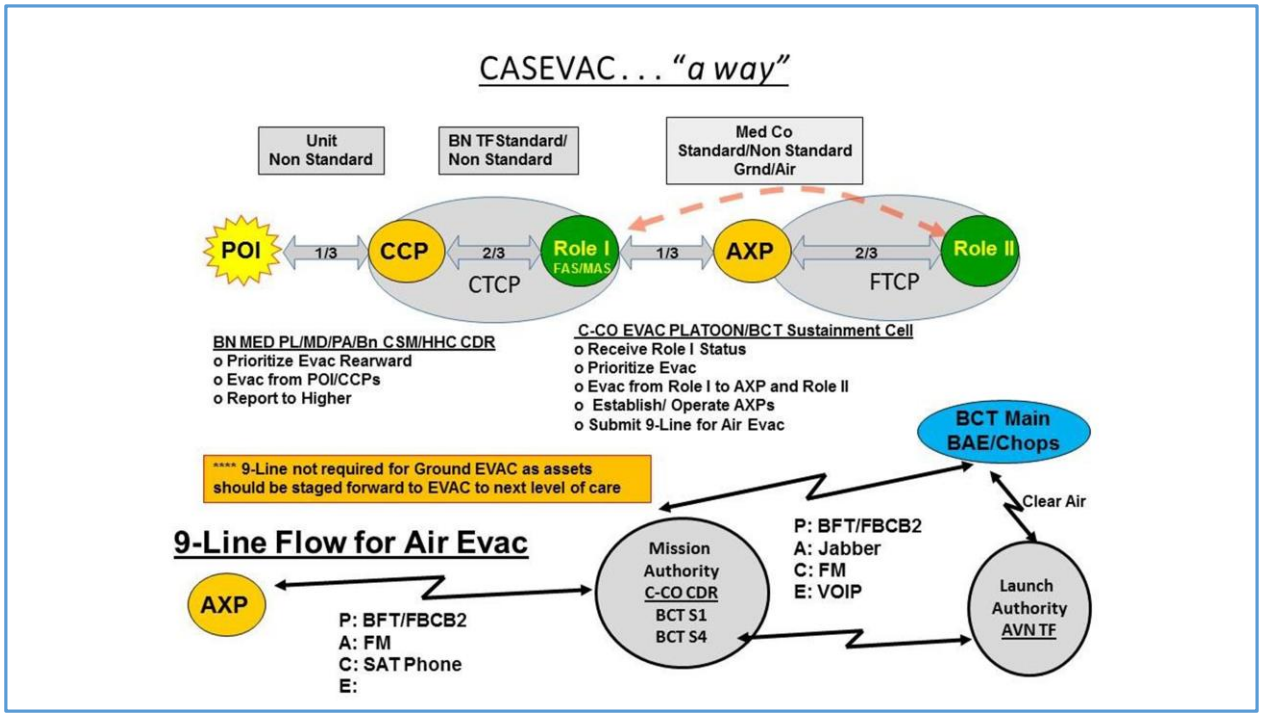

Figure 5 – CASEVAC "A Way" REF ATP 4-02.2, AUG 2014, Medical Evacuation

Recommendations:

Medical planners should consider the use of CCPs, Ambulance Exchange Points (AXPs), and the ambulance shuttle system when developing the BCT's casualty evacuation plan. The incorporation of these points greatly enhances the speed and efficiency of casualty evacuation from the battlefield.

Plan for AXPs at predetermined locations as far forward as tactically permissible to allow the rapid transfer of casualties from one platform to another. By breaking the operational environment up into smaller pieces, medical planners shorten evacuation timelines and positively improve casualty survival.

14. React to Indirect Fire (IDF) – When the unit received IDF all Soldiers immediately dropped to the ground and sought cover. The unit can improve in submitting a report IAW their TACSOP, conducting personnel accountability, finding/destroying the enemy, conducting a crater analysis to identify the point of origin (POO), and patrolling the area following IDF. The enemy called IDF from observation posts (OPs) on adjacent terrain that was never cleared by the unit prior to occupying this position. This observation is very common and occurs in most units our team has observed since 2012. When units do not clear the area of operations they usually receive IDF as a result.

15. Reconnaissance and Security

Observation 1 – During the defense, some units retained 25% security forward on the battle positions, until conditions led to a 100% requirement, while the remaining 75% waited in hide positions. This technique works well to prevent the threat from locating all defensive positions and templating fire missions, etc. Not all units provided 25% security and some did not. This left a gap in the security plan.

Observation 2 – The unit relied too heavily on UAS for observation and did not always plan for alternate observers of named areas of interest (NAIs) and fires targets. This resulted in a lost opportunity to engage the enemy main body traveling in a column formation in the units EA. Additional issues that effected this ability to call for fire (CFF) included: The AFATDS had a counterfire target and a high payoff (single) target both cued as priority 1. The unit encountered difficulties because they had all available fires assets tied to these two targets. A good technique is to assign each battery, or capability (mortar, artillery, MLRS, etc.) a different priority. This would have ensured an asset could deliver fires on the enemy main body.

Observation 3 – The unit did not position scouts far enough forward to identify threat forces moving in the main corridor. The enemy was able to negotiate terrain and move within their own weapons effective ranges before friendly forces could engage at standoff ranges, or place all fires at a decisive point in the EA. In other occasions staff/commanders positioned icons for scout OPs. The scouts occupied the locations of

the icons but could not observe the NAIs, instead of repositioning to locations where they could effectively observe.

> "We don't tell our scouts where to position, we tell them where to look"
>
> Senior Trainer

16. Protection – Leaders assigned to BN staffs expressed concern over an inability for the BN Main CP to secure themselves with no crew served weapons mounts on any platforms when the commander departs with the TAC. They recommended that any future AMPV or wheeled platform that resides in the TOC needs to have a crew served weapons mount.

17. Company Commander Initiative – BN staff and leaders expressed that stability operations for over the past decade have discouraged risk aversion. Sometimes company commanders do not operate within commander's intent and make rapid decisions in the absence of orders, or loss of mission command. Leaders recommended that commanders exercise aggressive initiative and take risks to accomplish the commander's intent, to learn by doing, and that it is ok to make a mistake in training to build leaders. Over the past year of visiting CTCs, our team has observed that many company commanders need improvement in portraying confidence and authority while delivering orders to their platoon leaders.