Combined-Arms Teams in the Offense: Maximizing Lethality by Mixing Formations

by CPT Sean T. Martin and CPT Robert A. Francis

Otto von Bismarck once said, "Fools say that they learn by experience. I prefer to profit by others' experience." Like Bismarck, the U.S. Army can draw lessons about the deployment of armored brigade combat teams at the National Training Center. Brigades learn crucial lessons on the battlefields of Erdabil Province, where the price of failure is pride instead of blood.

In more than a year of fighting in Erdabil Province, Demon Mechanized-Infantry Battalion (MIBN) has conducted many attacks to penetrate or seize pieces of key terrain. We've found that operating as cohesive combined-arms teams is paramount to success.

During offensive operations, combining arms at the company level and below maximizes lethality by mixing formations of platforms that have complementary capabilities to act as "hunters and killers"; provide ground-force commanders with the assets necessary to both isolate with armor and rapidly seize terrain with dismounts; and pair peer leaders with diverse experiences and perspectives from the Infantry and Armor Branches.

MIBN structure

The MIBN is the core maneuver formation of the brigade tactical group (BTG). The BTG operates with three MIBNs, a tank-company reserve, a combat-engineer company, an anti-armor troop and a modified reconnaissance battalion (Figures 1a and 1b). MIBNs are formed by a habitual relationship between infantry and armor companies, where the two company commanders alternate leading the formation as the MIBN commander. A similar relationship exists at the platoon level to form the mechanized-infantry company (MIC).

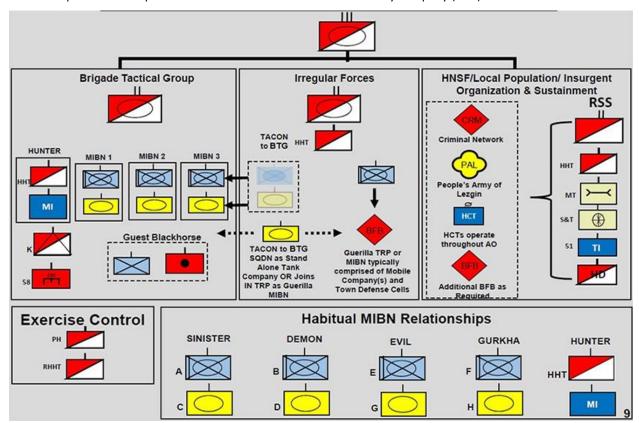


Figure 1a. Rotational task organization.

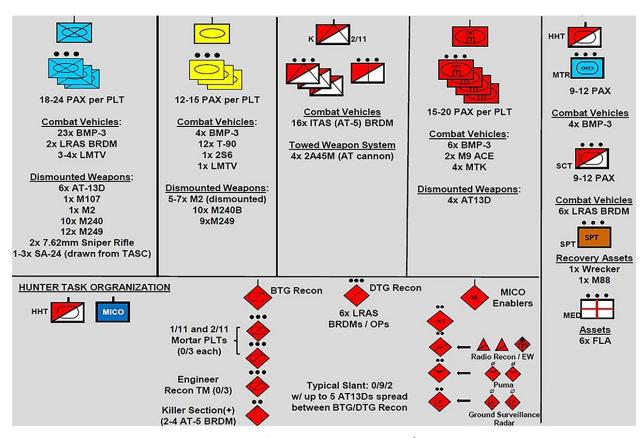
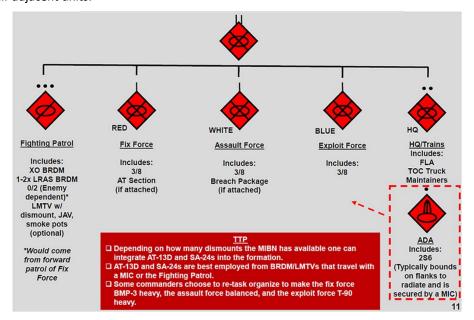


Figure 1b. List of assets available by troop/company.

The smallest maneuver element in the MIBN is the mechanized-infantry platoon (MIP), typically comprised of one main battle tank (MBT) and two *boyevaya mashina pekhoty* (BMP)-3s, commonly referred to as opposing-force (OPFOR) surrogate vehicles (OSVs) (Figures 2a and 2b). The task-organization of mixed assets down to the MIP level allows MIBN commanders to use the strengths of both platforms to mitigate the weakness each have individually. Also, each MIP and MIC has the same task-organization and is prepared to seamlessly assume the mission of their adjacent units.





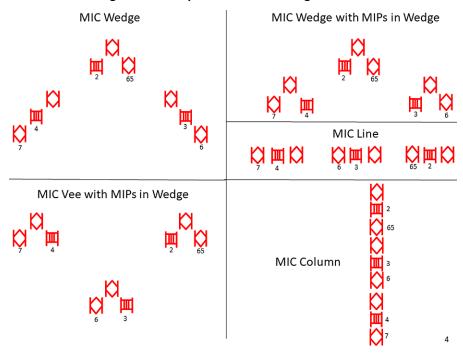


Figure 2b. Demon MIBN MIC formation SOP.

Unit employments

The key difference between the task-organizations of the Donovian formations and U.S. combined-arms teams is the integration of formations down to the lowest level possible. In Army Techniques Publication (ATP) 3-90.1, the Abrams and Bradley Fighting Vehicles (BFVs) remain independent platoons (Figure 3). Teams are either an armorcompany team with two tank platoons and one BFV platoon or a mechanized-infantry company team with two BFV platoons and a tank platoon. This means a tank platoon cannot effectively assume a BFV platoon's mission to seize terrain. In the same way, a BFV platoon is less effective at isolating the objective from enemy armor.

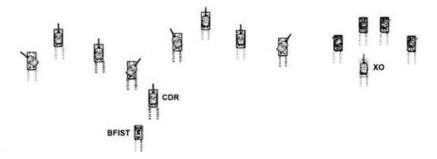


Figure 3. Depiction of company team in line, platoon wedges (from ATP 3-90.1, Figure 2-4).

The MBT and BMPs work to maximize each other's strengths while helping to mitigate vulnerabilities. Typically the MBT conducts most of the "killing" in the offense while the BMPs lead the formation and "hunt" or identify targets for the MBT to engage. This provides a mix of capabilities down to the MIP level across the formation. In the offense, MIBNs will typically task-organize forces into a combat-reconnaissance patrol, fixing force, assault force and exploitation force (Figure 4).

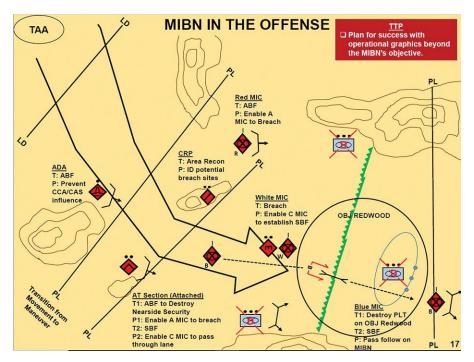


Figure 4. Typical concept sketch for employment of MIBN in the offense.

It is important to note that adversary BMP-3s are capable of transporting dismounted infantry. Within the MIBNs, OSVs do not replicate that capability. As a result, BMPs are employed forward of MBTs as internal fixing forces down to the MIP level. They lack the armored protection of an MBT but are capable of destroying or suppressing light armored targets at ranges exceeding the MBT's capabilities. The high rate of fire of the BMPs' 30mm cannon allows engagements of light armored targets out to 2.5 kilometers.

The platform also employs the AT-10 missile system to engage heavily armored targets out to four kilometers but remains exposed during the engagements. MBTs use the time and space created by the BMPs to maneuver to destroy targets with the 125mm main gun (Figure 5).

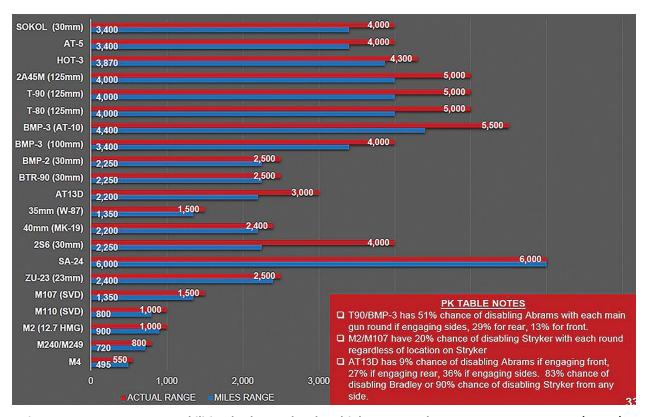


Figure 5. OPFOR weapon capabilities, both actual and Multiple Integrated Laser-Engagement System (MILES). Key: SOKOL = OPFOR helicopters replicating Hind attack helicopters. AT-5 = vehicle-mounted AT missile. 2A45M = AT towed cannon. T-90/T-80 = MBTs. BMPs 2/3 = infantry fighting vehicles. BTR-90 = wheeled armored personnel carrier. AT-13D = dismounted AT missile. W-87 = 35mm automatic grenade launcher. Mk-19 = 40mm automatic grenade launcher. 2S6 = tracked self-propelled anti-aircraft weapon. SA-24 = shoulder-fired anti-aircraft missile. ZU-23 = 23mm anti-aircraft auto-cannon. M107 = 50-caliber Dragunov sniper rifle. M110 = 7.62mm Dragunov sniper rifle. M2 = 50-caliber 12.7mm heavy machinegun. M240B/M249: 7.62mm machinegun and 5.56mm machinegun, respectively. M4 = 5.56mm carbine.

Attacks can either be enemy- or terrain-focused. However, as we are required to replicate a battalion-sized element with only two troop-/company-sized elements, Demon MIBN rarely conducts enemy-based attacks. When tasked with a terrain-based objective, it's essential for the attacking force to possess enough combat power to both isolate with armor and rapidly seize terrain with dismounts. The combined-arms team, with its various capabilities, is a perfect fit for an isolation force.

While moving to the objective, BMPs act as the lead vehicle or element. The BMPs will identify and fix threats for MBTs to maneuver on within direct-fire range. Once the enemy mounted combat power in the objective's vicinity has been destroyed, dismounts rapidly move forward, clear enemy fighting positions and seize terrain. Using dismounts that are part of the same organization – under one ground-force commander's direct operational control – ensures smoother coordination between the isolation force and dismount elements, allowing more rapid employment of dismounts once conditions are set.

The synchronization of the exploitation force is especially critical when attempting to dismount on the objective. While the dismounted element is seizing terrain, the isolation force uses its mounted platforms and weapon systems within the MIPs to maximize direct-fire controls along enemy reinforcement avenues of approach by orienting its missiles from BMPs on canalizing terrain at the maximum engagement line, while MBTs cover avenues requiring more rapid rates of fire on larger formations.

An example of an attack with a terrain-based objective is a mission that Demon MIBN conducted to seize Brigade Hill. Demon MIBN had defended the Colorado Wash for 48 hours before the attack. The day of the attack, the

enemy assessed in the area of operations (AO) was two platoons of BFVs defending in the vicinity of Brigade Hill, with two dismounted-infantry platoons defending Brigade Hill itself. As mentioned, MIBNs do not maintain an internal dismounted-infantry force, requiring the BTG to provide a company of dismounted infantry in four Light Medium Tactical Vehicles (LMTVs) and a platoon of smoke trucks to Demon MIBN to enable the attack.

The MIBN commander task-organized the unit into four company-sized elements. Two MICs were tasked to attack along Route Eagles and Route Queens, respectively, to fix combat power on the north and south sides of Brigade Hill. The third MIC was tasked to attack along Route Hendrix using the smoke platoon's concealment to secure a foothold for the infantry to dismount on the objective's west side. The task of the dismounted-infantry company was to seize Brigade Hill (Figure 6).

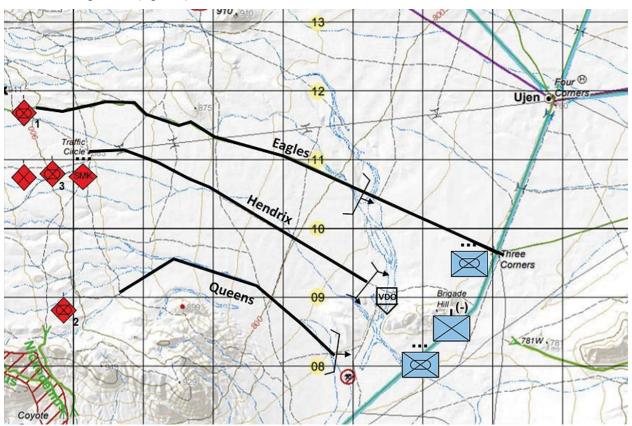


Figure 6. Attack to seize Brigade Hill.

The mission was successful for a number of reasons. The two MICs on Eagles and Queens attacked simultaneously and established attack-by-fire (ABF) positions to fix the BFV platoons in the vicinity of Brigade Hill. There were minimal losses on both sides, but the fixing forces prevented the BFVs from effectively engaging the third MIC, which attacked about five minutes later.

This third MIC continued along Hendrix with concealment from the smoke platoon and the four LMTVs of dismounts close behind, in trail mode, arriving at Brigade Hill with no losses and quickly establishing a foothold for the infantry to establish a dismount point. The third MIC continued to suppress the enemy dismounted platoons as the friendly infantry consolidated for its dismounted attack. The infantry Soldiers established communications with the MIC at Brigade Hill and systematically cleared through the complex terrain, calling for the MIC to suppress, shift and lift fires ahead of their advance (Figure 7).

Ultimately, the dismounted company was able to destroy the two dismounted platoons on Brigade Hill while only losing a squad. This is a prime example of how combined-arms maneuver, using strengths to make up for weaknesses of each asset, resulted in a successful attack.

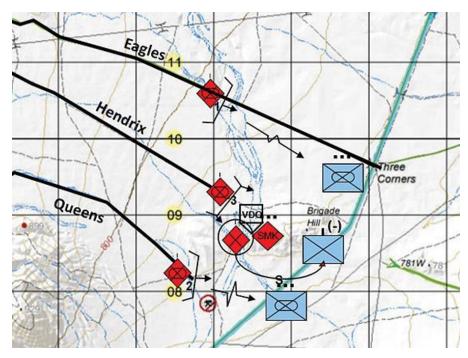


Figure 7. Seizure of Brigade Hill.

A second example when Demon MIBN executed a mission to seize a piece of key terrain was an attack to seize Hill 910. During the attack to seize this hill, Demon MIBN altered the traditional MIBN task-organization by dismounting 3rd Platoon from Blackjack Troop, sacrificing the manning of six BMPs. In addition to the MIBN's two remaining MICs (three MBTs and six BMPs each), a tank platoon (three MBTs) and one dismounted-infantry platoon, a platoon of smoke trucks was attached for the mission. Also, a section of two Killer Troop anti-armor boyevaya razvedyvatelnaya dozornaya mashina (BRDMs) would be operating in the area.

Prior to execution, Demon MIBN was preparing for a BTG attack scheduled 24 hours later. To execute this attack, Demon would conduct forward-passage-of-lines through another MIBN to attack to seize Hill 910 and then conduct a relief-in-place with a dismounted-infantry platoon from the dismounted-infantry company.

Demon MIBN initiated movement through the Central Corridor and established an attack position in Hidden Valley. Once the BTG gave the order to attack, the MIBN travelled along Route Queens to Brigade Hill and then maneuvered north toward Hill 910. The first MIC fixed the south side of the objective, while the second MIC isolated Hill 910 from reinforcements in the Colorado Wash (Figure 8).

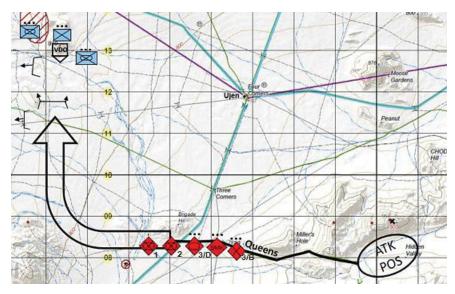


Figure 8. Attack to seize Hill 910.

The second MIC conducted a battle handover with the Killer Troop section in the vicinity of Traffic Circle and began clearing deadspace while the anti-armor section provided overwatch. The MIC and anti-armor section continued alternating bounds while clearing deadspace for each other until they had destroyed a platoon of Abrams in the eastern edge of the Washboard and established a blocking position on the eastern entrance to the Colorado Wash, effectively isolating Hill 910 from reinforcements to the west. The tank platoon then maneuvered with the support of the first MIC and smoke trucks to destroy a platoon of BFVs defending the west side of Hill 910 and a platoon of BFVs defending to the east and southeast of the objective.

Once the fixing element and tank platoon had achieved enough suppression of the objective, smoke trucks continued to provide concealment as the dismounted platoon maneuvered forward and dismounted on the south side of the objective. Third Platoon dismounted on the objective, then cleared north across Hill 910, destroying a platoon of enemy dismounts and Javelin observation posts (OPs) using small arms and hand grenades (Figure 9). Once the hilltop was clear of enemy, 3rd Platoon established a hasty defense with Javelins and destroyed another section of BFVs west of the objective.

Once all enemy combat power in the area was destroyed, Demon MIBN called forward a second MIBN to escort a dismounted-infantry platoon to conduct relief-in-place. After conducting relief-in-place on Hill 910, Demon MIBN withdrew to the support zone to continue preparations for the next BTG attack.

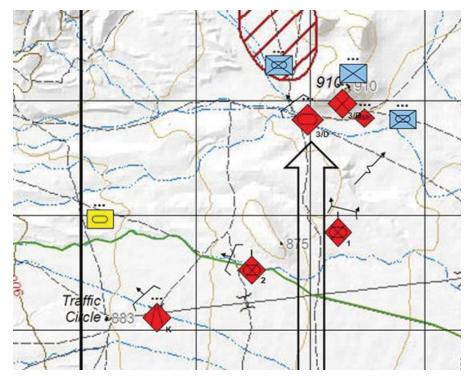


Figure 9. Seizure of Hill 910.

Leader development

Another critical benefit of the combined-arms team is mixing leaders. By pairing peer leaders with different experiences and perspectives from the Infantry and Armor Branches, organizations can benefit from subject-matter experts with specialized maneuver training from both the mounted and dismounted perspectives. The armor officer may not be as familiar with employment of sniper and Javelin OPs. The infantry officer is not likely to be as familiar with berm drills and movement formation drills. By pairing these two complementary leaders, the formation gains the knowledge from two perspectives for planning and executing operations.

Not only does this Donovian framework for combined-arms teams allow varied perspectives, but it also allows a peer relationship with clearly delineated planning and reporting duties (Table 1). By splitting duties into MIBN 6/65 and MIC 6/65, leaders are able to command these larger formations even more effectively than if they operated independently as U.S. combined-arms teams without a peer counterpart. It is arguable that the MIBNs operate more effectively due to their command group comprised of two captains, two first sergeants and two first-lieutenant executive officers running the command post (CP).

	6	65	СР
Offense	-With lead element or greatest point of friction -Maneuvers forces -Adjacent unit coordination	-With trail element, second point of friction -Controls external assets (SOKOL¹/smoke) -Provides recommendations to 6 -Reports to BTG: field-litter ambulance (FLA), battle-damage assessment (BDA), slant -Resolves observer-controller (OC)/Pale Horse (PH) Detachment issues -Assumes fight if 6 dies / is out of comms	MIBN 5 -Battle track / update battle boards -Fire missions -Track FLT, BDA, combat slant -Publish intelligence summary (INTSUM) MIBN 55 -Tack maintenance slant -Control maintenance / sustainment

		-Obtains miles tracking reports from PH 6 a.m., noon, 6 p.m.	
Defense	-With lead element or greatest point of friction -Maneuvers forces -Adjacent unit coordination	-Centrally located between FLT and TAA, second point of friction -Controls external assets (SOKOL/smoke) -Provides recommendations to 6 -Reports to BTG: FLA, BDA, slant -Resolves OC/PH Det issues -Assumes fight if 6 dies / is out of comms -Supervises CP operations -Obtains miles tracking reports from PH 6 a.m., noon, 6 p.m.	MIBN 5 -Battle track / update battle boards -Maintain situational awareness of BTG operations for 6/65 -Publish INTSUM MIBN 55 -Tack maintenance slant -Control maintenance / sustainment
Planning / tactical assembly area (TAA)	-Issues orders / guidance -Establishes timelines -Issues priorities of work	-Enforces timelines -Enforces priorities of work -Coordinates with external assets for briefing / mission planning -Supervises CP operations -Obtains miles tracking reports from PH 6 a.m., noon, 6 p.m.	MIBN 5 -Battle track / update battle boards -Fire missions -Track FLT, BDA, combat slant -Publish INTSUM MIBN 55 -Tack maintenance slant -Control maintenance / sustainment

Table 1. Demon MIBN SOP for duties and responsibilities of MIBN 6/65.

In Demon MIBN, when the formation is static or less dispersed, the two captains form a tactical-actions center comprised of two BRDMs. When the MIBN is dispersed to the point that terrain degrades communication or when the MIBN is attacking, the captains will attach themselves to two separate elements to maintain overall mission command of the formation. In this way, Demon MIBN can and has effectively conducted operations in the Siberian Ridge and Northern Corridor simultaneously with a separation of 15 kilometers' straight-line distance across complex terrain.

Beyond the obvious benefits of dispersing key leaders across the formation, clear delineation of 6 and 65 duties enables these leaders to focus their efforts. At the CP, this means one troop executive officer is focusing on maintenance and logistics, while the other focuses on battle-tracking and processing indirect fires. The MIBN 6 manages the fight and coordinates with adjacent units, while the MIBN 65 relays routine reports like contact and front-line trace (FLT) to higher headquarters. The commanders will rotate duties depending on their specific unit standard operating procedure (SOP). For Demon MIBN, leadership roles rotate from rotation to rotation.

Within the MICs, each MIC has two lieutenant platoon leaders and two platoon sergeants. This means that two of the MIPs each have a lieutenant and the third MIP has two platoon sergeants (Figure 10). Once organizations regularly practice this form of co-leadership, it makes managing larger formations more seamless and effective.

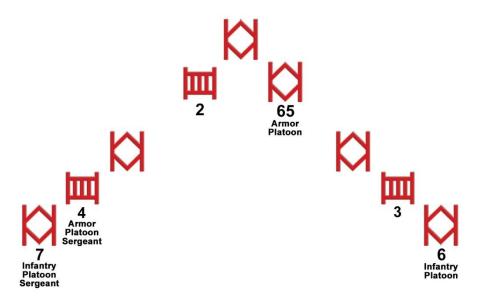


Figure 10. Demon MIBN SOP for MIC formations.

The key to success is forming these habitual peer relationships. In the U.S. Army combined-arms team, platoons can be inserted and removed depending on the task-organization needed for a given mission set. The Donovian combined-arms-team structure relies on MIBNs, MICs and MIPs that have nearly identical mixed formations, all capable of conducting the same missions, but have habitual relationships and SOPs down to the lowest level to increase efficiency and avoid the inherent friction points associated with operating with adjacent units.

Throughout history, the roles of armor and infantry have fluctuated on the battlefield. At times, armored formations have acted as a support asset for their infantry counterparts. Other times, the dismounted infantry has served as local security for the armor in complex urban centers and restrictive terrain. Ultimately, the measure of success in battle depends on how well these two types of fighting forces work together to reach a shared endstate.

In Erdabil Province, the cohesive, symbiotic relationship of the infantry troops and armor companies within the Donovian combined-arms teams enables their seamless and rapid maneuver across the battlefield. In the offense, operating as combined-arms teams at the company level and below maximizes lethality by (1) mixing formations of platforms that have complementary capabilities to act as "hunters and killers"; (2) providing ground-force commanders with the assets necessary to both isolate with armor and rapidly seize terrain with dismounts; and (3) pairing peer leaders with diverse experiences and perspectives from the Infantry and Armor Branches.

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Acronym Quick-Scan

(Some of these are found in the figures only)

ABF - attack by fire

ACE - M9 Armored Combat Earthmover

ACR - armored-cavalry regiment

ADA – air-defense artillery

AO – area of operations

AT – anti-tank

ATK POS - attack position

ATP - Army techniques publication

BCT - brigade combat team

BDA – battle-damage assessment

BFB - Bilasuvar Freedom Brigade (guerrilla forces)

BFIST - M7A3 Bradley fire-support team

BFV – Bradley Fighting Vehicle

BMP – boyevaya mashina pehoty

BRDM – boyevaya razvedyvatelnaya dozornaya mashina

BTG - brigade tactical group

CAS – close air support (fixed-wing aviation assets)

CCA – close combat aviation (rotary-wing assets)

CP - command post

CRM - criminal network

CRP - combat reconnaissance patrol

DTG - division tactical group

EW - electronic warfare

FLA - field-litter ambulance

FLT - front-line trace

HCT – human-intelligence collection team

HHT – headquarters and headquarters troop

HNSF – host-nation security forces

HQ – headquarters

IN - infantry

INTSUM – intelligence summary

ITAS - Improved Target Acquisition System

JAV – FGM-148 Javelin shoulder-fired anti-tank missile

LD – line of departure

LMTV – Light Medium Tactical Vehicle

LRAS - Long-Range Advanced Scout Surveillance System

MBT – main battle tank

MCCC - Maneuver Captain's Career Course

MI - military intelligence

MIBN - mechanized-infantry battalion

MIC - mechanized-infantry company

MiCo - military-intelligence company

MILES - Multiple Integrated Laser-Engagement System

MIP - mechanized-infantry platoon

MLMC – Maneuver Leader's Maintenance Course

MT - maintenance troop

MTK – tracked mine-clearing vehicle

MTR - mortar

OBJ – objective

OC – observer-controller

OP – observation post

OPFOR – opposing forces

OSV - opposing-force surrogate vehicle

PAL – People's Army of Lezgin

PAX – persons

PH – Pale Horse (Detachment) (observer-controllers assigned to the OPFOR)

PL - phase line

PLT – platoon

RHHT – regimental headquarters and headquarters troop

RoK – Republic of Korea

S&T – supply and transportation troop

SBF – support by fire

SOP – standard operating procedure

SPT – support

SQDN – squadron

TAA – tactical-assembly area

TACON – tactical control

TASC – Training Aids Support Center

TM - team

TOC – tactical-operations center

TRP - troop

TTP – tactics, techniques and procedures

VDO – vehicle-dismount objective