

Tanks Need the Infantry to Lead the Way

by 1LT Brandon Akuszewski and CPT Larry D. Tran

A U.S. Army combined arms battalion deployed to Vekaranjärvi, Finland for the first time in history to participate in combined arms maneuver training with the Finnish Army's Karelian Brigade earlier this year.

The U.S. 1st Battalion "Mustangs," 8th Cavalry Regiment deployed in support of Operation Lock 2023 to eastern Finland from May 28 to June 10, 2023. This was also the first time the allied Finnish Karelian Brigade conducted maneuver training east of the Kymi River.

Task Force (TF) Mustangs included 400 Karelian soldiers who were attached and fought with their U.S. allies as a multinational battlegroup against a mechanized battlegroup from the Finnish Army's Armoured Brigade in four force-on-force battle periods. As the Mustangs prepared for Operation Lock, they faced a training problem that armored brigade combat teams (ABCTs) have not focused on recently: how do infantry and armor integrate and conduct large-scale combat operations (LSCO) in severely restricted terrain?

The Army Techniques Publication (ATP) 3-90.1, ***Armor and Mechanized Infantry Company Team***, published in 2016 is the current U.S. Army doctrine for company teams. However, there is no discussion on how a company teams operate in severely restrictive terrain or standing operating procedures (SOPs) for infantry and tank integration.¹ Older U.S. Army doctrine Field Manual (FM) 71-1, ***Tank and Mechanized Company Team***, states SOPs for defile operations in restrictive terrain; however, this was published in 1998.² The lack of infantry and tank doctrine was identified by the School of Advanced Military Studies in 2001.³ As a result of this gap in doctrine, U.S. Marines 1st Tank Battalion had to relearn how to integrate their infantry and tanks during their combat operations in Fallujah, Iraq in 2004.⁴ Similarly, TF Mustangs had to reeducate and retrain their company teams on infantry and tank integration before Operation Lock.



Figure 1. Task Force Mustang briefs the battalion operations order for the first battle period of Operation Lock 2023.
(U.S. Army photo by 1LT Raven Parker, battalion unit public affairs)

Operation Lock provided the Mustangs the opportunity to codify SOPs for company teams, and it highlighted dismounted infantry's critical role in clearing restrictive terrain before the tanks began maneuvering. Dismounted infantry pulling in the tanks consistently resulted in mission success throughout force-on-force operations. TF Mustangs' SOPs during Operation Lock provide a framework for addressing doctrinal gaps in ATP 3-90.1, **Armor and Mechanized Infantry Company Teams**, allowing company teams to be lethal in severely restricted terrain in future LSCO.

Tailored SOPs

Intelligence preparation of the battlefield in the Vekaranjärvi area enabled the Mustangs to develop SOPs tailored to eastern Finland's restrictive terrain and the Finnish Armoured Brigade opposing force (OPFOR). The training area was heavily forested with dispersed trails throughout, resulting in mounted platoon mobility corridors.

Dismounted avenues of approach were uninhibited and there was little underbrush that impeded movement. Mounted maneuver was restricted to the trails and made the intersections of trails key terrain because control of the junctions provided the owner access to multiple roads. Fields of fire through the vegetation varied from 100m-400m depending on forest density. Keyhole shots on mounted avenues of approach could be identified from 600m-800m away providing the engaging tank with cover and concealment.

Bridges over the multiple water features throughout the area also canalized the offensive unit's maneuver to chokepoints or forced gap crossings to continue maneuvering. Overall, the terrain favored the defending force due to the forest's cover and concealment. Keyhole shot positions could be identified and supported by dismounted battle positions with anti-tank weapon systems.

For Operation Lock, the Mustang's force-on-force enemy was a mechanized infantry battlegroup from the Finnish Armoured Brigade. The Armoured Brigade is garrisoned at Hämeenlinna, Finland and deployed 107 miles east for this operation. Their units have trained at Vekaranjärvi's training areas before and are familiar with the dense, forested terrain there. TF Mustangs' intelligence section analyzed the OPFOR's capabilities and developed a detailed enemy situation template, based on the enemy order of battle and historical Finnish tactics from the Winter War and Continuation War.

The Armoured Brigade deployed a battlegroup for Operation Lock. This is equivalent to a U.S. Army battalion task force. Their warfighting function strengths included maneuverability of their vehicles, decentralized fires network allowing for shortened fires processing, and they had robust capabilities to emplace tactical obstacles. Finnish history was analyzed to abstract how they have conducted defensive operations in the past. The Finnish conducted delaying tactics during the Winter War and Continuation War, between 1939-1945 resulting to the successful attrition of numerically superior Soviet invaders. The Finns' delaying operations coupled with their envelopment tactics, or motti tactics, in the severely restricted terrain on the Finnish-Russian border resulted in five times more Soviet casualties and three times more Soviet vehicles destroyed when compared to Finnish losses in Winter War.⁵

The Armoured Brigade was an enemy that the Mustangs had never faced before. A formidable enemy that has experience conducting defensive operations against a superior force in severely restricted terrain. Therefore, the Mustangs' company teams considered these factors when adapting their SOPs for Operation Lock.

Team Assault's execution and SOP

TF Mustangs (Table 1) task organized with their organic battalion minus one-tank company. The TF also included one U.S. Army sapper platoon that was subsequently attached to the mechanized infantry company. The Karelian units that were attached to the TF were a Finnish mechanized infantry Company (Poni), a Finnish reconnaissance platoon (Eagle 10), a Finnish engineering platoon (Snow), a Finnish tank platoon (Delta 10), and a mortar company equipped with the Advanced Mortar System (AMOS), a Finno-Swedish 120mm semi-automatic twin barreled, breech loaded mortar turret (Zander). This article focuses on Assault Company's SOPs that enabled infantry and tank integration and underpinned the TF's tactical success and how its SOPs and lesson learned can facilitate future revisions of ATP 3-90.1.

TF Mustangs conducted three offensive operations during Operation Lock. During these operations, the TF's order of battle deployed the reconnaissance units, followed by the two mechanized infantry companies, and Team Assault remained in its attack position until conditions were set. The deployment of Team Assault was triggered by the identification of the Karelian battlegroup's main body. Table 2 depicts the offensive SOPs that shaped Team Assault's offensive operations once deployed. Figure 3 illustrates the execution matrix that Team Assault utilized for offensive operations.

The first action in the SOP was to conduct the forward passage of lines (FPOL). This was tasked to the mechanized infantry platoon because it became the led unit and allowed the platoon to quickly transition to vehicle dismount operations (VDO) after the FPOL was completed. During the FPOL, the mechanized infantry platoon leader conducted a battle handover (BHO) with the stationary unit via FM or a face-to-face brief. The intelligence gained from the BHO confirmed or refined the templated VDO points. Completion of the FPOL triggered the next action in the SOP, the VDO.

The mechanized infantry maneuvered to VDO and began dismounting. This was a crucial aspect of Team Assault's SOP because the infantry cleared the severely restrictive terrain of OPFOR anti-tank teams, identified OPFOR tank battle positions and allowed Team Assault to initiate contact with their smallest unit prior to the commitment of its tanks. For Team Assault, the platoon leader dismounted allowing the platoon to be with the unit that initiated contact with the enemy. The platoon sergeant maintained command and control of the Bradley's and occupied an attack position, ready to support the dismounts. The takeaway is that there must be platoon leadership in the mounted and dismounted sections to facilitate the relay of reports from the dismounts all the way to the company commander.

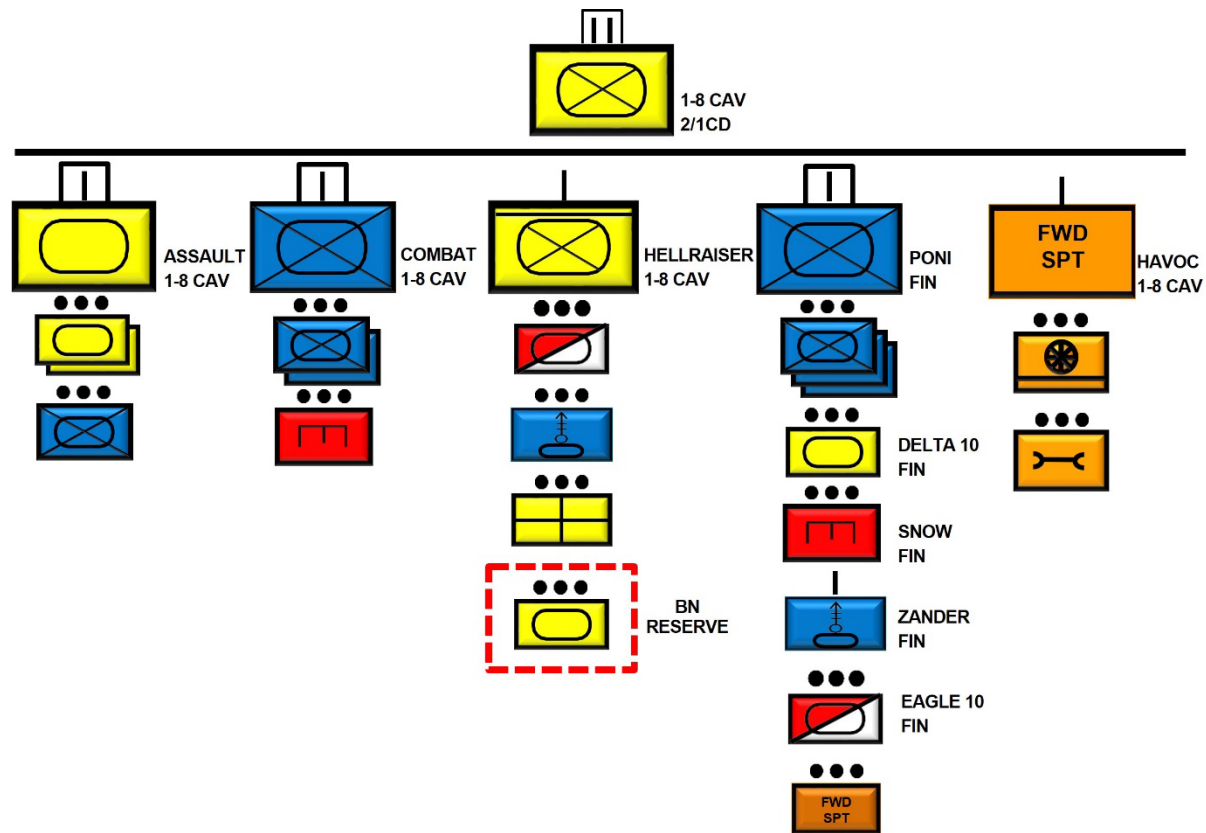


Table 1. Task Force Mustangs Task Organization (U.S. Army Graphic)

Team Assault's experience in Operation Lock demonstrated that the tempo of a company team's offense in severely restricted terrain is initially slow. The dismounts conducted squad patrolling techniques and squad attacks when faced with enemy dismount teams as stated in ATP 3-21.9, *Infantry Platoon and Squad*.⁶ The crucial trigger within the Team Assault's SOP was the identification of OPFOR tank battle positions. The resulting action was the

deployment of tank platoons. The tempo of the tank's assault was fast because the team's dismount had cleared the axes of attack of OPFOR anti-tank teams and relayed the position of OPFOR tanks. Team Assault's initial deployment and the sequenced SOPs provides a framework for company teams to maintain a slow initial tempo, allowing the dismounts to set conditions for the tank platoons. The decision to deploy the tank platoons causes the tempo to shift to an aggressive, fast-mounted assault.

Company teams must provide the enemy with multiple problem sets once the tank platoons deploy from the attack positions. These problem sets include indirect fires with preplanned fires on the objective, direct fires with Javelin teams engaging the OPFOR tanks they have visual contact with, and the tank platoons engaging with their 120mm main gun.



Figure 2. Battalion S-3, MAJ Ryan Van Wie, and Tank Company Commander, CPT Larry Tran, make final coordination before the first battle period. (U.S. Army photo by 1LT Raven Parker, battalion unit public affairs)



Figure 3. Tank and infantry integration during the second battle period of Operation Lock 2023. Crucial to Team Assault's SOP was the coordination between dismounted infantry, mounted infantry and tanks. (U.S. Army photo by 1LT Raven Parker, battalion unit public affairs)

Team Assault continued coordination with dismount infantry through face-to-face battle hand overs in which the dismounted squad/team leader hopped on the turret to provide the location of OPFOR Leopard tanks. A gap in the U.S. Army company team doctrine is standardized hand and arm signals that U.S. dismounts utilize to relay information to the tanks on the move. Team Assault's offensive operations showed the speed at which tank platoons moved through the objective led to enemy elements being bypassed. Company teams must determine how the M2 Bradley's are incorporated into the attack. For Operation Lock, Team Assault maneuvered the M2 Bradley's behind the tank platoons to clear any enemy elements that the tanks bypassed and positioned the Bradley's where they could mount the dismounts back into their vehicles as needed.

The next action is a decision point for the company team commander dependent on the remaining combat power and the enemy situation. Team Assault's decision point was if it had reached its limit of advance and had 60 percent of its combat power. If yes, then Team Assault would exploit the success and continue attacking to a subsequent objective to seek enemy command and control nodes or sustainment nodes. If the combat power was below 60 percent, then Team Assault would transition to a hasty defense. This engagement criteria and SOP was utilized for two offensive battle periods and resulted in the successful seizure of Team Assault's objectives each time with 85 percent or greater of the Team's combat power remaining for future operations.

Conclusion

The Mustangs were lethal in Operation Lock due to their implementation of company teams and the deployment of the infantry before the tanks. Their successes provide an opportunity to address a gap within ATP 3-90.1 on infantry and tank integration SOPs and company teams operating in a severely restrictive terrain. The gaps addressed in this article follow. Team Assault's doctrinal template and execution matrix (Tables 2 and 3) are example products that enabled success and can be potentially added to ATP 3-90.1 as an appendix focused on company teams operating in severely restrictive terrain. The highlight from both products is that company teams must conduct a slow, deliberate maneuver of dismounted infantry through severely restrictive terrain allowing the conditions to be set for the tank platoons' fast assault through the objective. Team Assault's infantry deployed ahead of the tanks and the Javelin teams always initiated the contact with OPFOR tank crews, who were unable to observe the dismounts within the forest due to their reduced situational awareness inside the tank with the engine running. The smallest element of the company team must initiate contact with the enemy.

Infantry and Tank Integration Offensive Operations

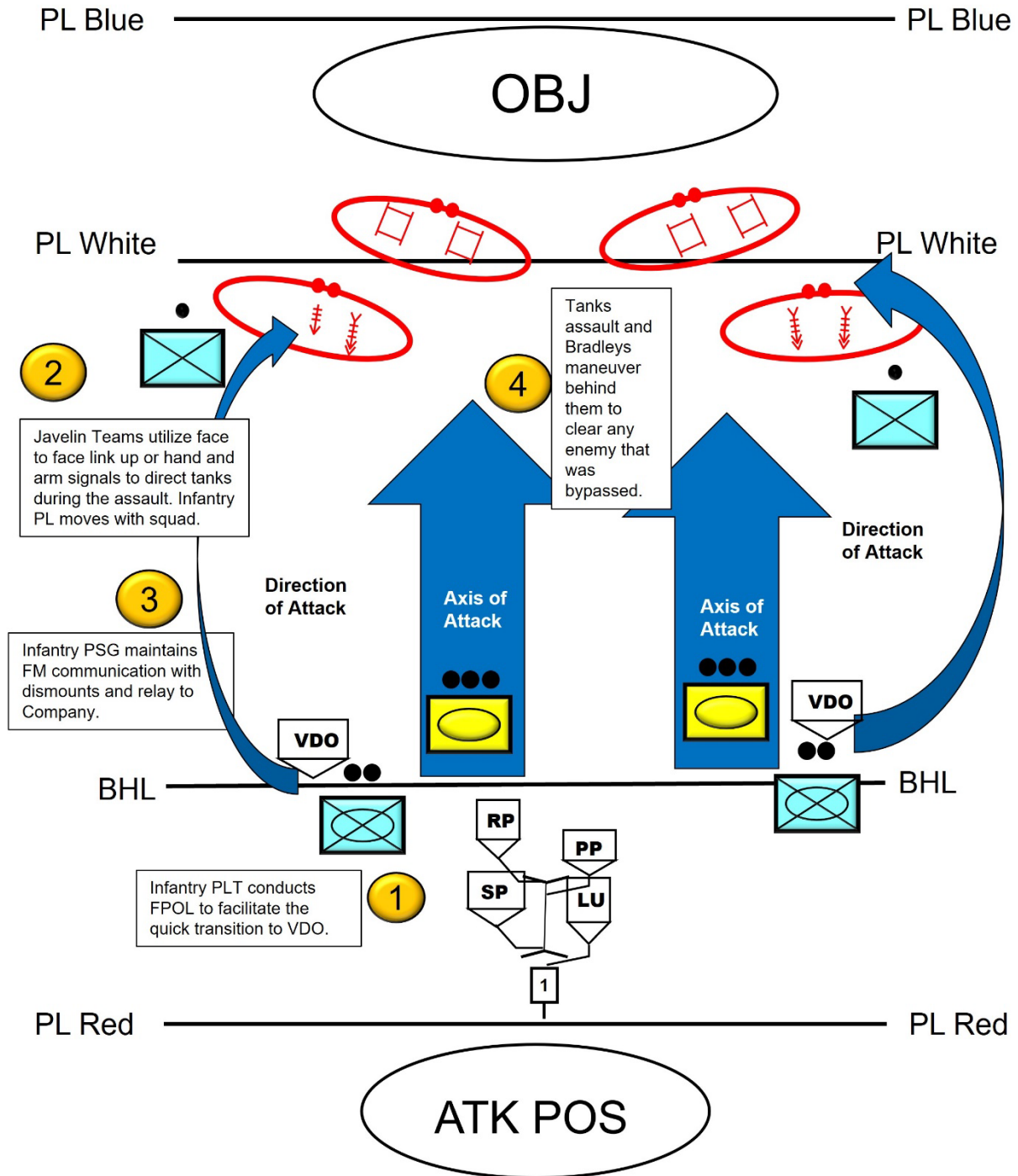


Table 2. Infantry and tank integration offensive operations. (U.S. Army graphic)

The position of the mechanized infantry platoon leadership is flexible if the information from the dismounts is relayed to the rest of the company team via FM communications. Standardizing hand and arm signals in the ATP

would facilitate the effective face-to-face communication with dismounted squad leaders and tank commanders. Lastly, company teams must plan the M2 Bradley's role in the attack of the objective, so that the Bradley's are staged to link up with their dismounts or support the tanks in the attack.

Team Assault's SOP for infantry and tank integration led to increased survivability of the tanks operating in severely restrictive terrain, while also allowing the infantry to get into the fight with their Javelin systems. The SOPs addressed multiple gaps in ATP 3-90.1 about operating in severely restrictive terrain and infantry-tank integration. Revisions to the U.S. Army's ABCT company teams' doctrine increases the lethality of armored formations in severely restricted terrain during future LSCO. Armor is the combat arm of decision, but it still needs the infantry to set conditions and lead the way!

Execution Matrix			
Friendly Forces	Enemy		
	Tanks	BMPs or APCs	Dismounts
<p>1x Dismounted Squad w/ Javelin</p> <p>Trigger: VDO point reached after BHO</p>	<p>Visual contact with a section of enemy tanks and under; engage with Javelin.</p> <p>Visual Contact with an enemy platoon of Leopards or more; triggers Tank Platoon to maneuver from ATK POS.</p> <p>Direct contact with 1x enemy tank or up; disengage and regains contact</p>	<p>Visual contact with any BMPs or APCs; bypass and trigger the Bradley's to maneuver from ATK POS.</p>	<p>Initiate direct contact with enemy squad or lower. If in contact with two enemy squads or more, then trigger maneuver of Bradley's.</p>
<p>1x M2 Bradley IFV Platoon</p> <p>Trigger: identification of any BMPs/APCs; engage with an enemy BMP/APC platoon or lower</p>	<p>Disengage and triggers maneuver of Tank Platoons from ATK POS.</p>	<p>Initiate direct contact with BMP/APC platoon or lower; If in contact with two BMP/APC platoons or more, then trigger maneuver of Tank Platoon from ATK POS</p>	<p>Engage with direct fire with any enemy dismounted elements.</p>
<p>2x M1 Abrams Tank Platoons mutually supporting</p> <p>Trigger: identification of enemy tank PLT or more; identification of a platoon of BMPs/APCs or more</p>	<p>Engage with direct fire on two enemy tanks Platoons and below; if in contact with enemy tank Company and above, triggers maneuver of BN reserve.</p>	<p>Engage with direct fire with any enemy BMPs/APCs</p>	<p>Engage with direct fire with any enemy dismounted elements.</p>

Table 3. Execution Matrix (U.S. Army)

1LT Brandon D. Akuszewski is a platoon leader, Company A, 1st Battalion, 8th Cavalry Regiment, 2nd Armored Brigade Combat Team (ABCT), 1st Cavalry Division, Fort Cavazos, TX. Previously he served as assistant S-3, Company A, 1-8 Cavalry, 2nd ABCT. His military schools include (all at Fort Moore, GA) Scout Leaders Course, Tank Commander Course, Airborne School, and Armor Basic Officer Leaders Course. 1LT Akuszewski has a bachelor's of science degree in international affairs from the U.S. Military Academy at West Point, NY.

CPT Larry D. Tran, commander, Company A, 1st Battalion, 8th Cavalry Regiment, 2nd Armored Brigade Combat Team (ABCT), 1st Cavalry Division, Fort Cavazos. His previous assignments include assistant S-3, 4th Squadron, 9th Cavalry Regiment, 2nd ABCT; commander, Headquarters and Headquarters Company (HHC), Task Force Sinai, Sharm el-Sheikh, Egypt; executive officer, HHC, 1st Battalion, 66th Armor Regiment, 3rd ABCT, 4th Infantry Division; and tank platoon leader, Company A, 1st 66th Armor Regiment. CPT Tran's military schools include the Cavalry Leaders Course; Maneuver Captain's Career Course; Army Reconnaissance Course; Armor Basic Officer Leaders Course. All schools were at Fort Moore, GA. CPT Tran has a bachelor's of science degree in human biology from the University of Texas at Austin. His awards include the Meritorious Service Medal.

Notes

¹ ATP 3-90.1, **Armor and Mechanized Infantry Company Team**, (Washington, D.C.: U.S. Government Publishing Office, 2016), Chapter 3.

² FM 71-1, **Tank and Mechanized Company Team**, (Washington D.C.: U.S. Government Printing Office, 1998), Chapter 3, Section 6.

³ John W. Washburn, "Integration of Armored Forces in the U.S. Army Infantry Division," School of Advanced Military Studies, January 2001: <https://apps.dtic.mil/sti/pdfs/ADA387170.pdf>.

⁴ B.T. Watson, "Maintaining Tank and Infantry Integration Training," U.S. Marine Corps Command and Staff College, January 2005: <https://apps.dtic.mil/sti/pdfs/ADA505349.pdf>.

⁵ Munter Nenyé, T. Wirtanen, C. Birks, **Finland at War: The Winter War 1939-40**. (Bloomsbury Publishing 2015).

⁶ ATP 3-21.9, **Infantry Platoon and Squad**, (Washington, D.C.: U.S. Government Publishing Office, 2016).

Acronym Quick-Scan

ABCT – armored brigade combat team

ATP – Army techniques publication

BHO – battle handover

FPOL – forward passage of lines

LSCO – large-scale combat operations

OPFOR – opposing force

SOP – standing operating procedures

TF – task force

VDO – vehicle dismount operations



Figure 4. Team Assault conducted an after-action review after the second battle period of Operation Lock 2023.
(U.S. Army photo by 1LT Raven Parker, battalion unit public affairs)