

Unclassified



**TCM-ABCT Seminar Wargame  
Report  
7-11 March 2016**

Published: 23 May 2016

## TCM ABCT Seminar Wargame Report

**1. Introduction:** The TRADOC Capability Manager-Armored Brigade Combat Team (TCM-ABCT) acts as the TRADOC conduit and user representative for FORSCOM and the ABCT communities, in both the active and the reserve components. TCM-ABCT performs ABCT gap analysis across Doctrine, Organization, Training, Materiel, Leadership and education, Personnel, Facilities and Policies (DOTMLPF-P) through collection of trends and data points from Combat Training Center (CTC) rotations, experimentation, Seminar Wargames and unit visits.

**2. Purpose.** The purpose of this report is to present the insights from the ABCT Seminar Wargame and recommend mitigation strategies. TCM-ABCT will utilize this document to inform the following:

**a. 2015 ABCT Capability Gap Revision:** Insights identified during the ABCT Seminar Wargame inform the development of ABCT capability gaps. These gaps are then analyzed to determine mitigation strategies impacting DOTMLPF-P.

**b. ABCT Operational and Organizational (O&O) Concept 2030-2040:** The O&O Concept for the ABCT in 2030 – 2040 will ensure that requirement efforts across the domains of DOTMLPF-P are synchronized and integrated as force modernization, force design, budgetary shifts, and end strength requirements of the Army's future ABCTs are met.

**c. Capabilities Needs Analysis (CNA) FY 16:** TCM-ABCT participates annually in the CNA process which includes a Functional Area Analysis (FAA), Functional Needs Analysis (FNA), and a Functional Solutions Analysis (FSA). The results of CNA are used by the MCoE to prioritize Fielded and Programmed Solutions, Gaps, and Recommended Solution Approaches (RSAs).

**d. ABCT Campaign of Learning (CoL):** The ABCT CoL is a structured process to collect information and focus intellectual efforts to inquiries into how to best improve and adapt the maneuver force to meet the challenges of current and future operational environments. The CoL supports the MCoE's Army Warfighting Challenges (AWFC) and the learning demands within those AWFCs. TCM-ABCT provides feedback on DOTMLPF-P gaps and recommends mitigation strategies through the ABCT CoL process.

**e. ABCT ARCIC Portfolio Assessment (APA):** The APA recommends gap mitigation strategies to address critical weaknesses in the ABCT formation. Proposed solutions, across DOTMLPF-P, remain focused within the Movement and Maneuver portfolio primarily due to fiscal scale. The principal strategy for increasing overall ABCT capability as swiftly as possible is to accelerate new developmental combat vehicles by trading incremental modernization efforts on legacy platforms beyond current engineer change proposals (ECPs) and planned lethality/survivability upgrades.

**f. TCM-ABCT Knowledge Management Forums:** TCM-ABCT will share this report on our milSuite page (<https://www.milsuite.mil/book/groups/t>), in the Armor School *Thunderbolt Blast*, and in future ABCT Warfighter Forums.

**3. Background.** As part of its CoL, TCM-ABCT hosted the seminar wargame at the Maneuver Battle Lab (MBL) from 7 to 11 March 2016. The hypothesis developed for the seminar was: The ABCT fights and wins against a near-peer/hybrid threat during decisive action in the conduct of Joint Combined Arms Maneuver (JCAM) and Wide Area Security (WAS) across all phases of operations. This venue allowed TCM-ABCT and the formation's stakeholders to assess the ABCT's ability to conduct JCAM and WAS in an immature theater against a near-peer/hybrid threat.

**a. Objectives.** The objectives of the seminar wargame included:

- (1) Assess the ABCT's ability to conduct JCAM against a near-peer/hybrid threat.
- (2) Identify the challenges associated with "setting the theater" in support of the deployment of ABCT(s) and develop a Mitigation Strategy for the identified shortfalls.
- (3) Focus outcomes to identify ABCT capability gaps and develop DOTMLPF-P recommendations to mitigate gaps and improve future JCAM.
- (4) Identify the prioritized requirements for experiments, modeling, and simulation.
- (5) Inform the CNA FY 16, the ARCIC Portfolio Review (Due NLT 31 August 2016), the Initial Draft of the O&O Concept (Due 30 September 2016), an updated Operational Mode Summary / Mission Profile (latest version written in 2009), and the Combat Vehicle Modernization Strategy.

**b. Participants.** The TCM received tremendous support in the preparation and execution of the seminar wargame from numerous organizations including: MCoE Concepts Development Directorate, MCoE Future Maneuver OPT, Mounted Requirements Division, TCM BCT Mission Command, MCoE G2, Cyber CoE, ARCIC, Aviation CoE, CERDEC, Fires CoE, Intelligence CoE, Maneuver Support CoE, SSI-CDID, SMDC, Sustainment CoE, TEFOR / G-25, TRAC – WSMR, 21st TSC and USAEUR G4.

**4. Seminar Wargame Concept.** The scenario included: a near-peer/hybrid threat; periods of threat air superiority and overwhelming threat fires; an Eastern European area of operations with a mix of unimproved roads, agricultural fields and urban centers and included multiple river and gap crossings; and long logistical lines of support. The Assembly Area for the ABCT was over 1200 kms from the SPOD and its objective 240kms further. The seminar wargame consisted of four working groups (WG) which were not linked to or dependent upon each other. WG 1 focused on the requirements for setting the conditions for the deployment of ABCTs to Europe in support of Unified Land Operations. WG 2 focused on the ABCT's ability to conduct the Reconnaissance and Security Fight with the current Cavalry Squadron Organization, synchronize and integrate attachments/enablers, conduct shaping operations, and sustain the ABCT. WG 3

focused on a Combined Arms Battalion's (CAB) ability to Shape the Terrain / Influence the Enemy's Maneuver; Conduct an Area Defense with enablers; and conduct Area Security. WG 4 focused on a CAB's ability, with enablers to conduct a Breach and Gap Crossing while conducting an attack; and to conduct Area Security.

**a. Study plan development.** The Test and Analysis Office (TAO) and TCM-ABCT developed the Data Collection Management Plan (DCMP) populated by the Essential Areas of Analysis (EEAs) based on the AWFC. Each WG utilized the DCMP to drive the group's discussion, informing their pertinent EEAs. The insights discussed in this report were gathered from the WG's daily "hot washes," comments entered by each WG into Facilitate Pro (FacPro), and notes taken and submitted by the facilitators of the WGs.

**b. Task Organization.** In this seminar, the ABCT commander detached an armor heavy CAB and received a Stryker Battalion (BN) and an Infantry BN as attachments. Additionally, in this scenario the threat's capabilities, especially in Fires and Air Defense, offset or degraded many of the joint enablers that normally result in an overmatch in our favor.

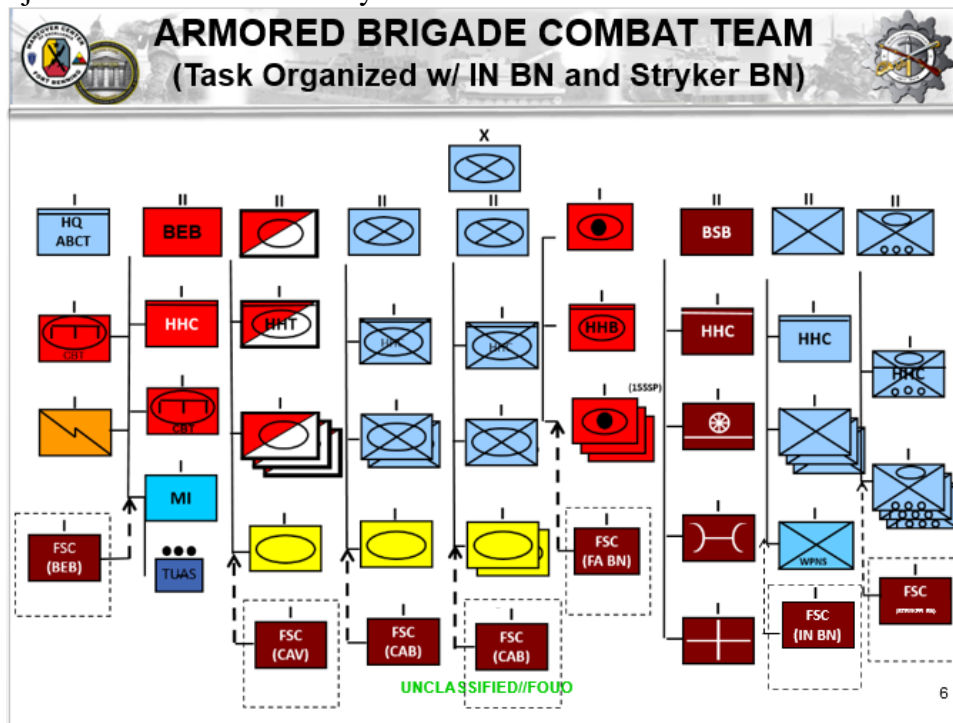


Figure 1 – Task Organization used during the TCM-ABCT Seminar Wargame

## 5. Insights

### a. Insufficient Combat Power Available to Defeat the Threat

**(1) Discussion.** The lack of formation appropriate mobility, protection, and firepower proved to be significant problem against the near-peer / hybrid threat. In this seminar, the ABCT commander detached an armor heavy CAB (2 AR COs / 1 MECH IN CO). Subsequently he had

insufficient tank / MECH companies to re-task organize and had three tank companies and three MECH companies for use in the close fight; the 4th tank company remained in the Cav Squadron. The ABCT did have a Stryker BN and an Infantry BN attached. However, these attached BNs did not have adequate survivability, mobility, and firepower to compensate for the detached CAB during the highly mobile Phase III fight. The attachment of a Stryker BN or an Infantry BN (to offset a detached CAB) enabled the ABCT during WAS activities, if resourced with protected mobility platforms, but not while conducting JCAM.

(a) While analyzing a CAB's ability to prepare for and conduct an Area Defense, WG 3 compared two courses of action (COA). COA 1 required the commander to prepare and conduct the defense with two MECH IN COs and one AR CO while COA 2 included the same tasks but included the attachment of one Stryker CO to the CAB. During the comparison of the COAs, the threat attacked with a mechanized Infantry brigade (organized with 52 BMPs, 42 Tanks, 30 SP Howitzers, and 6 BM-21s). Although the attachment of the Stryker CO in COA 2 provided the commander with more options, the group assessed that additional tanks were required to successfully defend against the threat in both COAs. The assessment was primarily based on the significant size and lethality of the attacking threat; the threat's brigade was larger and included several key enablers (Electronic Warfare, Air Defense, and Field Artillery) that were either absent from our ABCTs or were fewer in number.

(b) WG 4 (two AR COs / one MECH IN CO) examined a CAB's ability to conduct a combined arms breach of an obstacle and conduct an attack against a position held by reinforced Mechanized Infantry Company (MIC) with two MECH IN PLTs and one Tank PLT (supported by the enablers organic to the threat's brigade). The WG assessed that a comparison of the Blue Forces and Threat Forces resulted in an advantage for the threat in respect to the Correlation of Forces and Means (COFM). This assessment was primarily based on the threat's ability to prepare a complex defense, the capabilities of his ATGMs and his ability to employ brigade enablers (EW, AD, and FA). The WG also noted that the CAB required more MECH IN in order to sustain momentum during the attack against the MIC, who was defending well-prepared positions in an urban area and had the ability to conduct Sub-Terranean Operations (SbTO). WG 4 surmised that the loss of the 14 Infantry Fighting Vehicles (IFVs) and 9 IN Squads (due to the conversion from the R to the K Series TOE) put the CAB, and ABCT, at risk of failing its assigned mission in this scenario.

## **(2) EEAs Supported**

(a) Does the ABCT have sufficient capability to fight for information as it conducts reconnaissance and security operations during JCAM and WAS? (2.1)

(b) What is the capability of the ABCT's platforms to maneuver and survive in close combat against a near-peer/hybrid threat? (2.2)

(c) Is the CAB structure of three maneuver companies the correct design for DA operations against a peer/near peer hybrid threat? (3.1)

(d) How effective is the CAB structure of three maneuver companies in the conduct of area security? (4.1)

### **(3) AWFCs**

(a) 11 – Conduct Air-Ground Reconnaissance and Security Operations.

(b) 15 – Conduct Joint Combined Arms Maneuver.

### **(4) DOTMLPF Recommendations**

(a) Doctrine: Review the COFM used in planning at all levels to address and update to account for a near-peer / hybrid threat.

(b) Organization

– Return 2 Mechanized Infantry Companies and 1 Tank Company to the ABCTs.

– Configure all ABCT formations (manned and unmanned) under the same TO&E while limiting version control challenges.

(c) Materiel: Increase / Decrease funding profiles as required to conduct BCT Fielding – increase production to 90 tanks per year starting in 2025.

## **b. Fires Overmatch Against a Near-Peer Threat**

**(1) Discussion.** The ABCT has limited capacity and capability to execute indirect fires against a near-peer threat at competitive ranges and against armored targets due to the loss of DPICM). Much of the threat artillery employed during this scenario was out of the range of the ABCT's organic fires. WGs reported that fighting against near-peer threat altered their scheme of maneuver due to the FA overmatch (both in range and number of FA systems). WGs further noted that ABCTs rely on tube delivered obscuration, a time consuming mission that increases the likelihood of receiving enemy artillery fire; in this scenario, the organic FA BN could not provide sufficient obscuration to support the multiple templated obstacle breaches and gap crossings. This insufficiency and the ABCT's inability to provide close fires and execute the counter-fire fight simultaneously highlights the ABCT's dependency on an EAB Field Artillery HQs in this scenario. Finally, the loss of the ability to fire DPICM not only decreased the lethality of the FA BN against armored targets, but also increased the sustainment burden on the FA BN and the BCT because the BN has to fire more rounds in order to achieve the desired effects.

### **(2) EEAs Supported**

(a) How will the ABCT protect its formations against enemy UAS, rockets, mortars, artillery, WMD, manned aircraft, and long range missiles to preserve the force during joint combined arms maneuver? (3.6)

(b) How does the ABCT deploy required Fires capabilities to enable overmatch? (3.7)

(c) Are EAB enablers sufficient to sustain / support the ABCT during all operations?  
(3.11)

(d) How does the future ABCT deploy required Fires capabilities to enable overmatch?  
(4.9)

### **(3) AWFCs**

(a) 17 – Integrate Fires.

(b) 18 – Deliver Fires.

### **(4) DOTMLPF Recommendations**

(a) Doctrine. Address the role of DIVARTY in support of BCT operations.

(b) Training. BCTs and Division HQs should focus, both at home station and during CTC rotations, on the role of the DIVARTY in the counter-fire fight and shaping operations.

(c) Materiel

– The Army must continue to develop cannon and rocket fires capable of rapid long-range counter-battery fires to offset the threat's advantage in artillery.

– BCTs require an obscuration capability to support deliberate breaching and gap-crossing operations that should obscure the visual and thermal signatures of our vehicles and personnel from enemy detection.

– Develop a materiel solution to offset the loss of the DPICM munition.

## **c. Division's Role in Support of BCT maneuver**

**(1) Discussion.** Although this seminar's focus was on the ABCT during JCAM and WAS, WGs reiterated several dependencies that BCTs have on the division during their operations. In this scenario a division commander would have commanded multiple BCTs and at least one of each of the multifunctional support brigades including combat aviation, fires, and maneuver enhancement. Doctrinally, one sustainment brigade would support the BCTs and modular brigades on an area basis and one or more medical brigades would provide health service support to the division. Each BCT would require, and compete against each other for, support from the division to enable its operations. The BCTs in this scenario require a division HQ (and associated enablers) to plan and execute Shaping Operations during all phases and across all domains to include:

(a) A linkage from the strategic plan through the operational plan to the tactical plan, across the phases of a campaign (Phases 0 through V), that allows BCT commanders and staffs to clearly understand the campaign's end-state.

(b) Synchronization and prioritization of resources and enablers to include: combat aviation, fires, cyber, maneuver enhancement, intelligence, and sustainment.

(c) Control and execute fires and sensor management in support of maneuver (Counter-fire, SEAD, Obscuration, Fires in support of repositioning FA units, Sensor Zones, etc.)

(d) Provide an integrated Air Defense in support of BCT maneuver. The BCTs have no organic AD capability.

(e) Inform and Influence the population (within the BCT's AO) to enable maneuver during all phases and synchronized across all units.

(f) Conduct CEMA Offensive and Defensive Operations to enable maneuver.

(g) Shape terrain in order to influence enemy maneuver and attrit enemy forces prior to the enemy entering the BCT's AO.

(h) Terrain management within in a Deep, Close, and Rear Operational Construct.

## **(2) EEAs Supported**

(a) What is the capability of the ABCT's BEB to shape terrain during joint combined arms maneuver? (3.4)

(b) How does the ABCT deploy required Fires capabilities to enable overmatch? (3.7)

(c) Are EAB enablers sufficient to sustain / support the ABCT during all operations? (3.11)

## **(3) AWFCs**

(a) 11 – Conduct Air-Ground Reconnaissance and Security Operations.

(b) 15 – Conduct Joint Combined Arms Maneuver.

(c) 17 – Integrate Fires.

(d) 18 – Deliver Fires.

**(4) DOTMLPF Recommendations.** (D, O, T) Review division HQ's organization, roles, and responsibilities both in seminars and simulations.

## **d. Mobility / Counter-mobility / Survivability Shortfalls in the ABCT's BEB**

**(1) Discussion.** ABCTs require more than the mobility / counter-mobility / survivability assets found within the BEB. By its design, the BEB can provide approximately 25% of the



required EN capability required by an ABCT; the BEB can execute mobility / shape / obstacle simultaneously in support of 1 CAB, SDQN or BN at a time. Due to this lack of organic EN capabilities, the ABCT is dependent on Echelons Above Brigade (EAB) augmentation when there is a requirement to support more than one CAB. Mobility Augmentation Companies (MACs) provide this required support to the ABCT based on established Rules of Allocation (ROA) and are essential to the tactical success of the ABCT. However, EAB augmentation does not integrate into the ABCT without presenting disadvantages. For example, the primary mover in the MAC is the M113 while the BEB is equipped with ABVs, BFVs, and in this scenario AMPVs. This presents survivability disadvantages, TTP differences, and pace of movement challenges for the maneuver commander. The fact that the Joint Assault Bridge (JAB) is unusable due to the increased MLC of the M1A2SEPV3 (the current solution is to use the JAB as a CAUTION crossing for tanks at 3 MPH with a ground guide) further limits the ABCT's mobility operations. The United States' compliance to the Ottawa Treaty, which prohibits anti-personnel landmines (AP-mines), deepens the ABCT's lack of capability to shape terrain.

## **(2) EEAs Supported**

(a) What is the capability of the ABCT's platforms to maneuver and survive in close combat against a near-peer/hybrid threat? (2.2)

(b) What is the capability of the ABCT's BEB to shape terrain during joint combined arms maneuver? (3.4)

(c) What is the capability of the ABCT's BEB to identify, secure, and reduce obstacles and hazards; to breach structures; and to bridge gaps to guarantee unimpeded freedom of maneuver during joint combined arms maneuver? (3.5)

(d) What impacts do the planned platform upgrades and the fielding of future platforms have on the ABCT and EAB enablers? (3.10)

(e) Are the EAB enablers sufficient to sustain/support the ABCT during all operations? (3.11)

## **(3) AWFCs. 15 – Conduct Joint Combined Arms Maneuver.**

### **(4) DOTMLPF Recommendations.**

#### **(a) Training**

– Augment BCTs with a MAC during home station training and during CTC rotations to allow for the development of SOPs and techniques for deliberate breaching.

– Examine force flow to ensure required engineering assets flow into theater with or as soon as possible after the ABCT in order to maximize the capabilities of the ABCT.

#### **(b) Materiel**

– Remove the BFVs from the BEB and field the AMPV as early as possible.

– Field the AMPV to EAB Engineer assets as early as possible.

– Develop a scissor bridge that will support the formation’s vehicles.

**e. Cyber Electromagnetic Activities (CEMA) Threat to the BCT**

**(1) Discussion.** The threat employed a cyber level of sophistication which our BCTs have not encountered in other scenarios. A near-peer threat can be expected to operate in and collect on communication networks across all spectrums currently used within the BCTs. Currently, the BCTs have limited capability to protect their networks or conduct offensive CEMA operations; the CEMA cells are designed to coordinate, integrate and synchronize Cyberspace Operations (CO), Electronic Warfare (EW) and Spectrum management Operations in accordance with the commander's intent. Degradation to the communications systems creates challenges throughout the BCT to provide SA/SU and a COP for the BCT and its supporting enablers.

**(2) EEAs Supported**

- (a) How does the ABCT conduct operations under conditions of D3SOE? (5.1)
- (b) How does the ABCT detect and identify cyber threats and defend friendly networks? (5.3)
- (c) How does the ABCT detect, identify, and exploit access to threat networks? (5.4)
- (d) What (DOTmLPF) capabilities are required to protect the ABCT communications networks, including the shared COP? (5.5)
- (e) What capabilities or DOTmLPF changes are needed to enable the ABCT to conduct reconnaissance to ID and preempt threat EW activities? (5.6)
- (f) What DOTmLPF changes are needed to provide the ABCT with offensive and defensive EW and cyber capabilities and to integrate those capabilities into across the ROMO? (4.7)

**(3) AWFCs.** 7 – Conduct Space and Cyber Electromagnetic Operations and Maintain Communications.

**(4) DOTMLPF Recommendations.**

(a) Doctrine. BCTs must be able to identify and defend against any attempt to degrade or disrupt their network. Doctrine must address the near-peer’s emerging capabilities and our strategy to mitigate this ever worsening threat.

(b) Training. Home station training and CTC rotations must replicate the contested Cyber environment that BCTs can expect against a near-peer threat (as described in the *NTC 16-03 Cyber Support to Corps and Below Observations, Insights, and Lessons Learned*).

(c) Materiel

– EW Planning & Management Tool (EWPMT) is a software application that empowers the Electronic Warfare Officer (EWO) and Spectrum Manager (SM) to plan, coordinate, manage, control, and de-conflict the electromagnetic spectrum (EMS), incorporating Cyber planning and integration, from battalion to Joint Task Force (JTF) levels.

– Multi-Function EW (MFEW) is a System of Systems that will provide the BCT with an organic Offensive Electronic Attack (OEA), Electronic Warfare Support (ES), and Defensive Electronic Attack (DEA) capability.

**f. CAB Scout Platoon lacks Survivability, Mobility, and Firepower.**

(1) **Discussion.** A common observation from the three ABCT / CAB WGs was that the current CAB Scout platoons configured with three BFVs and five HWMMVs (3 x 5 configuration) lack adequate protection and lethality to fight for information against a near-peer threat. The WGs agreed that the 6 x 36 Scout platoon (6 BFVs and 36 Soldiers) organic to the ABCT's Cavalry Squadron would increase the CAB's capability to conduct R&S Operations, increase tactical options, and increase overall capacity.

(2) **EEAs Supported.** What is the capability of the ABCT's platforms to maneuver and survive in close combat against a near-peer/hybrid threat? (2.2)

(3) **AWFCs**

(a) 11 – Conduct Air-Ground Reconnaissance and Security Operations.

(b) 15 – Conduct Joint Combined Arms Maneuver.

(4) **DOTMLPF Recommendations**

(a) Doctrine. Revise FM 3-98 to describe the Standard Scout Platoon Organization's structure and employment.

(b) Organization. Configure ABCT Cavalry Squadrons and Scout Platoons to the standard scout platoon TO&E (6x36).

(c) Materiel. Replace the BEB Engineer BFVs with the AMPV and field the BFVs to the CAB Scout Platoons as early as possible.

(d) Leadership. Revise Cavalry oriented courses (RSLC, ARC, CLC) to reflect the Standard Scout Platoon.

(e) Personnel. Man all Scout platoons in all formations to reflect the 6x36 structure.

**g. Challenges of Deploying and Sustaining an ABCT**

**(1) Discussion.** Although WG 1 assessed that the road network can support movement of ABCT they identified several challenges affecting the RSOI of an ABCT in this theater. The challenges included the lack of adequate rail infrastructure at receiving locations and the inability of the Heavy Equipment Transporter System (HETS) to haul the M1 SEPv2. All of the WGs expressed concern about the sustainment of the ABCT during extended operations for all classes of supply including:

(a) The demand for class III (B) will exceed the capacity of the BSB during high-tempo sustained operations.

(b) The possible degraded sustainment capabilities due to threat EW/cyber (during all phases).

(c) The BSB has 1x 92M30 in the Support Ops section with no Mortuary Affairs equipment.

(d) EAB medical units do not have tracked ambulances.

(e) High casualty rates characterized by BCT-level high tempo operations and a contested air domain highlight the need for increased ground evacuation capability (standard and non-standard) and increased medical skills capacity in order to provide effective medical care.

(f) Medical assets of the BSB cannot be dispersed to minimize the effects of enemy artillery or airstrikes.

## **(2) EEAs Supported**

(a) Do theater resources support movement of the ABCT from SPOD/APOD to a staging base where the ABCT conducts RSOI? (1.4)

(b) Do theater resources support movement of the ABCT to the staging base? (1.7)

(c) Does the transportation infrastructure support movement of the ABCT from the SPOD/APOD to the staging base? (1.6)

(d) Are the theater resources adequate to support ABCT RSOI and movement to the TAA? (1.3)

(e) Are the theater and EAB enablers adequate to support ABCT RSOI and movement to the TAA? (1.1)

(f) Does the transportation infrastructure support movement of the ABCT from the staging base to the TAA? (1.10)

(g) Is the theater provided equipment (TPE) sufficient for the ABCT to accomplish its assigned missions? (1.2)

(h) What are the impacts of planned upgrades to combat platforms and the fielding of future platforms to the ABCT and EAB enablers? (1.5)

(i) Are facilities in the staging base adequate to support RSOI? (1.8)

(j) Is the TSC able to support the high tempo of ABCT offensive and defensive operations over extended LOC? (1.9)

(k) Are the EAB enablers sufficient to sustain / support the ABCT during all operations? (3.11)

**(3) AWFCs. 16 – Set the Theater, Sustain Operations, and Maintain Freedom of Movement.**

#### **(4) DOTMLPF Recommendations**

(a) Doctrine. As we continue to study this scenario and threat we must ensure that we are able to sustain extended combat operations at all echelons.

(b) Training

– We must place stress on sustainment organizations at all echelons, both at home station and during CTC rotations, to replicate the support required to sustain multiple BCTs during extended combat operations.

– Examine force flow to ensure required enabling assets flow into theater with or as soon as possible after the ABCT in order to maximize the capabilities of the ABCT.

(c) Materiel

– Fund the HETS A1 Modification (starting in FY21) and develop a HETS new start in order to transport the SEpv3.

– Field Mortuary Affairs equipment to the Support Ops section in the BSB.

### **6. Future Experimentation**

a. Continue to support the Next Generation Warfare studies.

b. Conduct ABCT Tactical Operations (Simulations).

(1) Analyze impact of loss of 2x MECH Infantry Companies.

(2) Determine the impact of seven tank companies and 6 MECH companies in an ABCT.

(3) Shape Terrain/Influence Enemy Maneuver.

(4) Indirect Fires – Assessing the loss of DPICM / Counter-Fire / Counter-Battery / Airspace Clearance and Management.

(5) Mobility Operations / Counter-mobility / Survivability operations.

c. Incorporate a Divisional Headquarters with multiple BCTs into this environment and against this threat.

d. Sustainment Operations incorporating TSCs/ESCs/CSSBs/BEBs and MEBs, if designated to secure rear areas.

7. POC for this report is Mr. Rhett Griner at rhett.b.griner.ctr@mail.mil, (706) 545-7482.

**TCM ABCT FY 16 Gaps List (as of 1 April)**

**Extremely High Risk**

1. The ABCT lacks sufficient formation appropriate maneuver companies, specifically IFVs and mechanized Infantry squads (x2 companies) and x1 armor company to conduct tactical fire and maneuver during combined arms mounted and dismounted operations in order to close with and destroy the enemy consistent with current doctrine.
2. The M113 FoVs has inadequate survivability and force protection, lacks the Size, Weight and Power-Cooling (SWaP-C) to incorporate future technologies and the Army's inbound network. It is an obsolete system, these platforms no longer provide commanders with viable capabilities to maneuver in operational environments.
3. Combat platforms in the ABCT require Active Protective Systems to defeat multiple enemy anti-armor weapons engagements while continuing to fight.
4. The FA Battalion in the ABCT lacks sufficient range to provide massed fires in support of the three Combined Arms Battalions (CAB) and the Cavalry Squadron and conduct counter-fire operations during Combined Arms Maneuver. This insufficiency is multiplied during Wide Area Security (WAS) operations due the dispersion of the supported forces and is further worsened if the FA Battalion is assigned an area of operations.
5. The current M1A2 FoVs exceeds support asset capability, future ECPs make the problem worse:
  - a. The Field Maintenance Teams (FMT) assigned to the Forward Support Companies (FSC) of the ABCT cannot recover or tow the Abrams MBT using a single recovery asset. Additionally, recovery vehicles cannot maintain pace with combat platforms during movement which negatively impacts the formation tempo during Decisive Action.
  - b. Heavy Equipment Transporter Truck Companies cannot transport vehicles in excess of 70 tons nor can they operate in areas with restrictive front axle weights limiting the ABCT commander's ability to execute expeditionary movement.
  - c. The Current MLC 85 bridge standard to AVLB and JAB is insufficient to support SEPv3 crossings when the tank is equipped with force protection kits and/or tank plows.
6. ABCTs lack the capability to apply local cyber actions to achieve local cyber effects to counter the increasing cyber/DF threats enhanced by threat UAS capabilities.
7. The DoD's policy to eliminate the employment of all cluster munitions by 2018 restricts the Fires Battalion in the ABCT from firing DPICM against armored and mechanized formations. The inability to employ DPICM limits the ABCT's ability to attrit enemy formations with indirect fires and increases the risk of losses to the formation during Decisive Action.
8. The ABCT lacks the ability to rapidly and accurately conduct counter UAS / counter air operations while protecting friendly UAS operations and manned aircraft during Decisive Action.
9. The ABCT BEB lacks the capacity to simultaneously provide mobility support, shape terrain and emplace obstacles to influence enemy maneuver, and prepare defensive positions to increase the survivability of combat platforms.

**High Risk**

10. The ABCT lacks the ability to maintain non-interrupted higher, lower, and adjacent "data and voice" communications with all elements of the brigade to sustain continuous situational awareness during Decisive Actions, while on the move.
11. The ABCT BEB is organized and equipped to support two (2) tactical breach lanes simultaneously, which is not sufficient to support four maneuver battalions during all phases of operations.

12. ABCTs lack the resources to effectively train to develop situational understanding, rapidly task organize for purpose, and synchronize Army Warfighter Functions across multiple domains while at home station.
13. The ABCT lacks adequate and rapid ability to produce obscurity to decrease the enemy's ability to detect friendly forces, increase survivability, and mask friendly intent during Decisive Action.
14. The ABCT, at all levels, lacks the ability to rapidly clear the airspace and gain authorization to employ fires, adversely impacting the employment of organic and non-organic fires against enemy ground and air systems, during Decisive Action.
15. The ABCT lacks the ability to provide networked communications to maintain "and share" situational awareness "between" mounted and dismounted Soldiers including voice, "data", and video capabilities during Decisive Action.
16. The lack of a standardized level of underbelly protection equivalent to at least 2X for all ABCT combat vehicle platforms restricts employment options and reduces our ability to protect vehicles and soldiers from blasts and ballistic effects.
17. Combat platforms in the ABCT lack the ability to detect, identify, and immediately engage threats while under armor without employing the main armament system, while reducing collateral damage and non-combatant casualties.
18. The ABCT, at all levels, lacks proficiency in planning for and conducting operations in a CBRN environment during Decisive Action.
19. The lack of commonality between an ABCT's home station assigned equipment, with its associated Training Aids, Devices, Simulators, and Simulations (TADSS), and the variants and configurations in the Army Prepositioned Stocks (APS) reduces training effectiveness at home station and forces combat vehicle crews to fall in on prepositioned stocks that are organized differently and have different capabilities depending on variant of vehicle assigned. This will impact combat readiness if units do not have sufficient time to retrain combat vehicle crews before combat operations begin.
20. The ABCT lacks the ability to conduct cooperative engagements between mounted systems and infantry squads using direct fire to mass accurate and/or mutually supporting fires quickly during Decisive Actions.

#### **Moderate Risk**

21. Elements within the ABCT lack the organization, SIPR, and network connectivity to collect, analyze, and disseminate an uninterrupted flow of information that provides time sensitive intelligence to minimize friendly force risks during dispersed operations.
22. The ABCT lacks the ability to identify hazards, such as mines and IED, from standoff distances, to reduce Soldier and vehicle losses during all operations.
23. The ABCT's sustainment platforms lacks sufficient mobility, survivability, connectivity, and sustainability to immediately follow combat forces through all terrain to sustain combat effectiveness during Decisive Action.
24. ABCT Soldiers, vehicle and equipment lack effective environmental controls required for continuous operation in extreme climatic conditions.
25. ABCT lacks the capability to provide the quality of time/quality of service network required for reliable voice and digital Fires messaging throughout the ABCT during all actions.
26. The ABCT lacks the capability to conduct Mission Rehearsals and Embedded Training from its combat platforms.
27. The ABCT lacks the organizational and Materiel capability to conduct scalable, non-lethal engagements that provide operational flexibility during Decisive Action.