Infantry

BUILDING ON THE FUNDAMENTALS

Infantry

FRONT COVER:
A grenadier with the 1st Battalion, 21st Infantry Regiment participates in platoon live-fire training on 3 April 2019 at Pohakuloa Training Area, HI. (Photo by SPC Geoff Cooper)

BACK COVER:
Soldiers assigned to Blackfoot Company, 1st Battalion, 501st Parachute Infantry Regiment, 4th Infantry Brigade Combat Team (Airborne), 25th Infantry Division, U.S. Army Alaska, fire M249 light machine guns during live-fire training on 4 March 2019 at Joint Base Elmendorf-Richardson, AK. (Photo by Alejandro Peña)

Commandant's Note

BG DAVID M. HODNE

Readying for LSCO:
Building on the Fundamentals

For well over a century, *Infantry* was recognized as our branch magazine. The publication was distributed at no cost to units and offered Soldiers tactical, doctrinal, and technical information, professional development guidance, lessons learned from units in combat, and myriad other useful data important to Soldiers. Officers, NCOs, retirees, and other subscribers around the world all eagerly waited for the latest issue to reach their mailboxes and training rooms. Fort Benning honored reciprocal subscription arrangements with over 48 partnered nations and jointly published articles of interest to allied readers. Hard copies of *Infantry* were shared with distinguished world-wide visitors. Our branch magazine was a valued adjunct to the visibility and respect that Fort Benning enjoyed among the world's armed forces, allies, and neutral nations. In 2013, after a century of being a print publication, *Infantry* became a web-based publication. Today, as our Army evolves, we recognize the potential for the magazine to be published in multiple mediums (one web-based and one printed) to complement each other. As we explore the feasibility of resuming publication of *Infantry* for unit distribution, we welcome your comments on the format, content, and layout of this new issue for the 2019 Maneuver Warfighter Conference.

The theme of the 2019 Maneuver Warfighter Conference is readying the Brigade Combat Team for Large Scale Combat Operations (LSCO). The purpose of this year's conference is to prepare the maneuver force for future challenges and examine how we train individual Soldier and collective skills. Near-peer competitors continue to improve their operational and tactical capabilities to achieve standoff against our capabilities. In this issue of *Infantry*, Dr. Lester W. Grau invites our attention to the mine warfare of the Soviet-Afghan War which accounted for 30-40 percent of trauma cases treated by Soviet medics. Mines and other explosive devices are a familiar subject to most Soldiers and virtually all Infantrymen and have been a subject of *Infantry* Magazine for well over a century.

As our Army, and our Infantry in particular, strives to regain overmatch against our adversaries, leaders across the maneuver force will discuss Soldier and squad modernization efforts necessary to fight and win on a hyperactive and increasingly lethal modern battlefield. Success is not reliant on new material or technology alone. Our innovative leaders remain decisive. Their skill requires our collective emphasis on thorough, and doctrinally correct, instructor certification and leader development. This provides the foundation for training future leaders in a manner that ultimately defines our lethality.

The innate value of instructor certification has never been more clearly demonstrated than in Training Circular (TC) 3-20.40, *Training and Qualification, Individual Weapons*, which defines goals and requirements for each weapon system and element. TC 3-20.40 features major updates to current rifle qualification, criteria, and authorized target systems to hone the marksmanship proficiency of the Infantryman. This approach reemphasizes weapon proficiency as described in TC 3-20.0, *Integrated Weapons Training Strategy (IWTS)*, stressing rapid deployment tactics and techniques and highlighting the role and benefits of simulations. The desired end state of the new marksmanship qualification system is the standardization of weapons training and qualification and increased lethality for all Soldiers, a key determinant of victory on the future battlefield. The background, criteria, and the Rifle and Carbine Qualification are discussed in detail as the lead Infantry News feature in this issue.

Your Infantry Branch is also redefining how we prepare initial entry Infantry Soldiers for the rigors of tomorrow's battlefields. Foremost among these is the 22-week Infantry One Station Unit Training (OSUT). The first 22-week course had an attrition rate of under 6 percent, a marked improvement over the previous 10-12 percent attrition rate of the most recent 14-week course. The success rate of the new course is attributed to strict adherence to the fundamentals of physical training, Soldier discipline, land navigation, combat lifesaver skills, combat water survival, and marksmanship. Two fundamentals inherent in the profession of arms are survivability and lethality, and both of these stand out in any discussion of this initiative. A less obvious, but significant, factor is the bonding and teamwork that results from Soldiers undergoing challenges, hardships, and shared accomplishments during the 22 weeks. The success of the U.S. Army Infantry School is a direct result of our committed investment in the acquisition, training, and support of the top-notch officers and NCOs to whom we entrust the training of our initial entry Soldiers.

In closing, your Infantry School dedicates our efforts to training Infantry Soldiers to close with the enemy by means of fire and maneuver in order to destroy or capture him, or to repel his assault with fire, close combat, or counterattack. As our Army modernizes and adapts to meet future challenges, this is an important time for our Infantry. It is also the right time to share the discussion in our branch magazine. Thanks for your support and thanks for all you do for our branch.

I am the Infantry! Follow me!

Infantry News
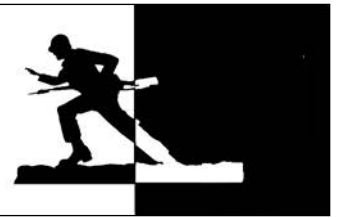
New Individual Weapons Training Strategy Approved

SFC JOHN ROWLAND
2LT KEATON CROWDER

For decades, the Army has struggled to holistically assess the tactical application of a Soldier's skills in current operational environments for individual weapons qualification or provide a program that effectively trained marksmanship. During the period between the Revolutionary War and Korean conflict, a standardized rifle qualification was nonexistent. It was documented that only a third of combat troops could accurately recognize and engage targets, rendering qualification difficult for commanders to use as a measure that accurately assessed the proficiency of their Soldiers in combat.

It was not until 1953 that a systematic training approach was established. This qualification template consisted of 56 targets (40 stationary and 16 moving targets), but due to the time and resource allocations of a draft-era Army, it was determined that Soldiers could not effectively engage moving targets so they were removed from the qualification. This 66-year-old qualification endured through more than 10 conflicts, four weapon systems, and numerous aiming devices. The Automated Record Fire (ARF) allowed Soldiers to disengage from target acquisition and change magazines at their leisure, was time consuming (15 minutes), and did not require Soldiers to demonstrate situational awareness or problem solving. However, on 1 April 2019, the U.S. Army Infantry School (USAIS) commandant, BG David M. Hodne, approved Training Circular (TC) 3-20.40, *Training and Qualification, Individual Weapons*. This publication is part of the overarching *Integrated Weapons Training Strategy* (IWTS), TC 3-20.0, which seeks to redefine goals and requirements for weapons training through qualification at echelon.

TC 3-20.40 applies to all individual weapons and serves as a resource to help commanders, staff, and NCOs understand the requirements for planning, preparing, executing, and assessing training through qualification. TC 3-20.40 provides major updates to the qualification criteria for all individual weapons by taking successful unit practices and consolidating them for a common approach to training individual weapons through qualification. The strategy emphasizes weapons proficiency and focuses on IWTS principles such as providing a commander with flexibility and adaptability to change and the facilitation of rapid deployment capabilities.

A Soldier participating in the 2019 Best Mortar Competition completes the new qualification table on 10 April.
Photos by Patrick A. Albright

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Training Strategy

- **Table I -** Preliminary Marksmanship Instruction and Evaluation (PMI&E)
- **Table II -** Preliminary Live-Fire Simulations (PLFS)
  - **Table III -** Drills
  - **Table IV -** Basic
  - **Table V -** Practice
  - **Table VI -** Qualification

Table I, PMI&E, is the hands-on and cognitive evaluation of the critical tasks necessary to safely and effectively employ the Soldier's assigned weapon. Table II, PLFS, is a simulations-based demonstration of the Soldier's performance in applying the shot process outlined in each individual weapon's

TC 3-20.40 Implementation Timeline

- **2014** ARI Study Conducted
- **11 July 2015** TC 3-20.0, Integrated Weapons Training Strategy, Published
- **13 May 2016** TC 3-22.9, Rifle and Carbine, Published
- **2017** New course of fire validated
- **2018 through 2019** USAIS LPDs conducted
- **1 April 2019** TC 3-20.40, Training and Qualification, Individual Weapons, Signed
- **October 2020 through October 2021** Implementation Year
- **2022** Full force qualified through new qualification

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TC. In this environment, leaders are able to replicate live conditions while providing critical feedback for their Soldiers that will better prepare them for live-fire events. Where Table II refines firing tasks, Table III, Drills, refines and evaluates the physical manipulations learned in Table I. Tables I-III are prerequisites to live fire where the Soldier must successfully pass the Gate to Live Fire (GTLF) before progressing to live-fire tables IV-VI. The tables can be executed in any order, provided they are evaluated within six weeks for active component, or six months for Guard and Reserve components, of any of the live-fire tables.

Table IV, Basic, is a live-fire condition used for basic skills training at a reduced tempo. For rifle, Soldiers must place eight of 10 consecutive rounds within the four-centimeter aiming point on the A8 zero target and then confirm their zero at 300 meters by hitting an e-type silhouette four out of five times. Finally, Soldiers are given ammunition to practice their application of holds at 100 and 200 meters before moving on to Table V.

Table V, Practice, is designed to be more difficult than the qualification by purposely inducing malfunctions and increasing the engagement tempo Soldiers are required to execute. This table builds the Soldier's confidence in the weapon, ammunition, optics, and training.

Table VI, Qualification, is the Army-standard record course of fire (COF) used to determine live-fire proficiency on an assigned weapon. For all weapons found in TC 3-20.40, Soldiers receive their rating from Stage 1, but they must receive GOs on subsequent stages to be considered qualified for collective live fire or a marksmanship rating. For rifle, Table VI is broken down into four stages:

- **Stage I -** Day Fire
- **Stage II -** Day Fire, CBRN (chemical, biological, radio-logical, nuclear)
- **Stage III -** Night Fire
- **Stage IV -** Night Fire, CBRN

Stage I comprises four firing phases where Soldiers engage 40 single or multiple stationary timed targets from the prone unsupported, prone supported, kneeling supported,
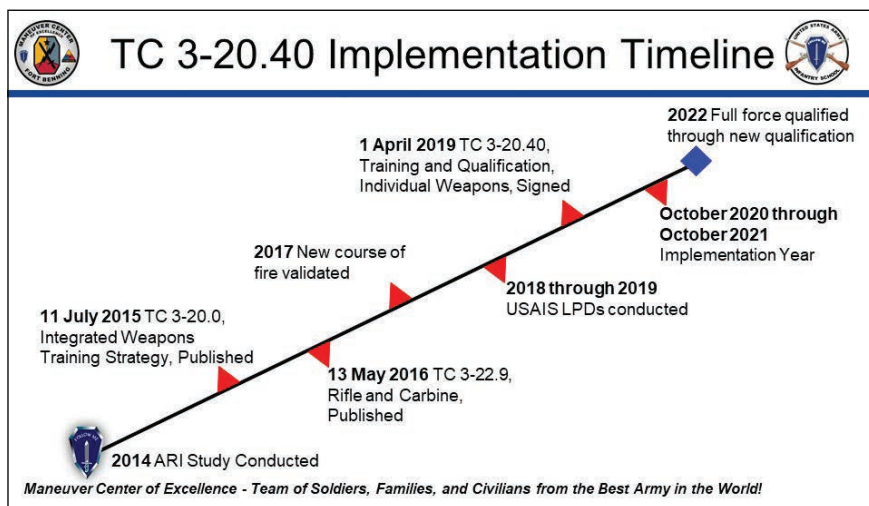
and standing supported positions. The COF takes about four minutes to conduct, has no administrative pauses once initiated, incorporates artificial support, and requires Soldiers to execute positional transitions and magazine changes on their own. Soldiers must score a minimum of 23 out of 40 to pass this stage of the qualification.

Stage II comprises one firing phase where Soldiers engage 10 single or multiple stationary timed targets from the standing unsupported position while wearing a protective mask. Soldiers must score a minimum of seven out of 10 to receive a GO for this stage of the qualification.

Stage III comprises two firing phases where Soldiers engage 20 single or multiple stationary timed targets from the kneeling supported position while wearing their night-vision device (NVG). Soldiers must score a minimum of 14 out of 20 to receive a GO for this stage of the qualification.

Stage IV comprises one firing phase where Soldiers engage 10 single or multiple stationary timed targets from the standing unsupported position while wearing a protective mask and NVGs. Soldiers must score a minimum of seven out of 10 to receive a GO for this stage of qualification.

The Alternate Course of Fire (ALT-C) is no longer considered a qualification. It is now a validation event that extends (not grants) a Soldier's existing rating by six months. ALT-C can be executed no more than twice in a 24-month period and must be approved by the first general officer in the chain of command.

These changes, while sweeping, are intended to increase Soldier performance, provide a common language that consolidates standards in small arms training through qualification, and ensure the utilization of resources. The threat of hybrid and peer threats is ever increasing, and we will face them in the future. USAIS will be conducting leader professional development (LPD) sessions with units across the Army over the next year to gather feedback and facilitate implementation. To schedule a USAIS LPD, division or brigade operations should email a request to usarmy.benning.infantry-schl.mbx.usais-marksmanship-team@mail.mil.

Infantry Week 2019

2019 David E. Grange Jr. Best Ranger Competition

1st Place: Team 19 with CPT John Bergman and CPT Michael Rose, 101st Airborne Division

2nd Place: Team 28 with SFC Ryan Gerber and 1LT Alastair Keys, 173rd Airborne Brigade

3rd Place: Team 20 with 1LT Nathan Penick and 1LT Edward von Kuhn, 101st Airborne Division

4th Place: Team 42 with CPT Ty Boyle and CPT Sam Pulliam, 199th Infantry Brigade, Maneuver Center of Excellence

5th Place: Team 36 with SGM Eric Echavarria and MSG Robert Jackson, U.S. Army Special Operations Command

Read more about the competition at: https://www.army.mil/article/220330/fort_campbell_team_wins_2019_best_ranger_title_for_second_time.

Photos clockwise from top - CPT Michael Rose, right, reaches for teammate CPT John Bergman during the combat water survival assessment at Victory Pond. (Photo by Patrick A. Albright)

The winners of the 2019 Best Ranger Competition, CPT Michael Rose and CPT John Bergman, pose for a photo at the Ranger Monument on 15 April. (Photo by Markeith Horace)

Team 42's CPT Sam Pulliam prepares to reach for the Ranger tab during the combat survival water assessment at Victory Pond on 14 April. (Photo by Patrick A. Albright)

MAJ Jonathan Rembetsy and SSG Michael Danielson of Team 3 complete an obstacle during the third day of the Best Ranger Competition. (Photo by Patrick A. Albright)

2019 Best Mortar Competition

1st Place: 82nd Airborne Division, Fort Bragg, NC — represented by SSG James Pennington, SGT Alec Norton, SPC Christian Elliott, and PFC Loren Dow

2nd Place: 1st Cavalry Division, Fort Hood, TX — represented by SSG Gary Stewart, CPL Ty Frame, SPC Kyle Bunnell, and PFC Jonathan Schweinshaupt

3rd Place: 1st Armored Division, Fort Bliss, TX — represented by SSG Jerome Urias, SGT Justin Peyton, PFC Bailey Hamilton, and PVT John Mlynarek.

Read more about the competition at: https://www.army.mil/article/220507/for_second_of_two_years_82nd_airborne_earns_title_of_best_mortar_crew.

Photos clockwise from top right - Team 11 won the 2019 Best Mortar Competition. The squad included SSG James Pennington, SGT Alec Norton, SPC Christian Elliott, and PFC Loren Dow.
(Photo by Patrick A. Albright)

A Soldier from the 82nd Airborne Division throws a grenade during the second day of the competition. (Photo by Markeith Horace)

Team 4 from the 1st Cavalry Division completes the trauma lane on the first day of the competition. (Photo by Patrick A. Albright)

A mortar crew fires a round as part of the Best Mortar Competition live-fire exercise on 11 April at Fort Benning's Red Cloud Range.
(Photo by Patrick A. Albright)
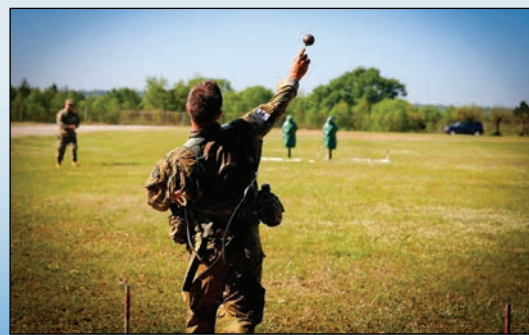
2019 Lacerda Cup All-Army Combatives Tournament

The **25th Infantry Division** was named overall champion of the 2019 Lacerda Cup. Second place was awarded to the **7th Infantry Division**.

The following are the results from the individual championship bouts:

Bantam Weight - 2LT Erica Forktus, 7th ID

Fly Weight - SSG Jesse Sablan, 7th ID

Light Weight - DRAW - PFC Hunter Missildine, 7th ID, and SGT Jonuel Rivera, 25th ID

Welter Weight - SSG Dillon Fraley, Army National Guard

Middle Weight - SSG Jacob Grove, 3rd ID

Cruiser Weight - CPL Alex Nuanez, 101st Airborne Division

Light Heavy Weight - SSG Rafael Brewster, 7th ID

Heavy Weight - SPC Jackson Fuamatu, 7th ID

View more photos from the competition at: https://www.fortbenningphotos.com/Maneuver-Center/199th-Infantry-Brigade/2019-Lacerda-Combatives-Competition.

Photos clockwise from bottom left - The team from the 25th Infantry Division as named overall champion of the 2019 Lacerda Cup. (Photo by Patrick A. Albright)

Two Soldiers grapple during the preliminary rounds of the 2019 Lacerda Cup on 10 April. (Photo by Patrick A. Albright)

Soldiers compete in the tactical scenarios portion of the Lacerda Cup on 12 April at Freedom Hall. (Photo by Markeith Horace)

During the second day of the Lacerda Cup, two Soldiers compete in an octagon match. (Photo by Markeith Horace)

The Infantry Heavy CAB in the Near-Peer Threat Environment

LTC MARK BATTJES

The armored force plays the critical role in our Army's ability to deter and defeat a near-peer threat. With its maneuverable firepower, the armored force provides the joint force commander the capability to mass effects at the decisive point on the battlefield to overwhelm an opponent's defenses or defeat its attack. The focal point of the armored force has always been its tank forces. Tanks provide the commander mobile protected firepower capable of destroying any enemy ground vehicle and maneuvering rapidly across most terrain.

Although the armored force has always included mounted infantry, it is clearly weighted towards tank forces. The current task organization of the armored brigade combat team (ABCT) presents an apt illustration. The ABCT consists of 13 maneuver companies: three cavalry troops, six tank companies, and four mechanized infantry companies. This task organization gives the BCT commander tremendous striking power. Yet it also provides the BCT commander with other capabilities if the mechanized infantry is employed in a way best calculated to maximize its strengths and augment the weaknesses of the other forces.

The infantry heavy combined arms battalion (CAB), in particular, can provide the BCT commander with several critical capabilities. It can seize, clear, and retain key terrain. It can block a single avenue of approach dominated by restricted terrain. It can provide additional maneuver elements — in the form of dismounted companies and a purely mounted element in Bradley Fighting Vehicles (BFVs) — to enable greater flexibility. Last, it can augment the cavalry squadron to perform reconnaissance forward and conduct security operations on the BCT's flanks.

Soldiers assigned to the 3rd Armored Brigade Combat Team, 4th Infantry Division scan terrain for enemy elements from their M2A3 Bradley Fighting Vehicle during Decisive Action Rotation 19-02 at the National Training Center, Fort Irwin, CA, on 30 October 2018.
Photo by PFC Kimberly Riley

During the 3rd Armored Brigade Combat Team, 4th Infantry Division's recent rotation at the National Training Center (NTC) at Fort Irwin, CA, its infantry heavy CAB — 1st Battalion, 8th Infantry — demonstrated each of those capabilities. The BCT commander employed 1-8 IN in ways that enabled the BCT to disrupt the opposing force's (OPFOR's) preferred scheme of maneuver, dislocate its defenses, and fight at the BCT's desired pace. Despite 3rd ABCT's success during the rotation, the relatively limited amount of infantry in the formation at times hampered its ability to maneuver and exposed elements of the brigade to threats that destroyed precious combat power.

For the armored force to achieve the decisive effects it is designed for, it must be able to employ mechanized infantry effectively. This requires changes to the way we train infantry formations within the armored force. It also necessitates a change to how we think about massing armored forces: It is just as important to mass infantry as it is to mass fires and tanks. Last, as an Army we should consider whether or not we have the right mix of mechanized infantry formations to tank formations in our ABCTs.

1-8 IN at NTC

During our recent rotation at NTC, the BCT commander utilized 1-8 IN to perform all of the tasks described above. Perhaps the most critical task the battalion performed centered around seizing, clearing, and retaining key terrain. The OPFOR understands how to use key terrain to dominate maneuver corridors. Its ability to employ anti-armor systems with devastating effect requires the armored force to gain control of the key terrain before it can maneuver.

In our west-to-east rotation, the BCT first had to gain control of the Brown-Debnam Pass complex, which the brigade accomplished using its cavalry squadron followed closely by the two armor heavy CABs in a rapid movement to contact. The 1-8 IN conducted its movement to contact along the Colorado Wadi. The BCT arrayed along a defensive line that connected the Brown-Debnam Pass complex to the southern wall it needed to capture Brigade Hill next.

The knobby, segmented hill dominates the cross-maneuver corridor that separates the western and eastern portions of the box. If the BCT did not own Brigade Hill, it could not continue the attack to the east. Approaching Brigade Hill mounted presents a dilemma. Just a single well-placed anti-armor system can systematically destroy a mounted approach. Yet those same systems are vulnerable to an approach by dismounted forces. The 1-8 IN dismounted a rifle company and maneuvered it along the southern wall while the BCT set conditions for a dismounted attack using artillery suppression and smoke.

Although the assault took much longer than anticipated, the hill became a strongpoint for the brigade after dismounted infantry had cleared it. The BCT used the hill to mask the assembly of forces for the next phase of its attack east and as a position from which to defend the brigade's southern flank from envelopment. The OPFOR's repeated attempts to recapture the hill — all defeated with heavy losses from tank, anti-armor, and BFV fire — indicate its importance to the OPFOR commander's preferred course of action.

Brigade Hill served another central function, however. It allowed the BCT to continue its dismounted clearance of key terrain. The 1-8 IN followed up its clearance of Brigade Hill by launching a dismounted attack with two companies to clear Hidden Valley. The two companies advanced near simultaneously on the north and south sides of the valley to destroy or displace enemy observation posts and anti-armor positions and secure the exit to John Wayne Pass. This maneuver effectively isolated the city of Razish from the south and prevented the OPFOR commander from using John Wayne Pass to envelop the brigade's flank.

Once 1-8 IN cleared Hidden Valley, it reorganized for the attack on the city of Razish. With the valley cleared of enemy forces, the battalion employed two dismounted infantry platoons as an economy-of-force mission to block John Wayne Pass and continue to isolate Razish. The remaining infantry and all of the battalion's BFVs were then available in the battle for Razish. The company commander remained with the dismounted platoons while his executive officer (XO) maneuvered the company's BFVs.

This additional maneuver element allowed the BCT commander to employ the remaining infantry in the BCT to secure other key terrain, which enabled the tank-heavy CABs to conduct a bold attack to the east that captured the entire central corridor. It also freed up the cavalry squadron from performing security operations on the brigade's southern flank. In fact, throughout the rotation 1-8 IN and the 4th Squadron, 10th Cavalry Regiment fought as dual components of the brigade's security and reconnaissance effort. The cavalry conducted reconnaissance forward primarily mounted; where it couldn't, the brigade commander employed dismounted infantry to push the brigade's eyes forward. Rather than dedicate cavalry troops to secure the BCT's flanks, 1-8 IN secured one flank while 4-10 CAV secured the other, conserving precious reconnaissance combat power.

The infantry did not demonstrate its tremendous value only on the offense. The brigade commander used 1-8 IN to block a single avenue of approach dominated by restricted terrain during defensive operations. The battalion used its infantry forces in the restricted terrain to destroy enemy forces forward with missiles and turn them into its tank forces in the center. From strong defensive positions, the battalion's tanks could defeat the already attrited enemy and force his withdrawal. During the brigade live fire, the battalion completely prevented any penetration along the Drinkwater Lake avenue of approach.

Training the Infantry Heavy CAB

To provide the critical capabilities it possesses to the BCT commander, the infantry heavy CAB must focus its training efforts. We identified two critical areas in particular: dismounted operations and lethality with missiles. These are the two distinct capabilities that mechanized infantry provides to the armored brigade. Yet they are often afterthoughts in the training progression for mechanized infantry.

If the infantry in the armored force cannot maneuver on its own — that is as a separate element supported by, or even not supported by, its BFVs — then it cannot provide the BCT commander flexibility. Throughout our train up, we emphasized dismounted maneuver to clear restricted terrain. During platoon and company live fires, we established objectives that forced the infantry to dismount and maneuver along a restricted or severely restricted avenue of approach. Later, during our brigade culminating training exercise, we used dismounted forces exactly as we would employ them later at the NTC. We even conducted a 10-kilometer approach march to establish a support-by-fire position using the dismounts from one company while its BFVs maneuvered as part of the battalion.

Although we talked often about the importance of lethality with missiles, we failed to take advantage of our simulator assets to develop these skills, a shortfall that we will correct during our next training cycle. Nevertheless, during company situational training exercises and the brigade's culminating training exercise, we forced the infantry Soldiers to learn to use their missile weapon systems. We demanded that they become experts at boresighting and zeroing the Javelin and TOW (tube-launched, optically-tracked, wireless-guided) weapons. Furthermore, they could receive credit for a kill only through the Multiple Integrated Laser Engagement System (MILES) — no assessed missile kills. This frustrated the infantry squads and crews, but ultimately they adapted, learned, and became lethal. BFVs and squads in the infantry companies across the brigade learned to kill their tank brethren with missiles at range, which enabled the BCT's success at NTC.

Changing our Thinking about Mechanized Infantry Forces

While the training changes discussed above are welcome, they do not go far enough to maximize the capability of the infantry in the armored force. To do that, we as a force must change the way we organize, train, and fight the mechanized infantry. We must challenge older ideas and think differently about the ways we have always done things.

First and foremost, we must recognize that the greatest threat the mechanized infantry faces in the near-peer threat environment is from armored personnel carriers (PCs). Our adversaries' armored forces are top heavy with PCs, just like the OPFOR at NTC. Yet we continue to insist on prioritizing the use of high explosive (HE) ammunition for the 25mm Bushmaster cannon. The gunnery tables contain more engagements with HE ammunition than with armor piercing (AP) ammunition. Moreover, we still refer to the HE box as the "large ready box."

We know that in the near-peer threat environment the mechanized infantry is likely to encounter 10-15 times as many PCs as lightly or unarmed vehicles, but we still expect them to enter this fight with far more practice firing HE than firing AP. They possess different ballistic characteristics. We should train our gunners and Bradley commanders (BCs) how to fight in the

Photo by PFC Kimberly Riley

A Soldier assigned to the 3rd Armored Brigade Combat Team, 4th Infantry Division prepares to fire a Javelin during training at the National Training Center.

environment we expect them to fight in. One could argue that the HE engagements are more difficult. While somewhat true, it is also irrelevant: The primary threat is PCs. I recommend that doctrine change to emphasize the PC threat, make the large ready box the AP box, and prioritize AP engagements in the BFV gunnery tables.

Next, the organization of the mechanized infantry's squads does not enable the greatest flexibility. The current table of organization and equipment (TOE) gives the BFV platoon three nine-Soldier rifle squads. Although the TOE provides the platoon with two medium machine guns and two Javelin systems, these weapons are secondary weapons for the rifle squads. This is not how we organize light infantry platoons, which receive a dedicated weapons squad. Moreover, three squads do not divide into four vehicles in any manner that makes sense.

We organized our platoons with two full rifle squads, each supported by a weapons team. The weapons teams trained on the machine guns and Javelins throughout our training cycle to maximize their effectiveness. Once we arrived at NTC, this paid off. Our machine gunners suppressed enemy positions while our Javelin gunners decimated OPFOR mechanized forces. Furthermore, we added Stingers to the weapons teams, which allowed them to defend themselves — and the entire brigade — from devastating helicopter attacks.

The mechanized infantry platoon should contain two 12-Soldier squads — a nine-Soldier rifle squad with a three-Soldier weapons team. This provides the platoon leader and company commander the maximum flexibility to employ infantry forces. It also allows them to focus training for the rifle squads and weapons teams on their most critical tasks rather than training one or other element on a secondary weapon system. I should also note that this change reduces the number of

Soldiers in the platoon while enabling the two squads to divide evenly into the platoon's four BFVs.

Last, as an armored force we must re-think how we employ infantry against a near-peer threat. Like most mechanized units, we intended to fight task-organized at NTC with one mechanized infantry company, a mechanized company team, and a tank team. After our first mission analysis, however, we decided to fight company pure. We maintained a pure task organization throughout the rotation with only one exception.

Fighting pure enabled the battalion to mass tanks and infantry. We do not generally think about massing infantry, but most pieces of key terrain on the battlefield require more than one or two platoons to clear. Therefore, it makes sense to mass an infantry company (or potentially two or three) to clear key terrain. It does not make sense in many instances to mass mechanized teams to perform the same task. We would do better to employ the tanks as a company in support of the infantry — as the BCT did when it attacked Razish — and allow the infantry to perform the heavy lifting of clearing the terrain systematically.

This discussion highlights a central weakness of the armored force: it has too few infantry. The brigade secured the central corridor through a bold attack. But that attack cost a high price. With the BCT's infantry massed to clear Razish and secure the southern flank, no infantry remained to clear the key terrain along the northern flank of the central corridor. The brigade fought through the Iron Triangle and the racetrack using cavalry forces, but these forces suffered heavy losses. If the brigade had more infantry, it certainly would have used them, and the infantry might have prevented such heavy losses.

Moreover, the paucity of infantry in the brigade at times fixed us and limited our flexibility. The brigade essentially leapfrogged the infantry forward. We maneuvered one or two companies at a time while the other companies retained key terrain already captured. At points during the rotation, no less than three companies were fixed controlling key terrain, leaving only a single company available for the next attack. The brigade

assumed risk to free infantry forces for the next attack, but this took time and slowed the brigade's maneuver.

The armored force needs more infantry. It will challenge the Army's procurement, recruiting, and maintenance capabilities to add infantry companies to the armored force, but even two more companies per brigade could make an enormous impact. If that is deemed unfeasible, then the Army must consider how to task organize armored brigades with additional infantry forces from the infantry or Stryker BCTs.

Conclusion

Mechanized infantry, if properly organized, trained, and employed, provides the armored force several key capabilities that enable it to employ the striking power of its tanks more effectively. The mechanized infantry can seize, clear, and retain key terrain; block a single avenue of approach; provide additional maneuver elements to the commander; and augment the cavalry squadron. If it performs these missions well, the infantry will disrupt the enemy's scheme of maneuver, attrite his forces, and enable the brigade's maneuver. It falls on the infantry heavy CAB in each armored brigade to ensure that the infantry fulfills its full potential in the near-peer threat environment.

LTC Mark Battjes is commander of the 1st Battalion, 8th Infantry Regiment, 3rd Armored Brigade Combat Team, 4th Infantry Division at Fort Carson, CO. LTC Battjes has served in a variety of operational assignments in the 101st Airborne Division (Air Assault), 3rd Infantry Division, and the 25th Infantry Division. He has served four combat tours in Iraq and two operational tours in Europe and Kuwait. LTC Battjes is a member of the Army Advanced Strategic Planning and Policy Program (ASP3) and holds a Ph.D. in history from the University of Texas at Austin.

Soldiers assigned to the 3rd Armored Brigade Combat Team, 4th Infantry Division maneuver in formation while assaulting an objective during Decisive Action Rotation 19-02 at the National Training Center on 28 October 2018.
Photo by SPC Kyler Chatman

Soldiers from the 1st Brigade Combat Team, 10th Mountain Division conduct an air assault during Joint Readiness Training Center Rotation 19-04 at Fort Polk, LA, on 18 February 2019.
Photo courtesy of JRTC Operations Group

'Framing the Problem' of Integrating Army Aviation in the BCT

LTC JASON S. DAVIS

Successful brigade combat teams (BCTs) at the Joint Readiness Training Center (JRTC) leverage division-level capabilities to solve brigade-level problems. When fully integrated into the BCT's combined arms maneuver, the combat aviation brigade (CAB) provides an aviation task force (AvTF) with a powerful leverage point for the BCT in the decisive action (DA) fight. Successful CAB integration provides the commander with options through air assault, attack aviation, reconnaissance, and other aviation core competencies. These options, when employed effectively, provide a capability currently unmatched by our adversaries. At JRTC, the BCT is flooded with a non-organic capability and often struggles to marshal the team in a combined arms fight. This article is not an all-encompassing "to do" list for integrating aviation into the BCT's plans and operations, nor is it a simple restating of doctrinal tasks from Army Techniques Publication (ATP) 3-04.1, *Aviation Tactical Employment*. The goal is to promote discussion in the BCT staff, provide the BCT commander topics to cover when issuing planning guidance, and encourage synchronization between the AvTF and the BCT.

To achieve this goal, ask yourself or your staff, "What can the AvTF do for the BCT in a DA training environment? What items should be addressed in commander-to-commander dialogue on the road-to-war and during the Combat Training Center (CTC) rotation? What do the BCT and AvTF staffs need to discuss to be successful?"

Trends at JRTC demonstrate that Army aviation is underutilized, often employed for on-call attack and limited air movements after initial entry operations. The drivers behind the low utilization are many, but often stem from a counterinsurgency (COIN) hangover and the lack of understanding regarding what questions to ask among the staff when planning and preparing for operations. The following questions, broken down by three major operations typically conducted during DA rotations under the superordinate task of mission command, assist the BCT and AvTF staff to forge a lethal combined arms team.

Mission Command

The philosophy of mission command is most critical to integrating aviation capabilities into the BCT's operation. Shared understanding of the commander's intent and, above all, establishing mutual trust are imperative to achieving the commander's intent. ATP 3-04.1 states that mission command is the "foundation for air-ground operations" and provides the "legitimacy of empowerment… from the air mission commander through brigade commander." That legitimacy relies on the mutual trust built between the BCT and supporting CAB task force. In order to build shared understanding of what the BCT

can trust the AvTF to provide, consider the following:

• Does the BCT staff understand AvTF crew/asset availability over space and time?

• Has the BCT staff created a scheme of maneuver early enough with the AvTF to allow massing assault or attack assets at the decisive point?

• Is the AvTF liaison officer (LNO) the "right person for the job" and able to speak on behalf of the AvTF commander? Are there enough LNOs? Is the LNO employed as the assistant brigade aviation officer (BAO) or as the voice of the AvTF commander?

• The BCT commander should ask if the LNO is a pilot-in-command, air mission commander, or flight lead, and ask the AvTF commander what mission sets (attack, assault) are represented in the LNO team.

The science of mission command is increasingly important as the battlefield geometry between the BCT and the supporting AvTF grows. A mismatch exists in the current Army-level fielding distribution of mission command systems, resulting in technical gaps between aviation brigade formations and the BCT's capability to leverage digital command and control (C2) systems. Imagine the BCT operating on a four-lane divided highway (Warfighter Information Network-Tactical Increment 2), while the AvTF is on a parallel frontage road using Joint Capabilities Release (JCR), FM, and a dial-up modem to build shared understanding. BCT and aviation leaders must address these tactical compatibility challenges during home-station training. These certification events help commanders understand the capabilities and limitations of their linked (and delinked) C2 systems to best illustrate to their staffs on how the units will share information. Too often, the lack of interoperability hinders synchronized staff actions between the BCT and AvTF.

• What is your staff doing to keep the AvTF on the same planning horizon as the BCT? Is the BCT's on-the-move mission command system capable of transmitting data to the AvTF line-of-sight C2 systems?

• If the BCT wants to use the Army Airborne Command and Control System (A2C2S) console, when was the last time the AvTF conducted a full validation exercise of it? Does the BCT commander understand exactly what systems the A2C2S provides during the flight?

• Are the BCT and AvTFs operating on the same UHF waveform for satellite communications (SATCOM)? Can the BCT's command posts communicate with aircraft on SATCOM?

Joint Forcible Entry (JFE)

Successful mission command integration sets the conditions for the opening event of most JRTC DA rotations — the JFE. According to Joint Publication 3-18, *Joint Forcible Entry Operations*, JFE operations "seize and hold lodgments against armed opposition" while neutralizing the enemy and establishing conditions for follow-on forces to enter the area of operations. At JRTC, these are normally air assault or airborne operations aimed at expanding lodgment and protecting key infrastructure. JFE air assaults are combined arms maneuvers

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conducted to seize key terrain or attack the enemy where it is most vulnerable, not to move a force faster than it would move by foot or vehicle. A well-planned air assault throws the enemy off balance and presents multiple dilemmas to the adversary.

The most successful air assault operation during a CTC rotation is typically the JFE assault, largely because the level of coordination between the AvTF and the BCT is at its peak at the end of reception, staging, onward movement and integration (RSO&I). The BCT is typically not focused on a close tactical fight and dedicates planning and rehearsal time to this combined arms operation. Later in the rotation, with the BCT staff focused on bayonet-range targets in front of them, the energy to plan and synchronize tends to fall to the wayside. To help counter this tendency, BCT commanders and their staffs should ask themselves:

• Does the BCT own the timeline for this combined arms maneuver, or is the BCT staff letting subordinate battalions "work it out" on their own?

• How flexible is the intelligence collection plan for the operation? What is the backup plan if weather prevents launch?

• Is the AvTF using its unmanned aircraft systems (UAS) to augment maneuver or is the BCT staff attempting to task them as part of the intelligence collection (IC) plan? Did the brigade spectrum manager account for multiple frequencies needed to support the additional UAS and has the brigade engineer battalion (BEB) UAS platoon contacted the AvTF to exchange the laser codes and uplink/downlink frequencies needed to facilitate manned-unmanned operations?

• Is the BCT willing to assign battlespace in front of the cavalry squadron to the AvTF, enabling them to conduct a screen during scout infiltration? Does the BCT staff understand the math associated with aerial security missions (example: how long a troop of eight AH-64s can doctrinally provide a screen over a given boundary or area of operations)?

• Does the BCT order consider the AvTF as a singular entity in the priority of fires, or does it reflect the AvTF serving as the sensor for a ground unit, possibly with a higher priority of fires?

• Has the AvTF offered to infiltrate the BCT's dismounted scouts? Could you deceive the enemy through false scout infiltrations? Did the AvTF offer to create caches through things like low cost/low altitude (LCLA) aerial resupply?

• What crews/aircraft are available when the BCT commander anticipates JFE/assault mission execution? What

is the trade-off for massing assault assets? Are you prepared to have limited aerial sustainment operations for 36 hours to shift aircrews away from a "massed asset" mission? The same question applies to massing attack assets.

• What is the follow-on support plan for the ground force? Did the AvTF plan to sustain the ground force commander by air and are the attack aviation assets available to provide firepower at their most vulnerable time?

• Is your staff familiar with the air assault planning process (AAPP) and the events associated with it? The air mission coordination meeting (AMCM), the air mission brief (AMB), and the combined arms rehearsal (CAR) are the big-ticket items critical to the success of these missions. The "96-hour air assault planning process" was originally designed for a full-size BCT assault. Can your unit do a smaller mission in a shorter timeframe?

• Has your staff considered a smaller force inserted further into the enemy's area to present the "multiple dilemmas" outlined in doctrine?

• Did the staff consider an artillery raid to eliminate a high-payoff target? Does the AvTF have the lift assets synchronized in space and time to conduct both the assault and artillery raid?

• Did your brigade support battalion (BSB) conduct the proper fuel testing on their M978 fleet to support aviation refuel operations if necessary? Is the BSB prepared to receive tactical control (TACON) of a forward arming and refueling point (FARP)?

• Does the AvTF plan to establish a FARP and tactical command post forward to extend the operational reach of the BCT and the AvTF?

Defense

FM 3-0, *Operations*, states that defensive operations "deter or defeat [an] enemy offense… gain time… and develop conditions favorable for offense." The goal of defensive operations is not as simple as surviving the opposing force (OPFOR) onslaught. When division-level enablers such as the CAB and division artillery (DIVARTY) are successfully requested and integrated, the defense can defeat the enemy and force culmination or capitulation. The BCT staff often defaults to COIN-based attack aviation planning and assumes attack weapons teams (AWTs) are available on short notice. These plans fail to develop engagement areas in the BCT deep fight and count on AWT support to defeat mechanized forces in a close fight. In the defense, it is critical that attack aviation is massed, with detailed intelligence triggers and a layered collection plan aimed at determining the time and place of the enemy main effort. The BCT often fails to fully utilize lift/assault forces in the defense, and the AvTF fails to offer solutions to BCT sustainment or protection challenges with Black Hawk and Chinook assets.

A successful defense determines indicators of the enemy's decisive operation (with a plan to identify those indicators), establishes obstacle belts to force the enemy into designated engagement areas (EAs), and delivers the required firepower when the enemy presents itself in those EAs. Desynchronized defenses fail to utilize all the enablers at their disposal to achieve those goals. To assist in mitigating the impact of a desynchronized defense, BCT and AvTF commanders and staffs should ask the following questions:

• Did our best attack aviation planner work with the BCT S3 to provide input for the concept of the operation? Did the BCT fire support officer (FSO) play a role in the development of the AvTF EAs, and are the requisite graphic control measures understood and disseminated at all levels? Are attack aviation routes (and other airspace control measures) depicted in the airspace control order and do they facilitate rapid indirect fire mission?

Photo by SSG Jared Gehmann

Paratroopers assigned to the 3rd Brigade Combat Team, 82nd Airborne Division take up defensive positions after landing during an air assault as part of a Joint Readiness Training Center rotation at Fort Polk, LA, on 2 November 2015.

• Do the BCT and AvTF S2s work jointly to develop named areas of interest, facilitating enemy destruction in established EAs? Is there a sensor-to-shooter rehearsal planned?

• Is air volcano available? Did the BCT assign a headquarters to lead the volcano operation, such as the BEB, and assign a supporting headquarters, such as the AvTF?

• Does the plan support the lead time required to load and launch the air volcano? Is the BCT able to dedicate the UH-60 assets needed for air volcano without affecting assault missions?

• Will the AvTF treat air volcano as a combined arms mission with the BEB and conduct the supporting rehearsals?

• Is the AvTF medical evacuation (MEDEVAC) platoon postured to weight the main effort? Are routes to/from Role 1 and 2 medical treatment facilities in the air control order?

• Did the BSB establish pre-packaged loads of critical supplies, and are pre-planned pickup/landing zones established? Did the AvTF participate in the sustainment rehearsal?

Attack

When rotational units conduct offensive operations, they are imposing their commander's will upon the enemy. The purpose of the attack — or offense — is to defeat or destroy enemy forces or seize key terrain. Many of the questions posed earlier in the article are relevant to the attack. Successful AvTFs fully integrate into the BCT planning cycle, are considered a maneuver element within the BCT, and find ways to apply aviation assets to achieve key tasks within the BCT commander's intent. The AvTF commander should review the BCT commander's intent and propose near-fully staffed aviation missions aligned against key tasks, such as an artillery raid to destroy a high-payoff target or an air assault to seize key terrain commanding an avenue of approach. Successful BCTs in the attack discuss the following while preparing for their mission:

• If the conditions for a battalion-sized air assault are not present, would multiple company-sized assaults present just as much of a dilemma for the enemy? Is the BCT using aviation to seize key terrain through air assaults? Does the BCT plan to use attack aviation to interdict the enemy mechanized force and prevent the enemy from committing his reserve?

• Is the AvTF trained on counter-radar terrain flight techniques to facilitate attack of targets in the BCT deep fight with minimal joint fires/electronic warfare support?

• Does the BCT airspace plan facilitate rapid clearance of fires while balancing flexibility for aviation assets?

• Is time available to plan a joint strike mission? Is a subordinate headquarters tasked with integrating joint tactical air controllers (JTACs), attack aviation planners, air defense/airspace planners, and the BCT FSO to accomplish that task?

• Are the maneuver battalions and AvTF postured to infiltrate combat power rapidly to key terrain in order to delay, disrupt, or provide early warning to the main effort?

Photo courtesy of JRTC Operations Group

An Apache assigned to the 5-159th Army Reserve Aviation Command engages a target during a live fire at Fort Polk on 1 August 2018.

• Does the BCT JTAC understand how the AvTF functions as a maneuver asset vice a close air support (CAS) platform?

• Is the AvTF involved in BCT targeting meetings? Did the BCT assign high-payoff targets to the AvTF with associated BCT-enabling assets to prosecute the target?

• Can the AvTF rapidly move BEB counter-mobility teams forward to delay enemy movement?

• Did the BCT and AvTF S2 teams determine as many landing zones as possible within the BCT area of operations? Did the CAB terrain section provide landing zone (LZ) analysis?

• Is the BCT main effort allocating AvTF assets accordingly? For example, is the BCT prepared to allocate MEDEVAC platforms only to the main effort, leaving supporting efforts without aerial evacuation platforms?

Conclusion

BCTs succeed in the decisive action training environment through successful integration of enabling capabilities. That integration cannot happen overnight during RSO&I at a CTC and requires frequency and repetition. Units must develop habitual training relationships, conduct multiple iterations of staff processes, and validate their systems prior to departure from home station.

The aforementioned planning considerations will not automatically result in a winning plan. However, framing the BCT problem through the lens of these questions or discussion points will result in a combined arms team with a better understanding of the gaps in its plan and a path to improved enabler integration. The AvTF must leave the BCT's planning process with the knowledge of what key tasks can be addressed with aviation assets. Using this problem-framing exercise, the AvTF can remain on azimuth during parallel planning and align their assets to the BCT's specified, implied, and key tasks.

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Mechanized Infantry Experience and Lethality:
An Empirical Analysis

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In 2001, the U.S. Army Infantry Branch merged anti-armor specialists (11H) and mechanized infantry specialists (11M) into the general infantry military occupational specialty (MOS) 11B. The Infantry commandant at the time, MG John Le Moyne, declared that the transformation of Infantry specialties would create "an Infantry NCO corps that understands and applies all the great capabilities our Infantry brings to the battlefield."[1] While the Infantry transformation certainly created well-rounded NCOs with experience across light, Stryker, and Bradley formations, we must remain aware of the potential for at least temporary degradation of expertise in mechanized infantry units.

As the new policy was implemented, the U.S. Army focused on wars in Iraq and Afghanistan. Some armored brigade combat teams (ABCTs) stored their tanks and Bradley Fighting Vehicles (BFVs), deploying as light infantry. With short dwell time between deployments, numerous ABCTs went years without conducting a single gunnery.[2] This focus on counterinsurgency negatively impacted proficiency in armor units' core competencies.[3] These trends have changed in recent years. The 2017 National Security Strategy highlighted the return of great power competition, and the 2018 National Defense Strategy Commission focused on the importance of conventional conflict against near-peer adversaries.[4] In response to this changing strategic environment, ABCTs have worked hard to regain decisive action proficiency.

This renewed emphasis on decisive action has magnified significant expertise gaps in mechanized infantry NCOs who have no prior mechanized infantry experience. This article reviews the implications of these gaps and conducts statistical analysis to demonstrate how prior mechanized experience may impact lethality. Our argument is based on qualitative observations from our time as mechanized infantry company commanders and quantitative analysis. Specifically, we use average crew experience levels and gunnery table (GT) VI scores from Bradley crew qualification to quantify how experience impacts lethality. We then provide recommendations which address these shortcomings.

A Bradley Fighting Vehicle from the 1st Battalion, 66th Armored Regiment maneuvers across Vaziani Military Base during an exercise in Tbilisi, Georgia, in May 2017.
Photo by SGT Timothy Pike

Framing the Problem: Master Trainers with No Experience

Imagine you are the company commander of a mechanized infantry company and you learn that you are about to receive a new 11B4O to fill a vacant platoon sergeant billet. You review this NCO's enlisted record brief (ERB) and learn he is Ranger qualified, jumpmaster, a former Ranger instructor, and has served in light and airborne units with extensive combat experience in Iraq and Afghanistan. You're excited, right? Possibly… but many former mechanized infantry commanders would have some lingering uncertainty.

How can platoon sergeants be expected to lead a platoon through proper Bradley command maintenance when they have never set foot in a Bradley? How can they be expected to train their crews for gunnery skills testing and crew qualification when they have never shot a gunnery? How can they mentor their platoon leaders on the nuances of mechanized infantry tactics? These NCOs cannot serve as a platoon's master trainer when they are only beginning to learn the equipment and employment considerations. Sadly, this is a common occurrence in mechanized infantry units.

We do not deny that this hypothetical NCO would personally benefit from this assignment as a mechanized infantry platoon sergeant. The NCO would undeniably be a more well-rounded infantry leader prepared to operate in a variety of units. Further, the NCO would likely bring expertise in dismounted operations that are still crucial in mechanized infantry units. Despite the NCO's strengths and the broadening benefits, the NCO's lack of experience comes at a high cost for the rest of the platoon. When you also consider that the majority of the platoon's NCOs might also come from a light or Stryker background, it is easy to see how the lack of NCO experience in mechanized units can limit unit-wide competence, lethality, and expertise.

The Bradley subject matter expert in many mechanized infantry platoons is often a sergeant (E5) who has been in the same Bradley unit his entire career. This sergeant essentially fills the roll of master trainer for the significant mechanized portion of the training plan to include gunnery preparation, maintenance, and recovery. While this young NCO's experience is important, it is often not paired with the knowledge, education, or maturity expected of a sergeant first class. The platoon sergeant needs expertise to shape the mechanized platoon's entire training plan to include dismounted and mounted maneuver and lethality, mechanized maintenance, and heavy sustainment.

Both mechanized infantry expertise and the formal and informal leadership a platoon sergeant owns are exceptionally important to maintaining a platoon's fleet of four BFVs. Many inexperienced platoon sergeants lean heavily on the sergeant subject matter expert to run the platoon's weekly

Photo by CPT Shaun Manley

A master gunner assigned to Company C, 1st Battalion, 66th Armor Regiment, conducts a safety and range orientation briefing to Abrams tank and Bradley Fighting Vehicle crews prior to executing a gunnery in Kuwait on 26 April 2015.

preventive maintenance checks and services (PMCS). Of course, good platoon leaders are leading the PMCS as well, but many new platoon leaders similarly lack the experience and deep maintenance understanding to ensure crews are completing checks to standard. If the platoon leader cannot learn maintenance from the platoon sergeant's experience and works under a company commander who likely is fulfilling the vehicular imperative following airborne or light assignments as a lieutenant, many platoons find themselves with the blind leading the blind. Many platoon leaders and platoon sergeants will eventually learn the right way to conduct maintenance, but in the world of constrained parts flow, austere regionally aligned deployments, and an aging fleet, our mechanized infantry units do not have time for this learning curve.

There will be some exceptional platoon sergeants coming from light backgrounds who quickly master the complexities of the M2 Bradley, the M242 25mm cannon, and mechanized infantry tactics, techniques, and procedures. However, based on our experience, this is the exception and not the rule. There is typically a steep learning curve. On average, it takes a complete annual training cycle to achieve baseline proficiency required to properly manage maintenance, train for gunnery, and understand mounted maneuver tactics. Considering the average platoon sergeant will only remain in position for one to two years, the majority of these platoon sergeants are leading their Soldiers without the prerequisite expertise. Similar implications apply to section leaders and gunners who lack mechanized experience.

Statistical Analysis: How Does Experience Impact Lethality?

Crew qualification gunnery (herein referred to as gunnery) is the U.S. Army's standardized training event that certifies

Bradley crews. Gunnery progressively evaluates crew lethality during six assessed "gunnery tables." The cumulative training event is GT VI, which is externally evaluated by vehicle crew evaluators and master gunners from another unit. Based on a 1,000 point scale, GT VI consists of 10 total engagements split between day and night and includes degraded conditions like chemical, biological, radiological, nuclear (CBRN) engagements and mechanical failures.[5] Beyond bragging rights, a crew's final GT VI score serves as a quantifiable measure of the crew's lethality. Crew GT VI scores serve as our study's independent variable.

The extensive preparation required to prepare Bradley crews for gunnery requires a determined effort by the platoon's NCOs. These gunnery preparation efforts often occur simultaneously with competing requirements like annual/semi-annual services, marksmanship qualifications, and team and squad live-fire exercises. Based on the difficulties associated with managing these competing requirements, NCOs with significant experience in mechanized infantry units will be better prepared to ensure their crews receive adequate training to excel in crew qualification gunnery. While Bradley gunnery is only one portion of the responsibility of BFV crews, we believe the data highlights a broader truth: Prior experience on the BFV is correlated with crew proficiency in lethality, maintenance, and maneuver.

Following that observation, our hypothesis was that mechanized infantry Soldiers require experience to attain expertise on the BFV. We tested our hypothesis against four gunneries from Chosen Company, 1st Battalion, 66th Armor Regiment, that occurred between 2016-2018. Pooling the GT VI scores together, we assessed the impact of a gunner's and Bradley commander's (BC) number of previously completed gunneries on crew lethality. This measures the raw lethality differences based on varying experience levels. The overall data set contains 58 crews which participated in four different gunneries. Of those 58 crews, only eight had previously qualified together. This means there are 42 unique crew combinations present in the data.

A Note on the Small Data Set

It is important to note that this study is limited to one company's gunnery scores over three years. This study lacks a robust sample size and is subject to internal effects based on dynamics unique to the company. The small sample size limits the statistical significance of these comparisons and creates large standard errors between comparison groups. Despite these shortcomings, the changing conditions over three years of data strengthen the finding's external validity. The time span included two battalion command teams, three company commanders, five first sergeants, and several rotations in platoon leadership. The various Table VIs occurred under different training plans,

in two different countries, on three different ranges, and with different weather conditions. Levels of preparation were at times impacted by competing training and maintenance requirements. Mechanized experience among subordinate leaders and crew members continually varied. Based on these varying conditions, we feel comfortable making larger statistical inferences based on this relatively small data set.

Critical Findings

Initial analysis revealed a strong correlation between increasing crew experience and increasing crew lethality. Across all five gunneries, a gunner with at least one prior gunnery will on average score 30 points more than a gunner without any prior experience. A gunner with two prior gunneries will on average score 78 points more than a new gunner. A gunner with three or more gunneries will on average score 96 points more than a new gunner. Though not as significant, similar results were observed with BCs (see Table 1 for complete breakdown). Gunners and BCs who had both shot at least one prior gunnery (not necessarily together) averaged 890 points, 32 points higher than the overall average 858 points. Although there were outliers who earned distinguished scores on their first gunnery, these were the exception and not the rule. Their presence is included in the data set, and the importance of experience still outweighs these exceptional Soldiers.

The analysis also revealed a high degree of crew turbulence. On average, 48 percent of Bradley crew personnel who participated in an observed gunnery returned for the next gunnery.[6] This means over half of experienced crew members were reassigned or transitioned out of the Army between gunneries. More significantly, this normal personnel rotation meant that crew stability between gunneries in Chosen Company, 1-66 AR averaged 13 percent across the three

Table 1 — Crew Experience Levels and GT VI Scores[7]

Gunners	Average GT VI Score	Sample Size
Gunner with no prior gunneries	838.84	32
Gunner with 1 prior gunnery	868.89	18
Gunner with 2 prior gunneries	916.40	5
Gunner with 3+ prior gunneries	934	2
Bradley Commanders (BC)	**Average GT VI Score**	**Sample Size**
BC with no prior gunneries	858.04	25
BC with 1 prior gunnery	862.46	13
BC with 2 prior gunneries*	832.00	11
BC with 3+ prior gunneries	889.75	8
Other	**Average GT VI Score**	**Sample Size**
Gunner and BC with no prior gunneries	846.57	14
Gunner and BC with at least 1 prior gunnery	890.69	13
Returning crews (previously shot together)	888.00	8
Overall company GT VI average	858.47	54

* Seven of 11 of these were platoon sergeants or section leaders with a brand-new gunner; combined, their average was 783. The remaining four of 11 with experienced gunners average 916. The platoon leader and platoon sergeant traditionally receive the most talented gunners.

observed years.[8] This is despite a concerted effort by the chain of command to ensure crew stability.

The importance of platoon sergeant experience was also evident in the results. Surprisingly, of the 10 platoon sergeants in position during the study, only two platoon sergeants had any previous mechanized experience. Both of their platoons earned the highest platoon average during the two gunneries they participated in. The remaining two top platoons were led by platoon sergeants and/or platoon leaders who had shot at least one previous gunnery.

One may criticize that 30-60 points are relatively insignificant when considering a gunnery on a 1,000 point scale. However, it is important to note that the range of observed scores present in the data was a low of 700 to a high of 985. Thus 30-60 points out of 285 points represent 10-20 percent of the range of recorded scores. In combat, this could be decisive. Overall, the data supports our hypothesis. Increasing experience levels directly enhance lethality and proficiency in the BFV.

To reiterate, much more goes into gunnery lethality than crew experience. Time in the Bradley Advanced Training Simulator, in-depth maintenance preparation, a thorough understanding of the M242 Bushmaster, and a well-developed training plan are also vital to a crew's lethality. However, experience improves crew competencies in these domains as well. Despite the large variety in conditions, the correlation between crew lethality and crew experience was present in four different gunneries.

Recommendations

Though limited in scale, the empirical findings of this article are seemingly obvious: Hard-earned experience on the Bradley produces more lethal crews. Though not tested here, it is plausible to expect increased proficiency in maintenance and tactical competence as mechanized experience increases. While the complexities of Army personnel policy are beyond our expertise, below are two possibilities that could enhance mechanized infantry proficiency.

Course of Action (COA) 1 — Reestablish 11M "mechanized infantry" MOS

This change would maximize proficiency and expertise within mechanized infantry units. NCOs would have years of experience on the Bradley prior to assuming important roles such as section leader or platoon sergeant. They would master the unique maintenance, training, and tactical aspects of mechanized infantry. 11M NCOs reporting to a new ABCT would come with previous mechanized experience rather than starting from scratch. Under this model, every Bradley commander would have prior mechanized experience. The impacts of regular personnel rotation and crew turbulence would be mitigated because 11M NCOs would report with baseline experience. New Soldiers would receive instruction from experts. The Bradley Master Gunner Course would be a sought-after professional development opportunity that would improve probability of promotion.[9]

A new 11M portion for Infantry One Station Unit Training would need to be established at Fort Benning. The greatest risk

from this option would be lower retention rates within the new 11M MOS. To mitigate against this, professional development milestones and promotion board guidelines would require modification to ensure 11Ms remain competitive with their 11B and 11C peers.

COA 2 — Mandate platoon sergeants with mechanized infantry experience

If reestablishing the 11M MOS is not feasible, then a reduced option can still improve mechanized infantry proficiency. This option would require that all 11B4O and 11B3O (promotable) NCOs reporting to an ABCT have previous mechanized experience. All Infantry Soldiers, E1-E6, who successfully qualify in a Bradley crew would receive an additional skill identifier (ASI) on their Soldier Record Brief. The U.S. Army Human Resources Command would then be required to assign those Soldiers with the mechanized infantry ASI to fill mechanized infantry platoon sergeant billets. This would ensure that every platoon sergeant had a baseline knowledge of the Bradley and mechanized infantry maintenance, training, and tactics. These experienced platoon sergeants would directly shape their platoon's maintenance and training plans. They could provide improved mentorship to new platoon leaders, section sergeants, and crew members who lack Bradley experience. To mitigate against inexperienced section leaders and NCOs, the Bradley Leader Course should be expanded to allow students to complete an entire gunnery progression and provide a more rigorous foundation in mechanized maintenance. All 11B2Os and 11B3Os reporting to an ABCT should be sent to this revised Bradley Leader Course enroute to their new assignment.

A note on officers

Though this article focused on mechanized infantry NCOs, we believe the light-wheeled imperative for infantry officers should be maintained. Though new infantry officers reporting to an ABCT need to quickly immerse themselves in the Bradley to succeed, they will never be their platoon's subject matter experts on the BFV. Every effort should be made to send these officers to the Bradley Leader Course at Fort Benning before assignment to an ABCT. New mechanized infantry officers would benefit from either proposal by gaining NCOs with former mechanized experience.

Conclusion

A 2018 RAND wargame on a NATO-Russia war in the Baltics indicated that each NATO combat vehicle would face six Russian combat vehicles based on the Western Military District's order of battle.[10] Lethality is a critical component of the U.S. Army's refocus on decisive action. Reviewing the current threat environment, it is clear the U.S. Army expects its combat units to fight outnumbered and win. Based on the strength of this study's findings, a larger study is warranted. Expanding this research to include mechanized infantry companies from other battalions, brigades, and divisions would further strengthen our hypothesis' validity. While this research focused on gunnery lethality, enhancing experience levels within mechanized infantry units will positively impact maintenance operational

readiness rates and tactical proficiency. Similar studies could be conducted analyzing NCOs' previous mechanized experience against a section and platoon's maintenance operational readiness rates. If these observations hold across larger samples, the U.S. Army Infantry community should consider policy changes that maximize expertise, reduce crew turbulence, and enhance overall lethality in mechanized units.

Notes

[1] MG John M. Le Moyne, "Closing Ranks for a Stronger Infantry," *Infantry* Magazine, May-August 2000, 1, accessed from http://www.benning.army.mil/infantry/magazine/issues/2000/MAY-AUG/pdfs/MAY-AUG2000.pdf.

[2] COL Gian P. Gentile "The Death of the Armor Corps," *Small Wars Journal*, 2010, accessed from http://smallwarsjournal.com/blog/journal/docs-temp/416-gentile.pdf.

[3] LTG Sean Macfarland, "It's Time to Invest in Armored Forces Again," Association of the United States Army, 9 November 2018: https://www.ausa.org/articles/it's-time-invest-armored-forces-again.

[4] 2017 U.S. National Security Strategy, December 2017, https://www.whitehouse.gov/wp-content/uploads/2017/12/NSS-Final-12-18-2017-0905-2.pdf; "Providing for the Common Defense: The Assessment and Recommendations of the National Defense Strategy Commission," Report, 2018: https://www.usip.org/sites/default/files/2018-11/providing-for-the-common-defense.pdf.

[5] Training Circular 3-20.31, *Crew Training and Qualification*, 17 March 2015.

[6] Crew personnel turnover = (number of crew members that were present at previous gunnery)/(total number of participating crew members).

[7] For those interested in the statistical significance underlying this analysis, see Appendix 1: Statistical Inference and Analysis (can be provided upon request — send email to usarmy.benning.tradoc.mbx.infantry-magazine@mail.mil).

[8] Crew stability is defined as a gunner and BC who previously qualified together remaining in the same crew so they can maintain their "qualified" rating. Crew stability rate = (number of crews that previously shot together)/(total number of firing crews).

[9] From our experience, many competent and qualified NCOs avoided Master Gunner School to avoid becoming locked into ABCT with the J3 skill identifier. If MG became an important career milestone for a new 11M MOS and these NCOs would be staying in ABCTs regardless, then MG attendance would significantly increase.

[10] Scott Boston, et al. "Assessing the Conventional Forces Imbalance in Europe: Implications for Countering Russian Local Superiority," RAND 2018, 9: https://www.rand.org/pubs/research_reports/RR2402.htm.

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Editor's Note: *As with all* Infantry *Magazine articles, the views herein are those of the authors and not necessarily those of the Department of Defense or any element of it.*

A Bradley Fighting Vehicle crew with the 4th Battalion, 6th Infantry Regiment, 3rd Armored Brigade Combat Team, 1st Armored Division, prepares to conduct Gunnery Table VI qualification at the Rodriguez Live-Fire Complex in the Republic of Korea on 22 February 2019.

Photo by SGT Alon J. Humphrey

An OPFOR Perspective on Multinational Interoperability

CPT DAN DIPZINSKI
CPT ERIK PRINS

In the current threat environment, the U.S. and our allies face a complex, near-peer, hybrid threat which has the capability, experience, and will to fight. However, defense budget constraints and the current force structure leave NATO in a place where no single army on the continent can fight and win on its own. Previous NATO doctrine depicted interoperability occurring echelons above brigade. That is no longer a reality. The Joint Multinational Readiness Center (JMRC) at Hohenfels, Germany, has been building and proving concepts for interoperability at the brigade level and below. Brigades, battalions, and even companies have been fighting with attached allies and partners to meet the combat power levels needed to achieve assigned missions.

The 1st Battalion, 4th Infantry Regiment — the opposing force (OPFOR) at JMRC — faces a similar problem at the battalion level every rotation. The unit is currently manned just above 600 personnel and has historically fought with fewer than 500. However, the Warrior Battalion is regularly called to fight brigades of more than 4,000 Soldiers. The OPFOR has to rely on interoperability with attached units to achieve success. Some of the units have a long-term relationship with 1-4 IN which simplifies integration. However, many units come for one rotation only. Additionally, attached OPFOR units are frequently not part of NATO and do not have shared doctrine. 1-4 IN uses the six principles of mission command to achieve success with allied partners. The attached multinational units

Photo by SGT Brandon Jacobs

U.S. and German Soldiers strategize during exercise Allied Spirit X in Hohenfels, Germany.

actually provide a forcing function to exercise good mission command. Mission command philosophy provides a framework for improving interoperability, while the inherent friction of interoperability also provides a mechanism for improving the practice of mission command.

Build Cohesive Teams through Mutual Trust

Team building is complicated business. Learning to trust a stranger is even tougher. Add a language barrier and a time-contained environment, and it's a recipe for disaster. But what history has demonstrated is that not all combat operations occur at predictable or convenient times. Units must learn to work together and develop a comfortable level of trust quickly. The intent is to create a mentality and start doing the little things that treat all units the same. One way the Warriors accomplish this is through social interaction. The experience of being a soldier is similar across many cultures, and the human dimension between persons is a step that should never be overlooked or simplified. A conversation sharing about homes, families, and military experiences goes a long ways to building trust.

Principles of Mission Command

1) Build cohesive teams through mutual trust
2) Create shared understanding
3) Provide clear commander's intent
4) Exercise disciplined initiative
5) Use mission orders
6) Accept prudent risk

In addition to social interaction, the layout of command posts and work areas is important. Sharing assembly area space as opposed to separate staging areas builds trust and also familiarizes units with foreign equipment. The 1-4 IN motor pool frequently sees soldiers from two or three different countries testing out each other's weapons, sharing similar complaints about the tight spacing in the back of armored personnel carriers, traversing a turret in a foreign tank, or comparing optics and systems. It's easier to trust someone when you know their name, where they come from, and what their nickname for their tank is — thus bridging the cultural gap. With the baseline team building established, you can start to build a unity of effort toward a common goal.

Create Shared Understanding

Units need shared understanding to prevent missed opportunities or misplacement of units on the battlefield. The Warriors approach multinational augments and seek to gain an understanding of adjacent units by asking three simple questions:

- "What type of formation does the unit have?"
- "What capabilities/limitations does the unit have?"
- "How can I as the commander best emplace this unit on the battlefield?"

This dialogue builds the baseline for shared understanding. Units will have no issue telling you what they are trained on or like doing, and they also are usually willing to share what they are not comfortable doing. But the effectiveness of that unit on the ground is what matters to a maneuver commander, which requires firsthand observation and experience. To create understanding, 1-4 IN conducts maneuver training with augmenters. Company teams develop short situational training exercise (STX) events that test limitations and capabilities of adjacent multinational units in small scenarios that test mission essential task list (METL) tasks. These events can be very simple — movement to contact, attack, or even just tactical movement or vehicle dismounting drills. The company command team usually serves as observer-controllers (OCs) and drives the after action reviews (AARs) that increase understanding to both units and share tactics, techniques, and procedures (TTPs) and standard operating procedures (SOPs). The intent is not to grade or evaluate but to increase shared understanding by observing the unit in person. Obviously, this experience goes both ways. It also provides

> ## FAQs When Receiving Augmenters:
>
> - Is the attached unit comfortable driving at night in dense vegetation or can they only maneuver in open terrain?
>
> - How fast can their anti-tank guided missiles (ATGM) emplace and displace?
>
> - How often does their tank require fuel as opposed to an Abrams?
>
> - How steep of terrain can a BTR80 climb and how quickly?

good opportunity for commanders to see their organization from the outside (what picture am I providing to my augmenter right now?).

Provide Clear Commander's Intent

Commander's intent is where interoperability begins to become complicated. Commanders face the usual problem of trying to convey their intent to another person. In addition to this problem, language and cultural differences amplify the complexity. In a way this problem becomes its own solution — commanders cannot rely on the "cookie-cutter" intent of expanded purpose, key tasks, and end state or count on "do it like last time" mentality. Commanders need to have a face-to-face discussion with their subordinates to ensure they understand the thought process and key aspects of a plan and clearly articulate what the battlefield should look like at

Photo by SPC Gage Hull

An OPFOR Soldier with the 182nd Infantry Regiment, Massachusetts Army National Guard, prepares to fire a training FGM-148 Javelin while conducting a town defense scenario during Exercise Combined Resolve VIII at the Hohenfels Training Area in Germany on 12 June 2017.
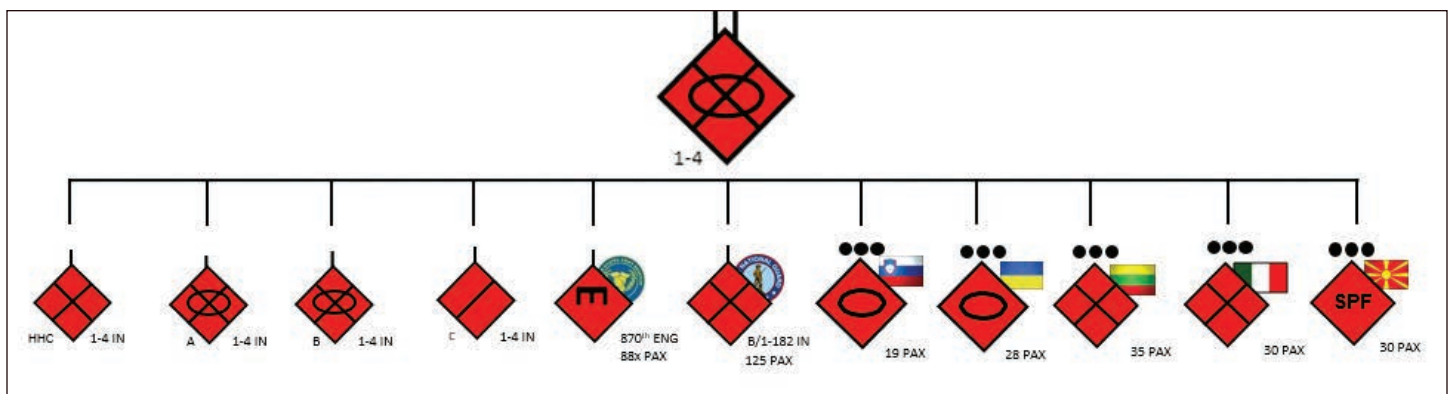
Figure 1 — Combined Resolve VIII Task Organization

the end of the operation. Commanders benefit greatly from simplicity of language used, end states, and objectives. This communication can be in plain language or back and forth discussion, both being preferable. However, it is critical to still publish a written order with the doctrinal intent for subordinates to reference back to. It is often easier to understand written words when English is not your first language than relying on solely verbal communication. The augmented units will be able to reference the written order for any terms or aspects that become unclear.

Exercise Disciplined Initiative

Disciplined initiative starts and ends with trust between commander and subordinate. Clear task and purpose, intent, and end state trump means and methods in enabling subordinates to conduct operations. When faced with a multinational problem, leaders must understand that direct leadership — or any form of micromanagement — is simply not possible; encouraging disciplined initiative is the only way to lead. Exercising disciplined initiative should not start once a multinational partner or ally enters a U.S. formation. Multinational interoperability must start from the very beginning of the training calendar when commanders build a culture of empowering subordinate initiative. Commanders must train their units to a standard — as well as be willing to assume risks — until they become comfortable enabling squads and platoons to operate independently.

To assist units in exercising disciplined initiative, 1-4 IN attaches liaison officers (LNOs) to all augmenting units. The role of LNOs is not merely to serve as a retrans platform between two units, as is often the stereotype. Rather, the Warriors use LNOs as the commander's representatives to attached units to serve as the continuity of the commander's intent. Whether the liaison is a staff officer or an entire attached platoon, Warrior commanders trust their LNOs to meet and know their intent and be able to accomplish the mission because the LNOs operate with similar style of mission command on a regular basis. Their role is to bridge the cultural and language gap and tighten cohesiveness at a deeper level than the commander in order to translate intent.

Use Mission Orders

If an operation is going to fail with multinational units, it's

because of communication. Interoperability boils down to the ability to pass information rapidly across the battlefield from one unit to another. By knowing they cannot count on many of the technical solutions to mission command, commanders are forced to rely on actual mission command and trust their subordinates. It is simply not possible to work otherwise. Communications difficulties are a two-way street. This is why the planning process is absolutely vital to interoperability.

When working with a multinational contingent, one cannot count on making large changes once the operation order (OPORD) is issued. Language barriers, technical incompatibility, and the fog of war severely inhibit the ability for commanders to rapidly change plans and directions with multinational units. Though LNOs mitigate the risk of confused communications, the answer is an overwhelming reliance on very clear commander's intent during the OPORD. This means that the issued OPORD must be clear, concise, and have room for flexibility built into it. Additionally, contingencies and intent must be clearly briefed when orders are issued. This is where having multinational augmenters really becomes a forcing function. By removing the option to "clear it up in a FRAGO" (fragmentary order) or call out changes in a net call, commanders do the proper planning and orders issuance up front.

Accept Prudent Risk

For an OPFOR it is easy to understand and accept prudent risk in a tactical environment. OPFORs conduct six to eight rotations a year as opposed to once every two years for a standard unit. Commanders and subordinates have multiple reps in a force-on-force environment. Together, the two authors of this article have conducted more than 20 decisive action training environment rotations as planners and more than 12 rotations as commanders. OPFOR commanders have multiple experiences where they made major mistakes and still achieved success. They also have experiences of doing things right and still failing. The multiple reps at a Combat Training Center (CTC) allow the OPFOR to understand the difference between a good result and a good decision. This perspective makes it easier for them understand the necessity of risk. It is obviously more difficult in a real-world environment or as a training unit, but accepting prudent risk is necessary to succeed. There are several key risks that need

to be controlled, balanced, and then accepted for an integrated multinational formation to be successful.

First, U.S. commanders need to understand the cultures of their attached units. Attached units may have recent significant conflict with another unit in the formation or with the enemy. The U.S. does not have a long history of deep conflict with another culture. This makes it difficult for us to understand the emotions and mindset of our attached units. Commanders need to understand their attached units may have a deep level of hate that goes beyond what we can understand given our cultural background. Commanders also need to understand that different cultures have different risk tolerance. Some units will be comfortable with a much higher level of risk than U.S. units. They may take risks that will jeopardize the mission without seeing it as a significant problem. Contrarily, other militaries may have a very low risk tolerance. Assigning them a "risky" mission may result in poor relations or even a departure of a unit. We need to see our blind spot, understand it, and account for it when assigning tasks.

Second, commanders and staffs need to balance the experience in LNOs between attached and organic units. Commanders may have to pull one of their best officers or NCOs to liaise with an attached unit. Commander may have to assume risk in their organic formations to build common understanding with attached multinationals.
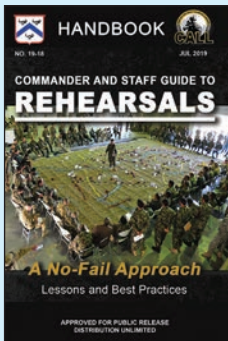
Third, commanders need to balance assets and enablers between units. They need to take into account a unit's organic capabilities when assigning enablers. A U.S. commander will be better prepared to employ close combat attack (CCA) or close air support (CAS) than a multinational commander. The higher headquarters might need to prioritize artillery to other units in order to offset the reduced CCA or CAS use. Obviously this is not an all-inclusive list, but it does provide some thoughts commanders can use when dealing with attached multinationals.

In conclusion, by properly employing the principles of mission command, a unit can achieve success in integrating multinationals. By understanding multinational interoperability, a unit can achieve success in exercising mission command as the inherent difficulties of integrating attachments can be used as a forcing function to reach a higher level of command.

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Building the Team:

Creating Time and Space for Leader Development in Organizations

MAJ JARED NICHOLS

> "Whenever I find these fellows who seem to have ability and a certain amount of disagreement with what we are doing, I am always interested in seeing them, and getting firsthand impressions."
>
> **— GEN George C. Marshal[1]**

Noticeably irritated, the battalion commander walked into the executive officer's (XO's) office holding a multi-page print out. The first command climate survey following the battalion change of command was ready for review. They read comments from various sections of the survey:

"This organization does not care about me;"
"This organization does not help me achieve my goals;" and
"This is the worst unit I have ever been a part of."

The battalion commander muttered, "We have to fix this." Then he looked up at the XO and said, "Tell me what you think."

There is a choice commanders face when they receive feedback from their units' junior leaders: write off the comments as "millennial" complaints or to take action. As a field grade officer, you can improve the leaders across your organization, but will your organization create space for leader development? In 2016, my battalion faced some harsh criticism from junior officers in its first command climate survey after the battalion change-of-command. Stepping into the battalion with a new command team and new field grades, we understood that we faced a daunting challenge. We did not know what the exact problem was; it was ill defined and appeared complex. After parsing through the command climate survey, we identified trends and then separated responsibility for addressing those trends. The command sergeant major (CSM) assumed responsibility for the junior enlisted and NCO comments, and I, as XO, assumed responsibility for developing a program for the junior officers. The command climate survey served as a mechanism to identify a problem and show other leaders in the battalion that we had to address the issue.

This article provides some steps on how to discuss leader development of junior officers in your organization and offers techniques for establishing a leader development program that meets the needs of your organization. It is paramount to solicit feedback from junior leaders in your organization, to vary the programming you provide, and to provide direction and structure for a successful program.[2] This is a synthesis of what we experienced and how we approached the establishment of a leader development program in the 1st Battalion, 16th Infantry "Iron Rangers" of the 1st Infantry Division from 2016-2018. It is clear from our experience that every organization needs a deliberate leader development program. Development has to be a deliberate event that incorporates feedback from those individuals in the program.

Sources of the Problem

Unless you are fortunate, you will never have the number

Photos courtesy of author

Soldiers with the 1st Battalion, 16th Infantry Regiment participate in a military skills team PT event during the unit's rotation to the Republic of Korea. The battalion used this time in isolation to conduct heavy leader development programs and to get the most out of the time outside of normally scheduled training events.

of people you need or the expected quality of the individuals assigned to your organization. We can either complain about it or do something about it. Developing junior leaders is the responsibility of leaders at every echelon in an organization. Many leaders and organizations talk about leader development but do not take deliberate action to provide a framework to support a successful program. We owe it to our junior leaders to provide them with development and prepare them for future responsibilities. Deliberate planning efforts have to be part of running a successful leader development program. By definition, "Leader development is fundamental to our Army — leader development is the deliberate, continuous, sequential, and progressive process..."[3]

While we all learn from professional development and our day-to-day duties and responsibilities, it is not enough to contribute to the actual progressive development of the individual. Every organization is different in its responsibilities, its specialization, and its mission. Every individual is different in how he or she learns and synthesizes information and experience. Every developmental experience has to take into account the needs of the individual with the needs of the organization. To balance these factors, it takes an organized operational approach to develop a successful leader development program.

We understand that "an Army leader, by virtue of assumed role or assigned responsibility, inspires and influences people to accomplish organizational goals."[4] The Army leader accomplishes this through the act of leadership: "the purpose of the process of influencing people by providing purpose, direction, and motivation to accomplish the mission and improve the organization."[5] Whether you believe that leaders are "born" or "made," we can assist individuals in developing to reach their highest potential. With all the competing requirements on the mission and on our people, how do we make them better? The push and pull of daily unit operations results in leader development normally coming off training calendars to meet requirements of the daily grind. We have to look toward the future!

We all want the same thing: to run effective organizations that are agile and adaptive and can accomplish any mission assigned. There will always be shortages of equipment, competing requirements, and taskings, but we have to find a way to invest in our people. If we focus on meeting day-to-day requirements and do not remain focused on the long view of the improvement of individuals, we are missing the long-term improvement of the organization. The failure to invest in leader development is at the risk of running an organization into the ground. "Leaders want to serve in an organization that values camaraderie and teamwork and improves the capabilities of others."[6] If you value your organization, you evaluate the development of every leader within that organization. You do not write anyone off — you seek their improvement and look for ways to make the individual better. Meet your organization where they are and work from there.

Understand the Operating Environment

Organizations are dynamic living organisms that do not exist in a vacuum. While the world around your organization is ever changing, most organizations resist change. If you do not already have a formal leader development program, it is difficult to implement an effective program without developing a need to change. The organization as a whole has to buy into the leader development program. This article will not address all the reasons why development is important or attempt to sell you on one specific way to do things. It will provide ways to implement change and provide a formal framework to ensure that the change sticks. Since organizations do not like to change, you have to create the space to enable change. Commanders are responsible for the performance of the organization as a whole. This, of course, means that they have a significant impact on the performance of your leader development program. Our battalion commander directed that the program focus on the "Three C's" — character, competence, and commitment — that were essential characteristics of programs when he was a junior officer.[7] The three C's construct was foundational to the development of the professional ethics of the 1990s-era Army. We linked the lines of effort to the three C's based upon developmental themes for the science of the profession, the theory and history of why we exist, and the human dimension. Our end state was the development of well-rounded leaders who are agile, adaptable, and inculcated with the esprit de corps of our regiment. Simply put, we wanted people who know who they are and what they are about.

In our own organization, we used the feedback solicited from the command climate survey to show the company commanders what their junior officers said about the current state of the organization. We focused the discussion on how to address these issues and what we could do to improve as a whole. This gained the support of the company commanders and helped to build a guiding coalition that saw the need to change. Every organization must admit that it needs to change and then build the guiding coalition that will see the change through.

Develop a Framework

While you inspire the need to change within your organization, you can start to develop a leader development framework. The developing framework begins with research in standing leader development doctrine and balancing that with the needs of your organization. In our organization, we used Field Manual (FM) 6-22, *Leader Development*, as the outline for our own framework. FM 6-22 synthesizes modern leader development research into a short-format 65-page document. The first portion focuses on theory, and the second portion provides useful steps to develop a functional, cohesive program. We utilized several of the methods from FM 6-22 to develop our own program. We realized that we did not have several of the features of successful leader development programs in place. Using FM 6-22 as a guide, we established
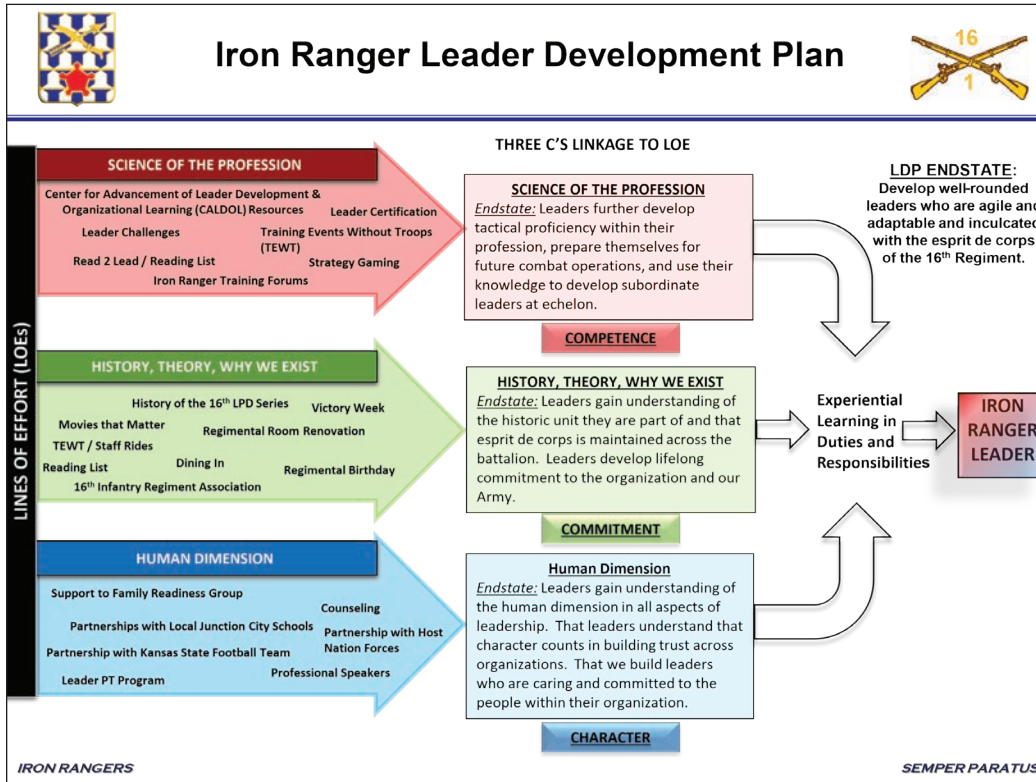
Figure 1 — Iron Ranger Leader Development Plan

list of local partnership programs, forecasted developmental events, and higher developmental initiatives. These ideas generated options that we sorted through and provided the feasible and acceptable options to the commander.

Crowdsourced ideas ranged from team sporting events to formal book-reading clubs with everything in between. We realized two things from this crowdsourcing process. First, our junior leaders had some great ideas! Second, we had to admit that we could not do all of the great ideas that were generated, either due to lack of time or resources. It is a balance. The great benefit of crowdsourced ideas is that junior leaders feel that they have ownership of the program and are excited about the process. We then had to find the time on the training calendar and get that time dedicated to our selected programs.

Our initial focus was to select events and then set those events on the calendar so that the junior leaders saw progress in the program. During the first 30 days of programming, we introduced a monthly officer physical fitness event and a leader professional development (LPD) session hosted by the battalion commander.[8] We used a gradually increasing approach of events to get some quick wins with successful events without inducing program fatigue. To ensure continued success, we realized that we had to establish a standing coalition to guide future event planning and implementation.

a vision for our program with supporting lines of effort. This vision nested with desired outcomes for our leaders as well as echelons of assigned development responsibility. The result was the Iron Ranger Leader Development Plan, which established our desired outcome along our supporting lines of effort (see Figure 1). We allocated two weeks from the start of research to the development and approval of the plan by the battalion commander.

Develop an Operational Approach and Establish Lines of Effort

After we determined our desired outcomes, we determined who was responsible for what within the organization. It was readily apparent to us that responsibility for development had to be spread between what the battalion is the lead on and what the company or individual is responsible for (see Figure 2). Leader development, we quickly realized, was a big all-encompassing task, and we had to spread responsibility across the organization if the program was going to be successful. This allowed us to separate the lines of effort amongst the organization so that the onus was on everyone at echelon.

Out of this framework, we sorted out the various ideas for leader development. We used ideas from FM 6-22 as well as solicited ideas from across the leaders in our battalion to generate a list of possible types of efforts and events. Simple discussions like "What is leader development to you?" or "What does good leader development look like?" provoked a battalion-wide crowdsourcing of ideas. We also incorporated into this a

Establish a Leader Development Council

Maintenance of a leader development program can be a time-consuming process if just one individual manages the program. Our best practice was the establishment of a Leader Development Council (LDC) as a guiding coalition within the unit. Instead of leader development as a topic in the training meeting, the LDC forecasted events, and then those events were back briefed as part of training schedules. The LDC included junior officers from each subordinate company and attachments as well as junior officer staff representation with the battalion XO serving as the LDC chair. The LDC met monthly to forecast the outlook at 60-plus days and beyond assigning responsibility; it then reviewed events within the next 60 days to finalize details or make adjustments. The LDC also served as the after action review (AAR) forum for events completed

Iron Ranger Development at Echelon

Echelon	Events	
Battalion	1) Regimental Day 2) Dining In 3) Officer PT coordination 5) Iron Ranger Talks 6) Partnership with Regimental Association	6) Read2Lead Facilitation 7) Movies that Matter Facilitation 8) Manage new officer welcome/inbrief 9) Kansas State Football Partnership
Company/ Staff	1) Counseling 2) Mentorship 3) Cultural Tours 4) Company Level Military Education 5) Partnership with local schools	6) Community Service 7) Enforce MSAF in Evaluations/Counseling 8) Read2Lead Mentorship/Small Group 9) Planning and execution of BN Officer PT and Social events
Individual	1) Maintain positive command climate 2) Lead by example 3) Conduct Counseling with subordinates 4) Participation in Leader Development Events at the BN and CO levels 5) Participation in community service or volunteer hours 6) Complete your Multi-Source Assessment and Feedback (MSAF) Annually 7) Complete MSAF for personnel who send you their MSAF forms 8) Professional Reading on history, military, leadership, and other topics. 9) Continuing Education for military or professional training	

Figure 2 — Iron Ranger Leader Development at Echelon

quarterly "hail and farewell" events were always on the calendar. This partitioning of responsibilities allowed the battalion staff to focus on programs and initiatives that required more time and resources in order to execute.

Iron Ranger Leadership Initiatives

Based upon time and resources, we settled on several Iron Ranger initiatives that we thought were feasible and fit our training schedule. We stayed away from large events to scale our program to our operational tempo and our limited financial resources. Instead of one or two major events, we realized we required more frequent touch points with junior leaders. The major programs managed by the battalion and executed across the organization were the Read2Lead, Movies That Matter, Iron Ranger Talks, and our history initiatives. Drawing from feedback from leaders in the battalion, we resourced programs that we felt were engaging, multifaceted, and different from other programs we experienced.

in the past 30 days. Figure 3 shows the 30/60/90-day outlook from an LDC meeting. As our program matured, we forecasted out to 180-plus days if the information was available for known upcoming events.

Based upon the type of events, we divided the battalion-wide events between those that a company could host and those that the battalion staff had the lead on. The company-led events were typically officer physical training (PT) and social events, while battalion-led events were larger initiatives that required resources outside of the ability of the companies. Iron Ranger initiatives involved outside organizations and resources that the battalion staff sourced for leader development events.[9] Allowing junior officers in the battalion to host events provided developmental opportunities for each officer and increased the interaction between officers across companies and the staff.

The onus for managing events passed to companies in a predictable manner, and events were scheduled a year out. Each company rotated hosting and running events for the rest of the organization. The average workload for each company was running one event every two months which allowed enough time to plan and execute our officer PT events, social events, or collaborate on larger events like a dining in. We ensured that monthly officer PT and

For the Read2Lead program, we resourced books, developed a reading guide, and conducted small group discussions based upon readings. For each selected book, a guide would read the book in advance and develop a discussion question list based upon themes in portions of each chapter of the book. Discussion groups then met weekly at the company and were led by one of the officers who used the discussion questions as a guide to talk about themes from the book or to

Figure 3 — 30/60/90-Day Leader Development Horizon

30/60/90 Leader Development Horizon

Month	Events/Leads
January (Next 30)	1) Leader Development Council Meets 1st week of January 2) 12JAN Officer PT – Staff – CPT Zimmerman lead – Functional Fitness 3) 12JAN Leader Challenge – Small Unit Tactical "LC: BDA" led by IR5 (moved) 4) 17JAN 12JAN – LPD for Officer on Platoon Fire Commands led by the Battalion MGs 5) Read2Lead Initial Meeting: Pass out "East Of Chosin" to Company Commanders and Staff Officers of the Battalion. In order to allow them to read ahead. Develop discussion questions
February (Next 60)	1) Leader Development Council Meets 20FEB 2) Read2Lead Execution (Start). Company level discussion groups once a week, and a final closing event. Execution window runs for Staff/Companies 18FEB-01APR. (reference the Read2Lead Leader's Guide) 3) Officer PT - 26FEB – HHC Lead (1LT Scarminach/1LT Richards). Mount Soyosan Hike 4) Movies the Matter: 27 1930 FEB The Lost Battalion. – Chaplain/IR5 setup and execution. 5) Community Outreach – TBD - B Co Local School Sponsorship Event
March (Next 90)	1) Leader Development Council Meets 1st Week of March 2) Officer PT – 06MAR – B CO Lead – Sports Focus 3) Iron Ranger Talk – 06MAR History of the 16th Infantry (PT I: 1861-1918) – B CO lead. 4) Read2Lead Event (Ends) 5) Movies that Matter: 12 1900 MAR: The Lost Battalion. 6) Platoon Leader Briefs to IR6 on Services Plan for Semi-Annual Services 7) Table XII OPORD Briefs to senior mentors **Dates for Consideration:** Training Holidays More than 75% of BN in the Field Local or community Events

guide the small group into other unit-related issues. Field grade officers rotated between groups to provide other views of the same reading. By using this method, we increased personal interaction across the battalion and facilitated an open dialogue between officers of all grades.

Reading programs normally hit two roadblocks: What book do you select and how do you pay for it? In our first effort to get a reading program off the ground, we worked alongside the Center for Junior Officers (CJO), which supported the initial purchase for our inaugural reading. There are hundreds of possible books to select for a reading program, but to keep it fresh and to create a space for learning, we selected a book that the majority of officers were not familiar with. Since we were deploying for a rotation to the Korean Peninsula, we decided to find a book that would speak to the challenges we might face. We selected *East of Chosin: Entrapment and Breakout in Korea, 1950*, the story of the maligned 39th Regimental Combat Team and its fate in the Korean War.

Working alongside CJO, we were able to resource enough books for all the officers in the battalion and have them shipped to us through CJO funding. We conducted our multi-week program and then provided CJO feedback from our experience. As part of the final week of the program, we had participants write reflective essays on their experience. Our experiences in the program, and our training materials, are available at the CJO-supported website (https://juniorofficer.army.mil/).[10]

The initial success of the *East of Chosin* program enabled our officers to see the value in reading, group discussion, and reflection. What we thought was a one-time event resulted in a book discussion program that was funded by the officers within the battalion. We solicited book ideas through the LDC and selected *The Energy Bus: 10 Rules to Fuel Your Life, Work,*

and Team with Positive Energy and the quintessential *Team Yankee: A Novel of World War III*. While we saw success with this reading program, we also recognized that not everyone is a bibliophile and that we needed to find other ways to provoke discussion and create a learning environment.

The LDC created the Movies That Matter initiative in response to meeting a need for our leaders who are not necessarily bibliophiles. Movies That Matter was a program that incorporated movies from different genres to provoke discussion and collaborative learning. Instead of a multi-week event, Movies That Matter was a one-time group watch of a selected movie that incorporated discussions at the start of the movie, the midpoint, and the end. Throughout several months, we interspaced Movies That Matter events in between Read2Lead to diversify the experience. The movies we focused on were an effort to address issues ranging from developing effective teams, ethics, and military decision making. The guide for the event would watch the movie beforehand, develop a discussion list to provoke conversation, and then serve as the host for the event.

The themes in the selected movies addressed issues we thought we collectively faced in the battalion. Throughout 18 months, we incorporated the movies *The Lost Battalion*, *Remember the Titans*, and *Zulu*. The themes we derived from each movie ranged from race relations, overcoming insurmountable odds, and even NCO/officer relations. The reading guide served as a start point, but based upon the group watching the movie, the discussion can range to almost any topic on the mind of the leaders present. The goal was to provoke the audience and have discussions on diverse topics to facilitate group learning. The selected Movies That Matter reading guides we developed are available through CJO at https://juniorofficer.army.mil/discussion-tag/movies-that-matter/. The key for every organization should be to select movies that speak to themes or challenges within the organization.

The intent of our Iron Ranger Talks program was to inspire young leaders to present in front of peers. The common inspiration for these events was the popular TED Talk series. A frequent problem with LPD series is that many programs are lecture-format presentations. Lectures work for some individual leaders but not for many others. Tapping into the cultural trend of the TED Talk-style allowed space for more creative presentations on topics ranging from the multi-domain battle, unit history, and even how to manage your career. Changing our approach to presentation allowed for a more permissive space for engagement with our junior officers.

One of our biggest initiatives was inculcating all officers of the battalion in the esteemed traditions and history of our unit. All Army units have history and traditions that tie into the fabric of that organization and provide a connection to the past. In many cases, this

CPT Alan Pesti (left) and CPT Kurt Zimmerman unbox a shipment of the book East of Chosin *at Camp Casey, Republic of Korea. The book was the first selection for the unit's Iron Ranger Read2Lead program.*

sense of being part of something larger gets lost in the daily grind. We made a consistent effort to tie history to everything that we did. We focused on using teachable moments from our unit's history to connect to the present, celebrating history through ceremony, and engaging with our veterans association on common goals.

For many organizations, it can be a challenge to tie the past and the present together. We looked across the organization and found individuals who were passionate about history and allowed them the time to work on projects to meet our end state of increasing esprit de corps. During the course of 18 months, we renovated our conference room into a proper regimental room, established better relations with the 16th Infantry Regiment Association, and developed historical education programs to train on our unit history. Overall, these initiatives built pride in the organization, and when times got hard, remembering those who came before us provided reflective moments that things really are not that bad.

Keep the Program on Course

As we alluded to earlier, leader development opportunities are the first things that fall off training calendars in many organizations. It is vital that we first find the time to develop a leader development strategy, implement that strategy, and then keep the program on course. Leader development is an investment in your organization and in the future of our profession. It is not a one-time event, and the results of leader development are not necessarily readily apparent overnight. It takes several months of programs to see the changes around you. You have to be consistent and patient with the program. It takes time to make things a habit and develop a new organizational culture. As our junior leaders developed over the course of 18 months, our organization improved, and the culture of learning spread throughout the battalion. The NCOs started programs that paralleled themes from junior officer programs; senior NCOs began attending events… voluntarily. Our performance in training improved across the board, and our confidence in each other increased. We were a fitter and better-prepared organization than the other organizations around us. In a world that wants agile and adaptable leaders, we found a way to meet people where they are and then improve both the individual and the organization as a whole. You can do it! You can build your team. You just need to create space for change, develop a program, and make time for events.

The 16th Infantry Regiment Association presents a piece of commemorative artwork celebrating the 1st Infantry Division's 100th anniversary to LTC Jon Meredith, commander of the 1st Battalion, 16th Infantry Regiment. Facilitating bonds with the association provided opportunities to interact with veterans of the regiment and develop an admiration for the unit's past accomplishments.

Notes

[1] Field Manual (FM) 100-1, *The Army* (1981), 8.

[2] Peter Schirmer, James C. Crowley, Nancy E. Blacker, Richard R. Brennan Jr., Henry A. Leonard, J. Michael Polich, Jerry M. Sollinger, and Danielle M. Varda, "Leader Development in Army Units: A View from the Field," (Washington, D.C.: RAND Arroyo Center, 2008), accessed on 4 March 2019 from https://www.rand.org/content/dam/rand/pubs/monographs/2008/RAND_MG648.sum.pdf.

[3] FM 6-22, *Leader Development* (2015), 1-2.

[4] Ibid, 1-13.

[5] Ibid, 1-13.

[6] Ibid, 1-4.

[7] FM 100-1, 7.

[8] Informally, we referred to these events as "Iron Ranger Talks" in order to break some of the stigma associated with the term LPD.

[9] Reference Figure 1 (Iron Ranger Leader Development Plan) for lines of effort and how our events incorporated underneath lines of effort. We did not execute a staff ride because it was resource intensive, and we did not have the resources to properly execute. We focused on events that we had control over and did not necessarily need to rely on outside funding.

[10] Organizations interested in a similar effort can contact CJO at info@cjo.army.mil for information.

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If you are interested in learning more about the 1-16 IN program, search for their leader development documents at https://juniorofficer.army.mil/.

From One Commander to the Next

MAJ DANA M. GINGRICH

Company command is the last role in which officers directly influence the development of every Soldier in their organization. Command is an opportunity to both lead from the front and empower subordinates to prepare an organization for the rigors of combat. Company command is an opportunity to develop the next generation of Army leaders.

The company commander makes hundreds of decisions that affect the organization's trajectory. This article focuses on three critical functions that only the commander can perform to align the organization on that trajectory. The company commander must create and communicate the vision, build the culture, and model the culture through personal example. The ultimate goal is to achieve **unity of effort** — the complementary effects of multiple platoons, sections, and squads aligned on a common purpose. Organizations, however, do not typically adopt big ideas without leader energy and member support.

To achieve mass adoption, the commander first socializes the ideas to gain individual buy-in. The ideas then gain momentum as influential NCOs and junior leaders support them, forming the guiding coalition. When the support from influential leaders reaches critical mass, the organization fully adopts the ideas. The commander leads the organization through this process by creating the vision, building the culture, and consistently living the culture.

Create the Vision

The commander creates a vision to align the organization. Beginning at the lowest level, every individual within the organization must understand the broad vision in order to prioritize time and effort effectively. The company's priorities will become evident because those areas are where the command team will apply the company's limited resources such as people, time, training, ammunition, and inspections.

My experience: The vision we communicated routinely was "Excellence on All Fronts." I believed that to be a great company, we could not just be the "live-fire company" or the "physical training (PT) company," we had to demonstrate excellence on all fronts. This translated to the company putting as much energy behind developing complex squad live fires as creating inclusive, engaging family events. My first sergeant (1SG) and

I established four pillars that were similar to the Ranger Regiment Big 4:

1. Leader Development (counseling, eight-step training model, candid feedback)

2. Small Unit Drills (battle drills, integration of fires, doctrinal knowledge, medical proficiency)

3. Physical Toughness (combat-focused PT, squad competitions, 20-mile road march)

4. Administrative Excellence (family readiness group [FRG], evaluations, awards)

When communicating the vision, a commander's first thoughts turn to the company as the audience. To lead beyond one's organization, however, the commander must communicate to the higher headquarters just as much as to the company. The first person with whom to share the vision is the battalion commander; this will provide an opportunity to ensure alignment with the battalion and brigade vision and to receive the battalion commander's feedback and support. Failure to communicate one's vision externally will result in friction at every major decision point. Once the battalion commander supports the vision, the conditions are set to share the vision internally.

This internal communication requires individual support before the organization will fully adopt the idea. The company commander must meet with the 1SG to fully explain the vision and receive feedback in a collaborative environment. This conversation results in the first step towards unity of effort by creating shared understanding between the two. Together, the company leadership communicates the vision's purpose to the platoon leaders/platoon sergeants, who then reinforce the vision within the organization.

The commander must include both officers and NCOs in developing and communicating the vision. The 1SG and platoon sergeants are normally the most influential leaders to permeate ideas within the company. Once platoon sergeants believe in the vision, they reinforce it by providing purpose and direction to small unit leaders within the company. Creating a common understanding allows the platoon sergeants to exercise disciplined initiative within their platoons. Gaining the 1SG's and platoon sergeants' support completes the next step towards achieving unity of effort.

Once the commander aligns the platoon and company

leadership, it is now time to communicate the vision to the entire company. Communicating across the whole organization characterizes one of the major challenges when progressing from platoon to company leadership. The platoon leader interacts with the platoon at multiple formations each day; this provides opportunities to communicate clearly and often. A company commander relies on multiple levels of leadership to communicate messages down to the individual. The 1SG's and platoon sergeants' alignment with the vision streamlines that communication. Finally, once the commander communicates the vision, focus can be shifted to achieving the vision.

Avoid pushing the responsibility of resource gathering to the company executive officer (XO) even though this is who secures and coordinates the short-term resources to support training events. Only the company commander can secure the resources required to support a company vision. The long-range training calendar (LRTC) is the instrument to acquire resources. Battalion assistant operations officers (AS3s) must balance supporting the companies with fulfilling the battalion commander's intent — reemphasizing the importance of communicating to the battalion commander. Following the battalion commander's approval, the company commander communicates this alignment with the battalion to the AS3. The AS3 becomes the company's advocate in the LRTC planning meetings. The most effective commanders develop multiple courses of action (COAs), gather battalion AS3/S3 support for the long-term vision, and parallel plan until LRTC publication.

The LRTC was the most important tool I used to achieve our company vision. The LRTC provided a visual overlay of all the events supporting our four pillars. It confirmed or denied our balance of priorities and our integration with higher headquarters. The LRTC also aligned the platoon and company leadership on a common vision that they used to communicate intent to their subordinate organizations. Lastly, it allowed me to delegate planning and resourcing responsibility to platoon leaders with adequate time and predictability.

We did our best to make LRTC development a collaborative process among the company leadership. Although I viewed the LRTC as one of my primary responsibilities, the platoon leaders/platoon sergeants focused on the daily to six-week synchronization and execution. We were aligned on the vision for the company, and they trusted that I would think deep enough to align training with that vision. After I developed multiple COAs, I would brief my 1SG and XO to gather feedback and to adjust my proposal prior to speaking with the AS3/S3. As company leadership, we sought unity of effort by collaborating early in the LRTC development process. Even with multiple COAs, we had a playbook to begin parallel planning while the battalion leadership determined the final LRTC. Once the battalion published the final LRTC, we immediately distributed the information to the lowest level. Our Soldiers wanted the long-term vision even if they did not act on it daily. The most effective platoon leaders would brief the LRTC to their platoons and then post the calendar in the platoon area. These platoon leaders' actions aligned squads on their own nested vision and created shared visualization within mission command.

A company commander with the 2nd Infantry Brigade Combat Team, 3rd Infantry Division coordinates indirect fire support with Soldiers and Airmen between objectives during a combined arms live-fire exercise at Fort Stewart, GA, on 15 December 2016.
Photo by SPC Wyatt Davis

Providing the S3/AS3 the ideal company version of the LRTC creates an opportunity for the staff to support the companies. The first question from the battalion commander will be: "Have you spoken to the companies about this?" When the AS3 says he/she spoke to the commander about it, the AS3 will become the company's advocate. Once the final LRTC is published, the XO/platoon leaders immediately begin working with Training/S4 to secure land, ammunition, and logistics support. The 1SG and platoon sergeants develop the eight-step training model timeline and milestones. **When used effectively, the LRTC becomes the commander's tool to communicate, collaborate, and empower.**

Communicating his/her vision is a company commander's first step towards achieving unity of effort. After gaining support from the battalion commander and critical leaders at the company and platoon levels, the company commander then communicates internally to the entire organization to create a common purpose. Finally, the commander utilizes the LRTC to plan and resource how the organization will accomplish the vision. For the vision to truly permeate the organization, it must be the drumbeat at every engagement with the company. Whether it is recognizing past successes or reiterating the importance of upcoming events, all communication should return to fulfilling the company's vision.

Build the Culture

Your organization will have a culture so be deliberate and make it your own. A vision of "Excellence on All Fronts" could generate a multitude of cultures that achieve a similar end state. This vision could easily breed a zero-defect culture where leaders are ruthless and drive the organization into the ground. The zero-defect culture then discourages leaders from influencing beyond their organization because they are too tentative to deviate from the commander's specified guidance, resulting in ineffective leadership at all levels.

We sought to create a goal-focused organization — one that sets high standards and then charts a deliberate path to achieve those standards. Anyone pursuing personal goals knows that not every goal is always achieved; however, failures along the way lay the foundation for future success. This second part is extremely important. Organizational and individual failures, if not immoral or unethical, become growth opportunities and can ultimately lead to goal accomplishment.

Creating a goal-focused organization does not simply mean developing sub-goals for the four pillars and reviewing progress every quarter. A goal-focused organization has to become a way of life. It starts with individual goal sheets (later explained in detail) and works its way up. Every organization has an existing culture; you have to decide: Do I conform, do I change, or do I develop a hybrid culture? But remember, as a commander, you OWN the culture. The elegance of the goal-focused culture is that it cannot be met with much resistance on the surface; everyone can agree that goals are good. The most likely form of initial resistance

> *We sought to create a goal-focused organization — one that sets high standards and then charts a deliberate path to achieve those standards. Anyone pursuing personal goals knows that not every goal is always achieved; however, failures along the way lay the foundation for future success.*

will be inaction, which makes implementation key.

a. Individually: Start with individual goals and work your way up.

I am probably the greatest advocate for the use of goal sheets. My 1SG described the goal sheet's power as, "Now that I wrote it down, I have to do it." I have lofty goals in my head, but writing the goals down forces me to develop a plan and to hold myself accountable.

As a platoon leader, I had a simplistic approach. I made everyone in the platoon fill out goal sheets and post them on their lockers, a decent idea but not well executed by me as a second lieutenant. As a commander, my main responsibility was to get Soldiers to perform at their best. This meant helping them achieve their personal and professional goals. I shared my goal sheet with my officers and 1SG and had them bring their goal sheets to our initial counseling. I wanted them to know that I was invested in their goals as the foundation of our leader relationship.

Positive unintended consequences resulted. My leaders set goals for everything from planning a successful squad live fire to learning French. This helped me get to know them as people, far beyond any standard initial counseling. I was striving to set the example and tell them: "As a leader, I care about you and your success." My platoon leaders took this same approach with their platoon sergeants and squad leaders. We became goal-focused individuals, and our leaders invested in the development of those around them.

b. Operationally:

Leaders began setting goals for everything. They set target increases in PT scores by event, target participation rates when planning family functions, and even target shortage reductions for monthly inventories. The goal-setting culture can best be described in the following anecdote.

Historically, Expert Infantryman Badge (EIB) testing has a 15-20 percent pass rate. When Soldiers wear the EIB, it means they have mastered the tasks and drills required in the infantry. For an infantry unit striving for excellence, 20-percent success did not sound great. As a group of leaders (platoon sergeants and up), we came together to determine our goal for the company. After some back and forth, we agreed on

50 percent. Our company sought to achieve a 50-percent pass rate at the EIB testing and had two months to prepare. We believed it followed the SMART (specific, measurable, achievable, relevant, time measured) goal template. The platoon leadership owned the goal and communicated it down to the lowest level. Every Soldier had to commit to earning the EIB, and all leaders had to invest in their Soldiers' success to achieve 50 percent. After two months of grueling train up and testing, 41 paratroopers pinned on their EIBs, a 41 percent pass rate and double the Army average.

The command's role in our company's EIB success came well before the train up and testing. The commander prioritized the resources such as training time, equipment, and distribution of work, and the team leaders, squad leaders, and platoon sergeants trained and developed the individual experts. Leaders were setting goals and investing in the success of their Soldiers.

c. Organizationally:

Developing and achieving organizational goals is more abstract and long term than achieving individual or collective goals. As a commander, organizational goal setting ties back into the vision. It occurs among leaders between vision setting and LRTC development. After the platoon sergeants and platoon leaders provide feedback, they should then brainstorm the necessary requirements to achieve the vision. The ideas from the brainstorm inform LRTC courses of action. The LRTC essentially becomes the organization's goal sheet, and then each event has its own operational goals. For our vision, it meant increasingly complex live fires, inclusive family events, and an increase in graduation rates from Ranger and Jumpmaster courses, as examples. It is difficult for individual Soldiers to connect with broader organizational goals. Therefore, the commander's communication must reinforce how past individual and operational successes and future company events are fulfilling the company's vision.

Live the Culture

Most Soldiers have been or will be part of an organization that advertises one culture and lives another. Whatever matters most to you and your organization must be the culture you live.

a. Set the Norms:

I am a perpetual optimist. I have a personal saying, "A leader

A paratrooper assigned to Chosen Company, 2nd Battalion, 503rd Infantry Regiment, 173rd Airborne Brigade, runs during a 12-mile ruck march as part of the brigade's Expert Infantryman Badge testing phase at the Grafenwoehr Training Area in Germany on 5 February 2016.

does not have the right to have a bad day." As an organizational leader, you have fewer interactions with individuals in your company. If the one time a private interacts with you and you are upset and abrasive, what is his/her lasting impression? Take that one step further; if your subordinate leaders know you are having a bad day, how likely are they to bring you information that could upset you further? How effective are you as a leader if your team selectively shares information with you? You do not have to be happy all the time, but you must be even-keeled and approachable.

b. Generate Short-Term Wins:

I wanted my leaders to challenge the status quo. Empowered leaders think critically about routine operating procedures to improve the organization. I absolutely despise the 15 minutes early to the 15 minutes early, hurry-up-and-wait status quo. As a 2LT, I arrived almost two hours early for a division run. As a commander, generate short-term wins within your span of control.

When I first took command, I would get to work at 0545 for a 0600 team meeting before PT. I would walk in and greet groups of privates who lived next door in the barracks. Inquiring about

this phenomenon, I discovered that the privates arrived at 0545 so that our company could report accountability to the battalion by 0640. We were living the 15-minute early status quo! The platoon sergeants went into a meeting from 0600-0620 and then put out information to the squad leaders from 0620-0630. The squad leaders put out the information to their squads AFTER PT. Therefore, we enacted a new policy. I did not want to see any private in the company before 0615 — short-term win.

The company leaders spoke about this small change in policy for the next month. In doing so, we were communicating different messages to different audiences. To the privates: we care about you and we use common sense. To the leaders: I trust you to challenge the status quo. We are going to be a company that does things that make sense. Short-term wins add up to a change in culture.

c. Make the Tough Decisions:

Tough decisions come when the behaviors of individuals within the organization directly challenge or diverge from the organization's culture. These were tough decisions for me early in my career because I had to decide: Do I truly believe in the vision and culture I am trying to set and is it right? These were the loneliest times and the most defining times. In every organization I have served, I have had to address significant issues: officer/NCO misconduct, hazing, sexual assault/equal opportunity, fraud/waste/abuse. The decision in these scenarios is usually straightforward — one just needs the fortitude to make it. The anecdote I highlight below is a subtler event that I consider having reinforced our company culture.

In analyzing the EIB attrition rate, we identified the land navigation test as a key driver for lower-enlisted attrition. We planned three days of land navigation training before the test to mitigate this risk. The land navigation course was in the Northern Italian foothills. I had a scheduling conflict for part of the training so I assigned a platoon leader to plan the training and my XO and 1SG to supervise the execution. The morning of departure, my master driver (a staff sergeant [SSG]) raised an issue that the driver of the support vehicle had to be winter-driver certified to drive in the training area. We were an airborne company so the driver's training and requirement presented an issue.

The SSG brought the issue with the driver (a private) to the platoon leader who then went to the XO to raise the issue. As discussed before, building a culture of excellence on all fronts can have many derivatives, especially with highly motivated lieutenants. My lieutenants had a bias for action. They were going to overcome barriers to accomplish the mission. The PL/XO approached the discussion from the perspective of "how do we resolve this issue quickly to still meet the movement timeline?" The discussion rapidly transitioned from problem definition to solution: Can the driver do without a winter license or how quickly could the master driver sign a winter driver's license? Fortunately, this all unfolded outside of my door in the company office.

Hearing this conversation, I started to get that tense feeling in my stomach when you know something does not sound right. I walked out of my office and immediately dismissed the driver so that I could talk to the leaders. I just told them to stop. Any solution that violated regulation or put this private at unnecessary risk was unacceptable. Furthermore, I was becoming uncomfortable since I was trusting them to lead the company in my absence. After establishing my expectations, I stepped away to allow the leaders to develop a creative solution and back brief me on the way forward. This event allowed me to reinforce multiple principles that defined our culture. 1. We will not sacrifice our integrity in pursuit of excellence. 2. Our Soldiers must know that their leadership cares about them. 3. We still trust and empower leaders after tough corrections and feedback.

Conclusion

My decisive point as a company commander was to achieve unity of effort. You will encounter many other aspects of leading a company that a commander addresses to create culture such as empowering others, investing in people, and aligning incentives. Everyone in the organization will help in these efforts, but only the commander can create the vision, communicate the vision, and build a culture to support that vision. Doing this aligns the organization and sets the condition for the unity of company effort to achieve far more than the sum of the parts.

Photo by SPC Antonio Bedin

CPT Dana Gingrich, right, passes the guidon to LTC Michael Kloepper, during a change of command ceremony for Chosen Company, 2nd Battalion, 503rd Infantry Regiment, on 26 May 2016 in Vicenza, Italy.

MAJ Dana M. Gingrich commanded Chosen Company, 2nd Battalion, 503rd Infantry (Airborne), 173rd Airborne Brigade, from 2015-2016 and was awarded the GEN Douglas MacArthur Leadership Award for 2015. He recently graduated with his Master in Business Administration from the Stanford Graduate School of Business and is currently attending the Command and General Staff Officers Course at Fort Leavenworth, KS.

The Art of Leadership

LTC RICHARD P. TAYLOR

In any organization, leaders must demonstrate positive, effective, and meaningful leadership. This can only be done by creating an environment of trust built on genuine concern for your people and their families, all while being authentic and humble. In our ambiguous environment, there is one constant — leaders at all levels are needed to maintain the positive momentum of the organization. A truly great organization, no matter the size or complexity, requires leaders who focus on their subordinates, developing them to one day fill their role as the organization's leader.

Doris Kearns Goodwin said that senior leaders must develop leaders who "have situated resilience, the ability to sustain ambition in the face of frustration, at the heart of potential leadership growth. More important than what happened to them was how they responded to these reversals, how they managed in various ways to put themselves back together, how these watershed experiences at first impeded, then deepened, and finally and decisively molded their leadership."[1] If organizations' leaders focus their efforts on implementing a leader development program, providing candid feedback, and developing junior leaders through experience, they will inherently develop the future generation of leaders.

Leader Development

John C. Maxwell, author of *The 21 Irrefutable Laws of Leadership,* wrote, "The true measure of leadership is influence..."[2] So how do we positively influence our subordinates? Think back to the most influential leader you had — whether from high school, college, the military, or the civilian work force. This leader likely had traits of charisma, loyalty, humility, passion, and empathy. It is a necessity for leaders in the Army to have a growth rather than fixed mindset. "Leaders with a growth mindset are more committed to their subordinates' development, and to their own. They give

a great deal more developmental coaching, they notice improvement in subordinates' performance, and they welcome critiques from their subordinates."[3]

The first step in developing our future leaders is building and prioritizing a leader professional development (LPD) program. The program should not be tied to the officer or NCO — this is for all leaders and tailored to the audience. The LPD program should include tactical and non-tactical situations. Airborne infantry battalions cannot only teach airborne joint forcible entry; they must also include diverse topics such as career development and professional reading and writing. Leaders should utilize low-density military occupation specialties (MOS) to expand on how the organization's core and specialty capabilities function together. A broad, inclusive program develops well-rounded leaders who are accustomed to including all ranks and MOSs in tactical and non-tactical situations.

A technique that worked well in our battalion was the development of a team leader/squad leader university, a platoon leader university, and an executive officer university.

Figure 1 — Red Devil Team Leader/Squad Leader University

These courses are taught at the battalion level but with feedback and input from company-level leadership and from the Soldiers participating in the training. These courses consist of both Army doctrine and best practices that can help our junior leaders excel in current and future positions.

Regardless of rank or position, don't let any opportunity pass to develop leaders at all levels. I remember my first rehearsal of concept (ROC) drill as a newly minted platoon leader; I was visibly nervous and felt as if I had the weight of the world on my shoulders. As I spoke to my battalion commander on the concept of operations, it didn't occur to me that I was, in fact, in the middle of a large LPD. But it wasn't just the battalion commander present; it was a leadership opportunity where all ranks of the organization were poised to help me. As I stumbled through my brief, my platoon sergeant mouthed "be cool" — he meant take a deep breath, relax, and "you know what you are doing." Leadership is parallel — my platoon sergeant was developing me, too. Leaders at all levels — platoon, company, and battalion — must rely on one another. My battalion commander didn't humiliate me during my first ROC drill, and my platoon sergeant didn't leave me to suffer alone. As leaders they embraced a culture and expectation of continuous development. Their presence gave me confidence for the remainder of the brief, for the exercise, and really, for the rest of my time as a lieutenant. ROC drills are important because they teach junior leaders how to conduct detailed planning and how to brief in front of a large audience. Use them to demonstrate and build confidence in all your leaders.

Live-fire exercise (LFX) certification exams and tactical exercises without troops (TEWTs) are additional opportunities for development. In our battalion, we required all platoon sergeants and above to pass a 50-question exam on surface danger zones, minimum safe distances, risk estimate distances, and requirements for the field ammunition holding area. While just one of many techniques, the examination ensured that our leaders understood the technical aspects of an LFX. We reinforced the exam with detailed LFX LPDs to teach leaders about the combined arms fight, expanding the message beyond infantry-specific tasks. During both preparation and execution, I provided feedback born of shared experiences, highlighting where I failed or had seen others fail, and that being re-set isn't failure — it is an opportunity to bounce back and improve.

Beyond the formal LPD and the opportunities provided by field exercises, the next step in leader development is a focus on reading and writing skills. Often these critical traits are neglected until an officer attends the Command and General Staff College or an NCO attends the U.S. Army Sergeants Major Academy. If a leader waits that long to begin reading and writing, they miss a key development opportunity. A good technique is the use of the staff duty, an opportune time to give leaders intellectual tasks that develop critical thinking, reading, and writing skills. This may include providing feedback /lessons learned on recent training conducted, providing comments on where the leadership within the battalion or company should focus and improve upon, or writing a synopsis on a chosen topic from a professional journal. Developing effective reading and writing skills helps leaders complete both routine and unique tasks. Effective written communication leads to clearly and concisely written evaluations, awards, letters of recommendation, memorandums of instruction, and operation orders (OPORDs). In the digital age, clear writing helps with interpersonal communication. Reading skills help leaders quickly comprehend information and cultivate a growing personal and professional knowledge base. Professional reading at the battalion should not be solely focused on military history or doctrine. Leaders benefit from exposure to a broad spectrum of information that helps them deal with the diverse formations they lead and the diverse problems they face.

Oral communication is tied to reading and writing. One intellectual exercise we used was to task the staff duty officer to do research on a battle and provide the battalion commander with a verbal review of the fight the next morning. The review included what decisions or actions could be improved. This provides basic knowledge, develops a leader's communication skills, and encourages self-study. Each attribute will improve the leader's ability to communicate with clarity and specificity, either in a staff meeting or an OPORD.

Communication is also tied to consistent messaging about the senior leader's leadership philosophy and vision. This messaging and positive communication reinforce the overall leadership theme throughout the organization.

Experience

Trust is undoubtedly the most important factor in leader development. "Trust allows us to rely on others. We rely on those we trust for advice to help us make decisions. Trust is the bedrock of the advancement of our own lives, our families, our companies, our societies, and our species."[4]

As a commander, I used a theme to highlight how important trust was to me. From the beginning, mine was "Trust + Fitness + Discipline = Victory." Clearly, leaders can't just talk; they must also demonstrate their trust. They do this in many ways, but shared hardship is fundamental in a military formation. It is how General Grant, who in the fall of 1861 marched from Illinois to Missouri with his men, developed the utmost reverence among his men. Sharing demanding tasks with your subordinates at physical training (PT), in the field, or in combat creates a bond of mutual respect.

Trust is further developed through shared experiences. Our job as leaders is to ensure those experiences are both positive and developmental. Throughout our careers, at all levels, we hear that once we gain more experience we will be better able to fully comprehend our environment. But, how do subordinates gain experience? How do those experiences build or detract from trust and development? Leaders must allow their subordinates to fail at times. Leaders must seek opportunities to provide unspecified missions to subordinates. It is easy for senior leaders to micromanage, provide the answer, complete

the task, and deny junior leaders the value of experience. When senior leaders create an environment of micromanagement, what does this do for the subordinate's confidence, their ability to problem solve, and their ability to fight through adversity? Without berating them, teach them what is right, allow them the opportunity to grow, and allow them to make mistakes. This teaches two significant traits — resiliency and grit. Resiliency and grit are what push people through adversity and challenges.

Along with trust, leaders must create an environment of shared understanding. During certain times, leaders do not have the opportunity to explain in detail what their subordinates need to execute, but these instances will not create resentment and stalled action if this is an exception to an established environment of shared understanding. Subordinates at all levels will understand and know why they are executing tasks when leaders continually provide context. "People who come to work with a clear sense of why are less prone to giving up after a few failures because they understand the higher cause."[5] In any organization, leaders are responsible for creating an environment of trust — trust is paramount to the success of any organization.

Feedback

Sir Winston Churchill said, "Criticism may not be agreeable, but it is necessary. It fulfills the same function as pain in the human body. It calls attention to an unhealthy state of things."[6] If we know feedback is good for our subordinates and for the organization, then why do so many leaders avoid it? The reason is often because "[w]e humans do not do well when someone whose intentions are unclear tells us where we stand, how good we 'really' are, and what we must do to fix ourselves. We excel *only* when people who know us and care about us tell us what they experience and what they feel, and in particular when they see something within us that really works."[7]

Leaders at all echelons deserve candid feedback from their superiors. The candid feedback that leaders give must be based on the principals of dignity and respect, which includes potentially presenting uncomfortable truths. Throughout my career, I have found that subordinates rise to the standard they are charged with executing. Feedback goes both ways. You, as the senior leader, can improve or sustain your attributes by accepting your subordinates' feedback. It builds trust and allows you to continue growth and development. By having

A Co, 1-504 PIR Senior Rater Worksheet

Name (In no priority)	Ready to assume the next leadership position	Decision making	Thinks two levels up	Accom-plish the mission	Positive / confident leader	Mentally and physically tough	Moral and physical courage	Team builder / works well w/ peers	Humble / unselfish leader	Effective comms (writing / speaking)	Accepts prudent risks / Initiative	Seek and accepts responsibility	Problem Solver	Technically and tactically proficient	Strong character, morally strong, ethically straight	Seeks self-study / profess-sional develop
CO XO																
1 PL																
2 PL																
3 PL																
FSO																
X LT																

— = Below average; potential to improve; needs counsel
✓ = Average; recognizes weakness and acts on it
+ = Above Average: understands himself/herself and acts with minimum to no guidance

OML (bullet / phrases that summarize why Officer is rated #1-7. Focus on key strength and weakness)

1.
2.
3.
4.
5.
6.
7.

Figure 2 — Example Senior Rater Worksheet

junior leaders learn how to give effective feedback now will help them in their counseling sessions in the future. Too often leaders focus on the negative aspects of feedback when, in reality, they should focus on what systems are working and how these systems positively impact the organization. Another good technique is to have subordinates give answers on how they think they are doing and what they need to work on to improve.

We live in a world of instant gratification; with a swipe of your finger, you can make purchases online. So apply that to feedback — when a subordinate does something that is extraordinary, do not wait until the quarterly counseling session — give them that feedback immediately! Let them know they did a tremendous job briefing, establishing a local support by fire, or leading re-conditioning PT. Bottom line, no matter the task or the environment, give immediate positive feedback when you observe it. Once your subordinates receive this candid and positive feedback, the organization — and more importantly, the people — will excel. In 1805, Admiral Nelson of the British Navy emphasized the value of initiative by creating "an organizational culture that rewarded individual initiative and critical thinking, as opposed to simple execution of commands."[8] Instant feedback empowers junior leaders to make quick, deliberate, and dynamic decisions independent of senior leader oversight, promoting a culture of initiative.

Here is one example of how this feedback may look in practice: a forward support company executive officer is deploying to the field in preparation for a Joint Readiness Training Center (JRTC) rotation. Prior to the exercise, the brigade support battalion (BSB) commander hosts an LPD on employment, occupation, and required personnel within

the field trains command post (FTCP) and the combat trains command post (CTCP). During the LPD and the training event, the commander publicly praises subordinates for their superb performance. After the training event, the battalion commander conducts counseling of all officers and senior NCOs. During the counseling session, the battalion commander asks junior officers their opinion on how the occupation and employment of the CTCP went for the maneuver battalions and if they had the proper personnel in the CTCP and in the FTCP. This gives the senior officer bottom-up refinement, and it also allows junior leaders the opportunity to learn from the BSB commander and to give some thought on what would work better in the future. This technique allows buy-in from subordinates on how the battalion can improve in the future. This antidote displays how the senior leader begins the training exercise with a formal LPD describing how to execute specific tasks in a training environment. Secondly, while in the field environment, the junior leaders receive instant feedback from the units they are supporting and from BSB leaders. Lastly, at the conclusion of the training event the commander formally counsels subordinate leaders. By executing in this fashion, senior leaders are ensuring the development of junior leaders throughout their organization.

Counseling is another form of feedback for our subordinate leaders. Counseling does not have to be done formally on a DA Form 4856. Counseling can be done in a green leader book on the side of a vehicle or at the personnel hangar while waiting to load the aircraft. Leaders at all echelons must take time to counsel their subordinates, whether monthly, quarterly, or absolute worst case prior to receiving their evaluation. Every leader in the Army (or in any large organization) is extremely busy; leaders must make time to develop and counsel their junior leaders. This is our legacy — this is how our Army will continue to grow and develop for the future. When counseling junior leaders, an effective technique is to use specific criteria so junior leaders understand how they are being evaluated and know where to focus their efforts. This further reinforces the importance of shared understanding within the organization.

Conclusion

Leader development is the responsibility of senior leaders within the organization. Leaders set the culture of leader development within the organization, and furthermore, leader development is the responsibility of every leader in the organization. Implementing a strong leader development program, providing candid feedback, and allowing subordinates to execute required tasks help shape and grow the next generation of leaders. As we continue to grow, mentor, and develop our leaders, it is essential that they are treated with dignity and respect. This is critical to remaining authentic and showing genuine concern and compassion for our people and their families. President Lincoln offered advice that holds true for leaders and subordinates today: "Always bear in mind that your own resolution to succeed is more important than any other one thing."[9]

Notes

[1] Doris K. Goodwin, *Leadership in Turbulent Times* (NY: Simon and Schuster, 2018).

[2] John C. Maxwell, *The 21 Irrefutable Laws of Leadership Follow Them and People will Follow You* (Nashville: Thomas Nelson, 2007).

[3] Carol S. Dweck, *Mindset, The New Psychology of Success* (NY: Ballantine Books, 2006).

[4] Simon Sinek, *Start with Why, How Great Leaders Inspire Everyone to Take Action* (NY: Penguin Group, 2009).

[5] Ibid.

[6] Interview with Winston Churchill, *New Statesman*, 7 January 1939.

[7] Marcus Buckingham and Ashley Goodall, "The Feedback Fallacy, *Harvard Business Review* (March-April 2019, 2): 92-101.

[8] Stanley McChrystal, *Team of Teams, New Rules of Engagement for a Complex World* (NY: Penguin Group, 2015).

[9] Goodwin, *Leadership*.

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Photo courtesy of author

Paratroopers in the 1st Battalion, 504th Parachute Infantry Regiment conduct a rehearsal of concept drill prior to a platoon live-fire exercise.

Counseling in the Operational Domain:

A Vital Component to Platoon Leadership

LTC KIRBY "BO" DENNIS

L eader development is achieved through mutually supporting efforts across three domains — the institutional, operational, and individual. While it is generally agreed that no domain is more or less important than the others, performance and developmental counseling is most prominent in the operational domain — and it must remain so. More pointedly, I contend that developmental counseling in the operational domain is the most important and meaningful form of leader development. In his October-December 2018 *Infantry* Magazine article "The Lost Art of Developmental Counseling," SFC Daniel Signore discusses this critical topic — and does so sensibly, as counseling is a subject that warrants continuous consideration and attention.[1] With this in mind, I offer the following advice to platoon leaders — a cohort that is critical to promoting a culture of counseling within our formations.

1. Don't Treat Counseling as a Negative Interaction

Oftentimes, we immediately think in negative terms when we hear the word "counseling." While an individual's past performance failures and weaknesses are certainly fair game for any professional discussion, the tone of counseling sessions should generally be positive and centered around future successes. With this in mind, an effective counseling technique is to speak to your audience about their areas of weakness through the lens of potential. In his article, SFC Signore's thesis is that effective counseling can unlock potential — and he is exactly right. Importantly, I am not arguing that performance counseling should not highlight areas of weakness; on the contrary, I firmly believe that leaders benefit from direct feedback on individual deficiencies. The manner in how you communicate these deficiencies is critical though, and effective counselors must learn how to speak to areas of weakness in a way that motivates their audience to embrace the feedback and set out to make improvement. Easier said than done, right? Not really! If you are a company commander, you have insight on what makes a successful first sergeant, so use this as counseling material for your platoon sergeants — who are generally aspiring to serve at the next level. Similarly, as a platoon leader, you have firsthand knowledge on what makes a platoon sergeant effective in his duties, so provide this to your squad leaders during counseling sessions — who are generally trying to succeed and be future platoon sergeants

themselves. To be sure, each counseling session will be tailored to a specific subordinate's performance and potential, and a variety of techniques will undoubtedly be employed. However, a leader's ability to link performance to potential and speak in terms that motivate are important skills that will enhance the counseling experience for all involved.

2. Adopt a Training and Combat Mentality to Counseling

As a young platoon leader, I learned that in order to effectively maneuver my platoon during training and in combat, I had to clearly communicate to my squad leaders in both the planning and execution phases of an operation. As a battalion commander 16 years later, this remains the case — as my platoon leaders inherently understood the value of forging strong tactical relationships with their squad leaders. After all, the squad leader is charged with ensuring the success of the breach, support by fire, and assault — so clear communication and shared understanding is critically important. At the same time, however, many of my platoon leaders did not necessarily view their daily (or non-tactical) relationships through the same lens. In short, platoon leaders should view their "counseling relationship" with their squad leaders in the same manner as their "tactical relationship" — just without the radio. If this mindset is adopted, I believe that the tenets of mission command — clear communication, shared understanding, and mutual trust — can be realized in all environments.

3. Consider Your Philosophy and Make Counseling a Battle-Rhythm Event

Meetings, field training, and physical training (PT) dominate our outlook calendars, not to mention the dozens of other events that demand time and attention. If executed properly, you will likely get a calendar reminder for a counseling session at least once a week. SFC Signore argues that counseling should be executed on payday activities, which is one technique to ensure counseling is executed through a deliberate battle-rhythm event. Regardless of the eventual schedule that is adopted, a platoon leader should ask a few questions regarding his counseling philosophy. Do I counsel team leaders in my platoon? If so, how often? How will my formal counseling sessions for squad leaders differ from my daily interactions

so that it has the most meaning and impact? Do I counsel my weapons squad leader differently than my other, more junior squad leaders? How often do I counsel my platoon sergeant? What time of day and month do I counsel to ensure that my time is protected? I could go on and on, but the simple point is that thought must be given to your counseling philosophy and "battle rhythm." If one does the math, platoon leaders likely have eight to 10 NCOs in their platoon to counsel on a monthly or quarterly basis. While effective counseling should not be defined by a specific length of time, I have personally found that it takes at least 90 to 120 minutes per counseling session to achieve a level of dialogue that is meaningful to both the counselor and the counseled. With these conservative estimates in mind, platoon leaders should plan to devote nine to 12 hours each month in some form of counseling environment with their subordinate NCOs. If we devoted this much time to any other event in our professional lives, we would most assuredly plan and resource it properly. In the end, counseling is one of the most important things we do as professionals — just like live-fire exercises and PT. Therefore, ensure you devote the right amount of time to executing this mission and make it a battle-rhythm event.

4. Approach Counseling from a Position of Confidence

My experience tells me that ineffective counselors struggle with issues of confidence, and as a result, they tend to avoid the mission of counseling all together. Undoubtedly, confidence can take time to develop; however, the mission of counseling begins immediately upon assuming platoon leadership duties. Simply stated, effective counseling that is confidently delivered is the product of deliberate preparation. The legendary Arthur Ashe stated, "One important key to success is self-confidence. An important key to self-confidence is preparation." Ashe's insight should resonate with leaders of all ranks, but particularly our company-grade leaders navigating the thorny issues associated with leadership. There are numerous preparation techniques to employ, among them are asking your first sergeant for insight prior to counseling, discussing strengths and weaknesses of your squad leaders with your platoon sergeant, taking time to write down and think about your own observations, and developing a theme for each counseling session. Stumbling into a counseling session without proper preparation is not only a waste of time, but it sends tacit signals to subordinates that their development is not a priority. Don't make this mistake — take the time to prepare for one of your most important missions as a platoon leader.

5. Ask Subordinates for Feedback on Your Performance

GEN Colin Powell once said, "There are no secrets to success. It is the result of preparation, hard work, and learning from failure." As leaders and counselors, we should solicit subordinate feedback at times to become more effective, and as GEN Powell noted, learn from our own failures. Generally speaking, professional feedback is delivered through a

> *Counseling is the foundational event for professional development — and it must be delivered through a program that aims to not only identify weakness and deficiency but also pinpoint strengths and positive leader attributes. Effective counseling is a skill that requires practice and repetition, much like **learning doctrine or improving physical fitness or public speaking.***

top-down approach, but we shouldn't constrain the forms or sources of feedback we need to receive. At the end of a counseling session, I encourage leaders to solicit feedback from subordinates on their own performance — a simple technique that invests subordinates in the conversation and demonstrates a level of professional trust between the two parties. Moreover, asking subordinates to verbally communicate professional shortcomings to their superior is a herculean request — but make no mistake, it is a form of development that the subordinate will benefit from. Professionally communicating areas of weakness underpins the learning culture that makes the Army profession so strong, which is most evident in the Army's after action review (AAR) process. Platoon leaders who have executed a Combat Training Center (CTC) rotation certainly understand this, as the AAR is the centerpiece to every unit's CTC experience. So if we rightfully take AARs so seriously as it pertains to organizational performance, shouldn't we do the same for our own personal performance? Subordinate feedback can be incredibly powerful and beneficial — so ask for it.

Counseling is the foundational event for professional development — and it must be delivered through a program that aims to not only identify weakness and deficiency but also pinpoint strengths and positive leader attributes. Effective counseling is a skill that requires practice and repetition, much like learning doctrine or improving physical fitness or public speaking. Indeed, an effective counselor can positively impact generations of Soldiers, and as such, is an aspect of our professional lives that demands our attention and energy.

Notes

[1] SFC Daniel Signore, "The Lost Art of Developmental Counseling," *Infantry* Magazine (October-December 2018), https://www.benning.army.mil/infantry/magazine/issues/2018/OCT-DEC/pdf/12_Signore_Counsel.pdf.

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Training Notes

'Just Say Cobra'

Planning and Executing the First U.S. Training Event in Georgia

CPT MICAH ABLES

During the 1st Brigade Combat Team, 1st Cavalry Division's rotation as the Regionally Aligned Force deployed to the U.S. European Command (EUCOM) as part of Atlantic Resolve and the European Deterrence Initiative, much of my company (Cobra Company, 2nd Battalion, 8th Cavalry Regiment) leadership and I were tasked to double-hat as advisers to the Georgia Defense Readiness Program-Training (GDRP-T). As part of GDRP-T, we were assisting the newly established Georgian Combat Training Center (CTC) as it trained light infantry battalions in a rotation loosely modeled after the Joint Readiness Training Center (JRTC) or Joint Multinational Readiness Center (JMRC). Being detached from our unit for the bulk of the deployment, we were unable to conduct any of our collective training, so Cobra Company deployed from Poland to Georgia to execute collective training up to a dismounted company partnered combined arms live-fire event (CALFEV) during the GDRP-T inter-rotational period. As

an added benefit, the CTC's observer-controllers (OCs) were able to externally evaluate us as we executed the CALFEV. While Georgia has hosted NATO events in the past (Agile Spirit and Noble Partner, for instance), this was the first time a U.S. unit deployed to Georgia to conduct bilateral training.

Although this CALFEV was conceived as a one-off training opportunity, this type of event may become more regular. The Georgian Minister and Chief of Defense were very pleased with the training and, as a result, are allocating additional defense spending to regularly host U.S. units to conduct Objective-T (OBJ-T) training in Georgia as part of their pro-NATO military reforms. For the rotational unit tasked with GDRP-T, this type of training event will allow the tasked company to maintain some level of OBJ-T readiness. Although there were enough

Soldiers assigned to Cobra Company, 2nd Battalion, 8th Cavalry Regiment, 1st Armored Brigade Combat Team, 1st Cavalry Division, and Georgian forces conduct a multinational company combined arms live-fire event at the Vaziani Training Area in Georgia on 5 December 2018.

Photos by SPC Hannah Tarkelly

A Soldier from Cobra Company, 2nd Battalion, 8th Cavalry Regiment, provides aid to a simulated casualty during a multinational company combined arms live-fire event in Georgia on 5 December 2018.

lessons learned and cultural and bureaucratic obstacles (from both sides) to fill a book, I will highlight only the main points here to hopefully ease the path for future companies that are tasked to execute this partnered planning and training.

Conception of, and planning for, this event did not begin in earnest until approximately six weeks prior to deployment. My executive officer (XO) and first sergeant (1SG) executed the company's deployment with one strategic airlift (STRATAIR) flight with personnel and equipment and one flight with ammunition, personnel, and equipment. After several flight delays, Cobra Company arrived at Vaziani Training Area (VTA), and we moved into a zero and qualification range and team dry walkthroughs. We then conducted team live-fire exercises (LFX) and squad LFX. As a training opportunity for ourselves and an opportunity to help the CTC, we then role-played as the opposing force (OPFOR) for the CTC's battalion situational training exercise. We used the following week to conduct platoon-level training and participate in Soviet weapons familiarization training that the Georgians had planned for us.

Next, we jumped right into troop leading procedures (TLPs) and executed the platoon partnered LFX where each platoon worked with an attached Georgian element. The two-kilometer platoon lane stretched over two ranges and consisted of breaching a mined wire obstacle (MWO), assaulting a three-building objective, repelling a counterattack, identifying disengagement criteria, and conducting casualty evacuation (CASEVAC) and a tactical withdrawal.

After a short recovery period, we started TLPs and executed the company partnered CALFEV supported by Georgian mortars and artillery. Thanks to permissive and flexible range planning guidelines, the CALFEV consisted of an eight-kilometer movement en route to three company objectives on four ranges. The two intermediate objectives consisted of attacking a three-building outpost and conducting CASEVAC. The final objective included completing a night MWO breach,

reacting to a mass casualty (MASCAL) situation, clearing four buildings, establishing hasty battle positions, and repelling an enemy counterattack. All in all, Cobra fired nearly 85,000 live rounds over 25 days of training at VTA.

After a quick recovery period, after action reviews (AARs), and police calls, Cobra Company packed up and redeployed back to meet up with the rest of the battalion, less than six weeks after arriving in Georgia.

Planning Conferences

During the planning phase, the ODC (Office of Defense Cooperation — Army representatives closely tied in with our Embassy's Defense Attaché Office and Georgian J-Staff) hosted weekly planning conferences with various stakeholders, to include the J3, J4, J6, division-level representatives, etc. As the event got closer, members of the general staff were replaced by brigade and battalion-level action officers. Similar to AAR comments from the Noble Partner 18 planning process, I felt that these meetings were not very helpful in nailing down details; however, I found that they were imperative to building contacts and developing the necessary network to conduct and support training in Georgia.

Recommendations: Maintain regular meetings with shareholders to discuss plans and changes as they occur. Use these meetings to identify reliable key stakeholders and exchange contact information with these centers of gravity.

Higher Echelon Involvement

The planning of this exercise fell entirely to the company level, as both battalion and brigade were decisively engaged in other major training events. Both higher echelons were responsive to specific requests for assistance (ammunition draw, STRATAIR flights, OC assistance, etc.), but they were largely absent from the day-to-day planning. The political visibility, complexity, and media coverage of this operation should have demanded staff support. Additionally, my triple-hatting as exercise planner effectively eliminated any GDRP-T advising I was able to execute. Finally, the training value was diminished because I was developing my own training and injects plan.

Recommendations: At a minimum, higher headquarters should assign an action/liaison officer to handle key aspects of this mission. The action officer should be forward deployed three to six weeks prior to deployment to set conditions for the unit's arrival. Planners should stay closely tied to the ODC, as they handled much of the EUCOM and Joint Chiefs of Staff coordination for our rotation.

Fires Planning

Throughout the fires planning process, we constantly received directly contradicting guidance concerning authorized firing points, directions of fire, and impact areas from the artillery brigade commander and the navigation command (airspace controllers). Firing points and targets were submitted in writing very early in the planning process; however, they continued to change until the morning of execution due to disagreements

and ongoing negotiations with the navigation command. Fortunately, the Georgian artillery company commander was very dedicated to ensuring this mission happened, and the navigation command ultimately adjusted airspace restrictions to allow the fires assets to support the mission.

Recommendations: Bring in all stakeholders (navigation command, fires command, 7th Army Training Command [ATC]/Training Support Activity Europe [TSAE], etc.) to conduct fires planning at least six weeks in advance. Come to the first meeting prepared with proposed firing points, TTLODAC (target description, trigger time or event, location of the target, observers, delivery system, attack guidance, and communications), risk estimate distances (to include U.S. estimates of foreign weapons systems), and schemes of maneuver.

Deployment

Cobra deployed from Poland to VTA on separate flights due to our amount of ammunition, cargo, and personnel. The Georgian National Movement Coordination Center (NMCC) acted as a one-stop shop and was ready and prepared to support our arrival with buses, loadmaster, forklift, police escort, etc.

Recommendations: As soon as flight information is confirmed, send information to the NMCC along with required support assets. Keep them updated on any changes to flight schedule or load plans. Ensure the 302 customs forms are filled out and brought with cargo.

Host Nation Operation Order (OPORD) Issues

During planning conferences, I requested a Georgian platoon to conduct range details and support (road guard, targetry guard, etc.). This was agreed to and the purpose was understood; however, when the exercise OPORD was published, the attached platoon was not authorized to conduct guard operations (a very strict legal definition in Georgia). As such, the platoon was unable to meet its purpose, and we had to strain to meet our own guard requirements, which resulted in both reduced training effectiveness and occasional lapses in range security.

Additionally, the partnered platoon had just received new weapons that soldiers were unable to zero before our training. Because they were not authorized to zero in the deployment OPORD, they would have been unable to participate in our training without intervention. Similarly, the mortars and the D30s were not authorized to conduct registration before they were set to support us.

Recommendation: Try to ensure all purposes and requirements are understood ahead of time, but be prepared to "just say Cobra" and use contacts from the planning conferences to get last-minute permission to conduct these essential tasks when the bureaucracy threatens mission accomplishment.

Targetry Coordination

We were able to work with the 7ATC TSAE representative

A U.S. Soldier assigned to Charlie Company, 2nd Battalion, 8th Cavalry Regiment, and a Georgian soldier move forward during an exercise at the Vaziani Training Area in Georgia on 25 November 2018.

to establish our targetry; however, our TSAE representative changed between the squad and platoon live fires. Both representatives were incredibly driven to fight the bureaucracy, odds, and weather to build our training lanes. The first representative needed more direct guidance in constructing the lane but was much more flexible in executing the lane. The second representative required much less guidance with construction but had very specific expectations of how the lane should be conducted, which did not always make tactical sense or meet the desired training objectives.

Recommendation: Bring TSAE representatives into the planning process as early as possible to ensure expectations and training objectives are clearly understood both ways.

Building Partnership

During the planning conferences, I was adamant about having a live fire-qualified Georgian platoon available to create a partnered task organization. The J3 and division representatives were initially opposed to the idea but eventually consented and assigned a Georgian platoon to partner with us.

My platoon leaders greatly benefited from working with partnered forces, and by partnering at the lowest level possible, our junior Soldiers finally got to feel like they were part of the bigger picture and built strong, positive relationships with their Georgian peers and counterparts.

Additionally, the Deputy Chief of Defense offered to host a Soviet weapons familiarization range for us, along with static displays of Soviet-era and current Georgian military vehicles and equipment. For most of our Soldiers, getting to fire the Soviet weapons was a highlight of the deployment.

Recommendations: Maintain partnered operations at the lowest level. Ensure partnered squads and platoons are included in the tactical TLPs. In addition to a cultural immersion day, request a "military immersion" day with host nation forces to build partnerships at the lowest level.

Georgian OCs

During our CALFEV, the CTC OCs that we had been advising for the past few months served as our OCs. This was a unique opportunity for them to both take off the advising "training wheels" and to see an American infantry unit in action. This was mutually beneficial as it gave them a different look at how to execute training while giving us an outsider's perspective from partners with real-world combat experience in both Afghanistan and the 2008 August War.

Recommendation: Plan any training to take place during the CTC's inter-rotational period in order to benefit from being evaluated by the CTC's OCs.

Expectation Management

More than most partnered operations, everything is always in flux in Georgia. Planning feels — and often is — futile. There are mountains of bureaucracy that block anything from happening until one last-minute phone call changes everything.

Recommendation: Embrace Georgia's "no problem" mindset. Even though the plan for a major event to occur is not solidified even 24 hours out, rest assured — the Georgians will move heaven and earth to make sure it happens.

While the planning process was, at times, one of my most frustrating and exasperating experiences in the Army, it was well worth it. Ultimately, planning and executing this training event was a highlight of my and most of my Soldiers' Army careers. You will be lucky to draw this assignment in the future — and, best of all, you will get to work with some of the best partners around.

At the time this article was written, **CPT Micah Ables** served as commander of Cobra Company, 2nd Battalion, 8th Cavalry Regiment, and executive officer (XO) of Team Lynx. He currently commands Headquarters and Headquarters Company, 2nd Battalion, 12th Cavalry Regiment. His previous assignments include serving as the brigade plans chief and as an XO and heavy weapons platoon leader in Kandahar, Afghanistan, with the 2nd Battalion, 327th Infantry Regiment, 101st Airborne Division (Air Assault).

Lessons Learned During CALFEV in Georgia

COBRA COMPANY, 2ND BATTALION, 8TH CAVALRY REGIMENT

As discussed in the previous article, in November 2018, Cobra Company, 2nd Battalion, 8th Cavalry Regiment, became the first U.S. mechanized infantry company to conduct company-level training in Georgia, a NATO Partner for Peace. As part of the 1st Armored Brigade Combat Team, 1st Cavalry Division, Cobra Company deployed to Poland in May 2018 in support of Operation Atlantic Resolve before deploying to conduct a live-fire progression in Georgia.

The junior officers of Cobra Company faced several additional challenges while preparing to execute live-fire events to include: handling the logistics of deploying a company with minimal leadership, planning training with a foreign military, and operating alongside foreign Soldiers during operations. Ultimately, the combined arms live-fire event (CALFEV) in Georgia was an excellent opportunity for a mechanized infantry company to train dismounted infantry tactics and expose Infantrymen to the range of operations outside a mechanized infantry unit.

Months before the CALFEV, parts of Cobra Company leadership — including the company commander, two platoon leaders, and several NCOs — deployed to Georgia to participate in an advising mission for the Georgian Armed Forces (GAF). The company executive officer (XO), 1LT Emily Olson, led the rest of the company during its deployment to Georgia and established the supply network once the company was established. 1LT Olson planned and executed two air movements, one with palletized ammunition and one with the majority of Soldiers. In Georgia, the National Movement Coordination Center (NMCC) received Cobra Company on arrival and provided all the necessary equipment to download supplies and transport Soldiers to their new home. To support garrison and tactical movements, the GAF assigned Cobra Company 10-ton personnel carriers and Toyota Hiluxes. With the company officially consolidated in Georgia and leadership structures fully restored, it was time to train.

Within 24 hours of arrival, Cobra Company Soldiers packed their rucksacks, drew their weapons, and conducted a zero and qualification range for all weapon systems. Once Soldiers had successfully completed their qualification range, one of the Cobra platoon leaders, 1LT Stephen Greenway, directed them to the team live fire. In the months prior, 1LT Greenway had worked with the company commander (CPT Micah Ables) to plan an event that would effectively measure team leaders' tactical command and control of their teams. As part of the planning process, 1LT Greenway studied after action reviews (AARs) from previous

training exercises to improve the quality of the event. One of the improvements made was using a live, reactive opposing force (OPFOR) for the dry and blank iterations in order to provide a dynamic and challenging scenario and to test specialty skills, such as searching enemy prisoners of war (EPWs) and providing first aid to wounded Soldiers.

The team live fire was the first time that a majority of Cobra Company Soldiers had participated in a live-fire event, and there were struggles during the training. Buddy teams failed to bound in unison, call out the direction of enemy fire and location of enemy positions, and report their level of ammunition until they had expended all of their magazines. Some of the team leaders failed to use fire commands to focus fires on specific targets or to give different rates of fire to their buddy team pairs. During the lane hot washes, evaluators recommended that squad leaders take greater responsibility for training team leaders to assess situations, make decisions, and give confident maneuver commands that focus fires on target. CPT Ables reiterated that rehearsals were essential. After the completion of the team event, another Cobra platoon leader, 1LT Kendall Williams, briefed the plan for the squad live fire.

1LT Williams designed the squad live-fire lane to test a squad's ability to communicate effectively, maneuver using terrain, clear EPWs, treat friendly casualties, and quickly reconsolidate before receiving a follow-on mission. He created a tactical scenario in which a Ranger School-style vehicle insertion was used to transport squads with an attached weapons team from the tactical assembly area (TAA) to an objective rally point site 1,500 meters away from the objective. The intent was for the squads to dismount and move toward the objective where they would be ambushed while en route. Squad leaders would be evaluated on their ability to adapt to a changing situation and their ability to control their teams during the execution of the squad attack battle drill.

After the execution of a few dry iterations, 1LT Williams observed that a number of Cobra Company's mechanized Infantrymen did not have an adequate understanding of the operation and role of dismounted weapons teams during offensive operations. Weapons squad leaders with dismounted backgrounds often grew frustrated with Soldiers who did not grasp fire commands or understand fire control measures. Both the officers and NCOs agreed that continued rehearsals and training would be needed in order to increase technical and tactical proficiency. During night iterations, some squads struggled to send effective and timely signals and failed to develop triggers from a primary to an alternate communication plan, which hindered the tempo of their operations. After the completion of the event, 1LT Williams recommended conducting company-wide AARs following each dry, blank, and live iteration to discuss trends and allow all squads to learn from each other. He suggested that these general AARs would better facilitate the creation of company standard operating procedures (SOPs) that would be practiced and executed during the platoon live-fire event.

For the platoon event, Cobra Company conducted live-fire training alongside its Georgian partners. A squad from a Georgian NATO Response Force platoon was assigned to each Cobra Company platoon. Another Cobra platoon leader, 1LT Corinth Cross, briefed Cobra leaders on the challenges of training with their foreign partners such as the language barrier and integration of interpreters, the lack of time allotted for the Georgians to train with the Americans, and cultural differences towards mission planning and execution. CPT Ables reminded the lieutenants of the American experience in Afghanistan and throughout Europe, where partner mindsets were often different than the United States. While there is much to learn from their foreign partners, he said that leaders can't allow those differences to hinder operational success.

The platoon leaders redoubled their efforts to integrate the Georgians into their plans for the live-fire lane. Platoons created alternative courses of action (COAs) to capitalize on

Soldiers with Cobra Company, 2nd Battalion, 8th Cavalry Regiment, fire at targets during a multinational company combined arms live-fire event at the Vaziani Training Area in Georgia on 5 December 2018.

Photos by SPC Hannah Tarkelly

the Georgians' and their own squads' strengths. In a post-event AAR, 1LT Cross argued that while developing multiple COAs was a good exercise in troop leading procedures, it cut into planning and rehearsal time. Another challenge was that Georgians and Americans were unable to eat together. Due to legal issues and contracting specifications, Georgians and Americans had different dining facilities in garrison, and in the field the Georgians had to eat MREs whereas the Americans were served hot food twice a day. This fact could have potentially weakened morale amongst the Georgians and did little to strengthen the camaraderie and partnership between the U.S. and Georgian soldiers. Lastly, there was hesitancy amongst some of the platoon leaders and platoon sergeants about executing a live fire with non-English speaking partners. Some of the uncertainty was due to the fact that

1LT Kendall Williams, a platoon leader with Cobra Company, 2nd Battalion, 8th Cavalry Regiment, talks with a Georgian soldier during the combined arms live-fire event.

Cobra Company had never observed the Georgian squads during a team or squad live fire. Although the Georgian unit was unavailable to join Cobra's training sooner, the company agreed that the Georgian squads should have participated in both the earlier team and squad events to build cohesion and confidence. They also agreed that platoon leaders could have done a better job of overcoming their skepticism through rehearsals, increased communication, and a greater willingness to train together. However, there would be another opportunity to do so during the company live-fire event.

The company CALFEV was the culminating training event for Cobra Company in Georgia. The event took place over three days and consisted of three company-sized objectives spread out over eight kilometers. Each platoon was designated as the decisive operation for one of the objectives. When not serving in that role, the platoons served as support by fire, breach, or reserve. The Georgian Combat Training Center (CTC) observer-controllers (OCs) were invited to serve as the company's external evaluators. The CTC trains rotational Georgian infantry battalions, focusing on company-size operations, and the CALFEV served as a demonstration of U.S. tactics and techniques.

During the event, Cobra Company struggled to develop an SOP for priorities of work once it had occupied the TAA. Platoon leadership did not do enough to reinforce security as the number one priority of work, which resulted in platoons quickly shifting to chow and rest cycles following occupation. Noise and light discipline were also problems that junior leaders could have worked harder to correct on the spot. Another issue that was identified was the fact that platoon leaders, platoon sergeants, and squad leaders did not possess adequate maps and tactical graphics or control measures during the CALFEV.

This was a failure of the platoon leaders to adequately copy and pass on the graphic control measures that were briefed during the company operation order. Ultimately, the CALFEV served as a grueling training opportunity that strengthened the fortitude and mental toughness of all Cobra Company Infantrymen.

The CALFEV was a significant military-diplomatic victory for the United States and Georgia and represented a major step forward in the partnership between the two militaries. The U.S.'s integration with the CTC and the NATO Response Force was frequently recognized by the Georgian Ministry of Defense and U.S. Embassy officials. The mechanized Infantrymen of Cobra Company were exposed to dismounted operations, enhancing their tactical and technical skill sets and preparing them to serve in a light infantry unit in the future. Together, the junior officers learned a great deal about the planning and execution of joint training events, and those lessons learned will undoubtedly benefit them and those they lead in the future.

The following leaders of Cobra Company, 2nd Battalion, 8th Cavalry Regiment, contributed to this article:

1LT Corinth Cross currently serves as executive officer of Cobra Company, 2-8 CAV, Fort Hood, TX. He graduated from the U.S. Military Academy at West Point, NY, with a bachelor's degree in information technology.

1LT Stephen Greenway currently serves as a platoon leader in Cobra Company, 2-8 CAV. He graduated from the University of Georgia School of Public and International Affairs with a bachelor's degree in international affairs.

1LT Emily G. Olson currently serves as the mortar platoon leader for 2-8 CAV. She graduated from Carroll College with a bachelor's degree in biology.

1LT Kendall Williams currently serves as a platoon leader in Cobra Company, 2-8 CAV. He graduated from Virginia Commonwealth University with a bachelor's degree in economics.

Changes Coming to TCCC Training

MSG MIKE A. REMLEY

Data from the Joint Trauma System (JTS) demonstrate that if a combat casualty lives long enough to reach the care of a surgeon, the odds overwhelmingly favor that the casualty will survive, which highlights the importance of the care rendered by first responders.

In June 2018, the Assistant Secretary of Defense for Health Affairs chartered a working group made up of members from the Defense Health Agency (DHA) and the services charged with developing a standardized **Tactical Combat Casualty Care (TCCC)** curriculum for all service members (ASM). TCCC ASM will be the first of four Joint-Tiered standardized TCCC curricula to be completed. The TCCC ASM working group identified five lifesaving skills (rapid casualty assessment, tourniquet application, hemostatic dressing, pressure dressing, and airway maneuvers) that will serve as both the minimum standard of care for all service members and the foundation by which additional Joint-Tiered standardized longitudinal curricula will be developed. The goal of TCCC ASM is to increase trauma readiness for an estimated 1.5 million non-medical first responders across the full range of military operations (air, land, and sea). Tier one - **TCCC ASM** is scheduled to be delivered to the armed forces on 31 July 2019. The remaining tiers being developed are Tier two - **Combat Lifesaver**, Tier three - **Combat Medic/Hospital Corpsman**, and Tier four - **Combat Paramedic/Provider**. All standardized TCCC training curricula are scheduled to be delivered to the services no later than April 2020, with the expectation that the services be prepared to start training from that point forward. Once these courses are integrated into the services, the JTS and the services will have established the minimum trauma training standards as a baseline for Joint interoperability.

Background

TCCC originated as part of the Naval Special Warfare Biomedical Research Program. A review of battlefield trauma care revealed that:

1) Extremity hemorrhage was a leading mechanism of preventable death in combat fatalities;

2) Deaths from extremity hemorrhage could be prevented with the application of a tourniquet; and

3) The routine use of tourniquets during orthopedic surgery procedures provided evidence that these devices could be safely used for short periods of time.

Despite these facts, in the early 1990s, combat medical personnel were trained NOT to use tourniquets on the battlefield because of the mistaken belief that they would cause ischemic damage to arms and legs.

After a comprehensive review of tourniquet use identified that prevailing prehospital trauma care doctrine was wrong, it became apparent that a thorough review of battlefield trauma care principles was necessary. Do casualties with penetrating trauma really require spinal immobilization? Are two liters of saline solution administered rapidly really the best strategy for treating casualties with internal bleeding and shock? Are there no better ways to treat the pain of combat wounds than slow-acting intramuscular morphine?

A three-year research effort undertaken by the Special Operations medical community in partnership with the Uniformed Services University resulted in the development of TCCC guidelines — a set of novel, evidence-based, best-practice prehospital trauma care guidelines customized for use on the battlefield.

The TCCC development effort identified the leading causes of preventable death on the battlefield. Originally published in 1996, the principles of TCCC have been continuously revised and updated over the last two decades as additional evidence and experience has been gained. Changes to these guidelines have been based on new technology, emerging research, and lessons learned from the battlefield, as evaluated and recommended by the Committee of Tactical Combat Casualty Care (CoTCCC).

The mission of the CoTCCC is to develop evidence-based, best-practice prehospital trauma care guidelines customized for the tactical environment and to translate change proposals into relevant trauma care best practices in support of the full range of military operations. Change proposals result from detailed and critical analysis of available evidence through medical literature, scientific studies, military trauma registry casualty reviews, and best practices. Changes are then presented to the CoTCCC for deliberation, refinement, and consensus through a majority vote. Currently, the CoTCCC is composed of 42 voting members specially selected as subject matter experts in trauma care, battlefield medicine, tactical medicine, and prehospital medicine with extensive experience in the deployed and combat environment. The CoTCCC focuses on providing the best recommendations

for training and equipping the joint warfighter going into harm's way around the world. CoTCCC falls under the Defense Committee on Trauma, one of seven branches of the JTS.

On 18 January 2013, Marine Gen James N. Mattis, then commander of the United States Central Command (CENTCOM), wrote a memorandum to U.S. Military Service Chiefs focusing on the CENTCOM killed in action reduction initiative. He highlighted the outcomes of a November 2012 survey of prehospital medical teams conducted by his command surgeon in coordination with the JTS. This survey's findings identified the difference between the Ranger battlefield trauma care experience and that of the Department of Defense (DoD) at large. The

Photo by SSG Ian M. Kummer

Soldiers assigned to the 40th Combat Aviation Brigade treat a simulated patient during a tactical combat casualty care course that was conducted at Camp Buehring, Kuwait, on 23 February 2016.

difference was attributable to the Ranger Casualty Response System, a command-directed program that aggressively teaches TCCC guidelines to all unit personnel, integrates TCCC into small unit tactics and battle drills, and utilizes a unit-based trauma registry for performance improvement and directed procurement. In contrast, most of the DoD did not adopt TCCC until a decade or so after the 75th Ranger Regiment, and other Special Operations units did not implement it with an equivalent amount of command emphasis, contributing to a greater incidence of preventable prehospital deaths in military units that were late adopters of TCCC. Gen Mattis' memorandum outlined that the unprecedented low fatality rate achieved by the Ranger Casualty Response System may serve as a model for improving prehospital trauma care and saving lives on the battlefield.[1]

Standardized TCCC Training

Unfortunately, many trauma courses in the past that have been represented as "TCCC" training were not actually certified courses. As noted in a 2015 JTS white paper on this topic, "A TCCC curriculum was first established in 2008 at the request of Navy Medicine. Annually updated versions of this curriculum are now developed by the JTS and posted on the MHS [Military Health System] and NAEMT [National Association of Emergency Medical Technicians] websites. Although [CENTCOM] and the services have directed that U.S.

service members deploying in support of combat operations be trained in TCCC, there has been no standardization of the courses used to accomplish this training. Pockets of excellence exist throughout DoD with TCCC implementation, but significant variation has been noted in TCCC training courses (especially with sustainment training). Further, some medical providers in the DoD have not been trained in TCCC at all. The JTS combat trauma care performance review process, recent medical AARs [after action reviews] from combat units and the recent media note of inappropriate and potentially dangerous combat trauma training at some military units have all served to highlight the need for better quality assurance of both initial and sustainment DoD TCCC training courses."[2]

In an effort to eliminate preventable death on the battlefield, DoD policy and congressional mandate directed units to implement standardized TCCC into their readiness training. Sections 707 and 708 of the National Defense Authorization Act for Fiscal Year 2017 outline how the JTS' Joint Trauma Education and Training Branch (JTET) will help improve trauma readiness and outcomes through evidence-driven performance improvement and incorporation of the identified opportunities to improve battlefield trauma care into annually updated TCCC training curricula. The JTET reached initial operating capability in March 2019. The JTET will serve as the reference body for coordination of trauma training partnerships with

A 10th Mountain Division Soldier checks a simulated casualty's airway during the field care phase of a Tactical Combat Casualty Care demonstration at Forward Operating Base Fenty, Nangarhar Province, Afghanistan, on 22 October 2013.

functions will be to facilitate military and civilian educational partnership agreements and develop standardized outcomes-based instruction for trauma training to deliver to the services.

The Deployed Medicine (DM) website and smart phone application is a trial platform used by the DHA to test new innovative learning models aimed at improving readiness and performance of deployed military personnel. The intent is to deliver personalized, dynamic learning using the most current and accessible technology, enabling a self-directed and continuous study of medical best practices and lessons learned. DM is accessible via the website at www.deployedmedicine.com or by downloading the free app on your Apple or Android device. For more information, please send an email to info@deployedmedicine.com or visit the JTS website at https://jts.amedd.army.mil/.

civilian medical centers, sharing partnership lessons learned, developing standardized combat casualty care instruction for all members of the armed forces, and promoting the use of standardized trauma training platforms. The director of the DHA, in coordination with the services and the Joint Staff, determined that the JTET will fall under the JTS umbrella and will be responsible for optimizing and standardizing combat trauma training within DoD. The JTET's first priority is to fulfill the requirements outlined in DoD Instruction 1322.24, *Medical Readiness Training*, as well as to identify Joint trauma courses needed to provide injured service members with the best possible chance of survival and recovery. The JTET's primary

Notes

[1] Gen James N. Mattis, Memorandum: Killed in Action (KIA) Reduction Initiative, 18 January 2013.

[2] Joint Trauma System White Paper, "Establishing a DoD Standard for Tactical Combat Casualty Care (TCCC) Training, 10 September 2015.

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IEDs, Land Mines, and Booby Traps in the Soviet-Afghan War

LTC (RETIRED) LESTER W. GRAU

The 1979-1989 Soviet war in Afghanistan lasted more than nine years, and mine warfare was a major component of it. Both the Soviets and their Afghan counterparts from the Democratic Republic of Afghanistan employed millions of anti-personnel land mines in pattern minefields. General Boris Gromov, who commanded the Soviet 40th Army during the withdrawal, stated that the 40th Army turned over 613 minefields (with records) to the Afghanistan army before it withdrew from the country.[1] The Soviets supplemented these fixed fields with scatterable mines employed from aircraft, helicopters, cannon, and multiple rocket launchers. The Mujahideen deployed a wide variety of anti-tank mines and anti-personnel mines that were supplied by the United States, China, NATO members, and Arab countries. The Mujahideen also reused Soviet mines and manufactured their own blast mines (fougasse), which we now refer to as improvised explosive devices (IEDs). Soviet figures for mine injuries include IEDs and booby traps.

The graph below shows Soviet 40th Army personnel deaths and vehicle losses to mines during their war in Afghanistan. As the graph shows, the Mujahideen did not have many

Soviet 40th Army Losses to Mines — Personnel KIA and Vehicles Lost[2]

mines at the start of the war but soon obtained them. Soviet deaths to mines were initially quite high until the Soviets developed mine countermeasures which cut their losses. These countermeasures included issuing flak jackets, sandbagging and reinforcing vehicle floors, and riding on the tops of armored vehicles. Dissemination of these countermeasures was part of the in-country courses conducted by the 45th Separate Engineer Regiment.[3] After that, the number of deaths from mines fell, but the number wounded by mines rose. Vehicle losses peaked in 1984 and 1985 during the heaviest fighting in the war and fell off as the Soviets prepared to withdraw.

Of the 620,000 Soviet personnel who served in Afghanistan, at least 14,453 were killed or died from wounds, accidents, or disease. This is 2.33 percent of those who served. Another 53,753 (or 8.67 percent) were wounded or injured.[4] In the early part of the war, there were twice as many Soviet soldiers wounded by bullets than by shrapnel, but by the end of the war there were 2.5 times more Soviet soldiers wounded by shrapnel than by bullets. The proportion of multiple and combination wounds increased four times over the course of the war, while the number of serious and critical wounds increased two times. Land mines were the primary reason for this increase in serious and critical wounds. The number of wounded from land mines increased by 25-30 percent over the course of the war.[5] Improved Soviet medical evacuation during the war allowed more of the critically wounded to survive.[6] Throughout the course of the war, land mines caused 30-40 percent of the trauma cases treated by Soviet medical personnel.[7]

Interest in training Russian soldiers to deal with mines, IEDs, and booby traps remains high. All of these systems were also used by the Chechens in their long war with the Russians. In August 2008, the following article appeared in the Russian *Army Digest*. It reflects Russian experience with IEDs in Afghanistan and Chechnya and reflects their efforts to train their soldiers to avoid becoming IED casualties. The IEDs in this article use simple triggering mechanisms of almost 40 years ago. They are all mechanical triggering devices with no remote mechanisms. This article also gives a great deal of credit to foreign (Arab) instructors, although during the war the Soviet press characterized the foreign instructors as Pakistani and American. The Arab instructors became a problem for the Russians during their war in Chechnya.
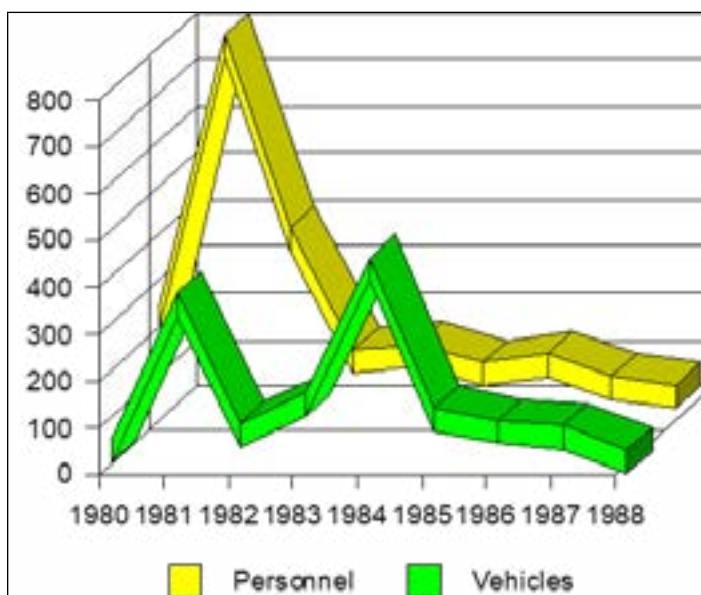
Dirty Tricks of the "Ghosts"[8]

E.I. Kaminsky

The "ghosts" [Mujahideen] learned about making explosive obstacles in specialist schools and training centers run by experienced foreign instructors. The methods and means of mining and their application are varied, cunning, and perfidious. Most often, the Arab "wolves" mined stretches of road, roadside buildings, and mountain paths; areas at risk also included water wells, oases, groves, and paths to them; abandoned buildings and caves suitable for accommodation or resting people. At the bottom of the list were major assets: weapons stores and valuable material; armaments, combat equipment, and various devices deliberately left on the terrain; and so on. The "ghosts" [Mujahideen] used a wide range of various booby traps.

All of these seriously impede the movement of forces, their maneuver and transfer, and the transport of cargo. Along with this is the experience of combat in the Republic of Afghanistan that shows how mine blasts occurred through carelessness and lack of caution. But there will be no surprise explosions if soldiers are observant and cautious; study enemy tactics, tell-tale indicators, and secret signs left behind during mining; and call in the sappers in a timely fashion.

Figure 1. *A roadside bomb [fougasse or IED] triggered by an electric push button switch made of plastic plates wrapped in polyethylene: (1) explosive charge, (2) power supply, (3-4) electric switch, (5) contacts, (6) polyethylene film.*

Figure 1
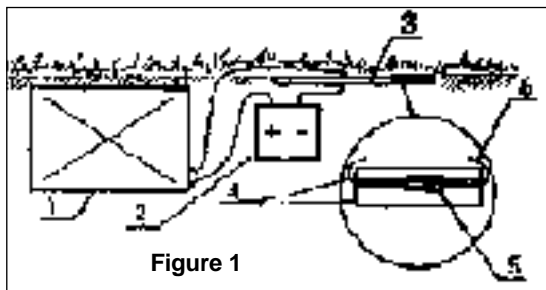
For example, combined arms unit commanders and drivers must strictly observe march discipline. Without an order, drivers must not pass other vehicles, pull off the road onto the shoulder, or pull off the road into places that have not been checked by sappers.

In a "mine war," all personnel, and not just the platoon-assigned lookouts, must keep an eye on the road. Remember that no matter how much the enemy camouflages a mine site, there are always traces — loose wrappers strewn on the road, wire bits, or metal contacts used in a roadside bomb's switch — barely noticeable bumps on the road, "scraps" of explosive packing material, and so on.

If a driver spots any such thing, he must stop the vehicle, mark the suspicious site, report to the unit commander, and follow his orders. In his turn, the commander calls in sappers or uses his own assets to survey and demine (or bypass) the suspect section.

Sappers also continuously survey while on the move. Survey is one of the key methods of detecting mines and is based on sound knowledge of where they are likely to be set, telltale indicators, and secret signs used by the "ghosts."

For example, more often than not the "ghosts" would lay individual anti-tank (or anti-vehicle) mines in places where the explosion would halt traffic for a long time and kill personnel — chiefly at steep hairpin turns in passes; places with road and bridge structures; road sections alongside steep inclines, ledges, and side-hill cuts; in narrow gorges and hollows; and on high embankments.

Figure 2. *A roadside bomb [fougasse or IED] triggered by a probe-activated electric switch made of two metal grids insulated from each other by polyethylene: (1) mine probe, (2) metal grid-contacts, (3) polyethylene layer, (4) electric wire.*
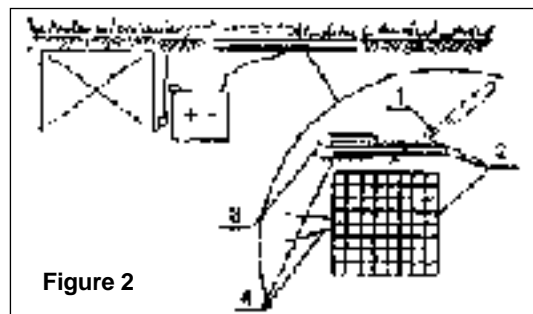

Figure 2

Figure 3. *Two TC-6 mines laid one on top of the other with a layer of one-two centimeters of soil between them, with the lower mine booby trapped [with an anti-lift device]: (1) pull fuse, (2) wire, (3) pin.*

Figure 3

Let me cite an example of actual combat using this tactic. Working in scouting and obstacle-clearing groups, sappers located and deactivated several anti-tank mines on the approach to a steep mountain road turn. They checked several dozen more meters of the road — no mines. However, it was disquieting that all the mines that had been found were metal (meaning that they were easily located by mine detectors) and placed at a minimal depth.

They continued to search and just beyond the turn they found a powerful roadside bomb [IED] triggered by an electric push-button switch made of two plastic plates with metal contacts secured between them (Figure 1). This is the usual design of the switches that the "ghosts" used. The pressure of the moving tracked vehicle of the wheel or track of a passing vehicle on the switch's upper plate brings the electric contacts together.

Another roadside bomb that we found was built in the same way, only this time both plates of the switch were wrapped in polyethylene, meaning that the electric circuit could close only after this improvised insulation had been destroyed, that is, after it had been run over several times. Apparently the "ghosts" were hoping that we would start moving once we found mines located before the turn but not search for those mines after the turn. They calculated that the passage of the first vehicles would convince us that this section of the route was "safe." And then, after a while, there would be a powerful explosion.

Figure 4. *A booby-trapped TC-6 mine with an electric pressure-release switch: (1) electric switch, (2) electric blasting cap, (3) wire, (4) power source.*
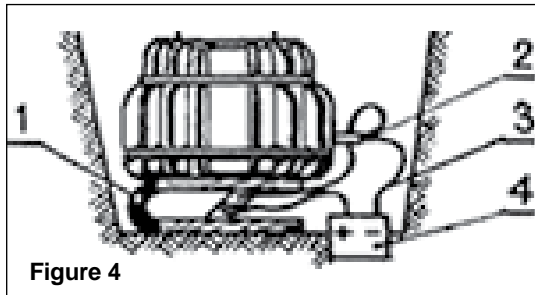

Figure 4

Figure 5. *A roadside bomb [fougasse or IED] triggered by an electric switch using pieces of metal cable lying in the right and left furrows of a tank trail. The electric circuit is closed when a tracked vehicle runs over them: (1) cable pieces, (2) roadway, (3) location of the tracks.*
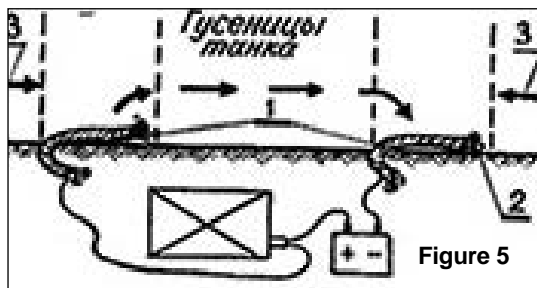

Figure 5

Figure 6. *A powerful roadside bomb [fougasse or IED] is laid in a narrow stretch of tree-lined road. It is activated by an electric switch using a clothespin secured to a tree. The pull on the tripwire pulls the insulating plug out of the clothespin which brings the electric contacts together: (1) explosive charge, (2) electric switch, (3) tripwire, (4) power source, (5) electric wire, (6) electric blasting cap, (7) electric switch contacts, (8) insulating plug fastened to the tripwire. The wire is stretched at a height of 1.2 to 1.6 meters high.*
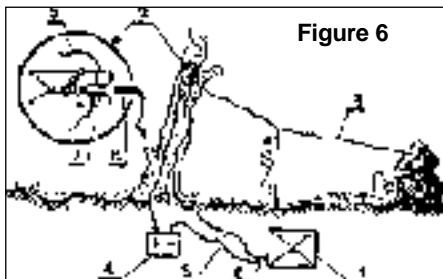
Figure 7. *Mined roadblock that is laid on a road section*

Figure 6

with no detour. It is activated by an electric pressure-release switch. (It is cunning because the sappers who check the rubble are convinced that there are no mines in it since it is very hard to find an IED hidden deep beneath the roadbed. The blast must occur while the debris heap is being worked on, at the very last moment when the load that is keeping the electric switch deactivated is being removed: (1) explosive charge, (2) power source, (3) electric wire, (4) electric switch, (5) electric switch spring, (6) electric switch contacts, (7) rubble, (8) cliff, (9) wall of stone.
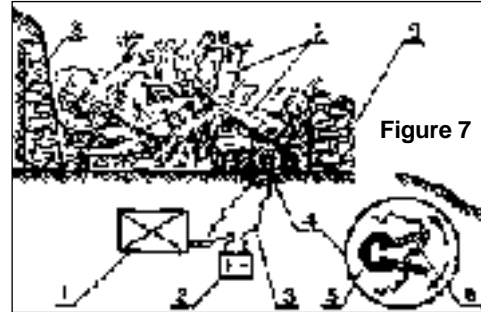

Figure 7

Figure 8. *A bounding anti-personnel mine (like the American M2A4) is most often laid in a bush (tall grass) along a mountain path or in places that are convenient for rest (rest halts). It is triggered by pressure exerted directly on the fuse mechanism or by pulling one of the tripwires. The expulsion charge and fuse-delay mechanism detonate the explosive charge at a height of up to 1.8 meters: (1) mine casing, (2) explosive (fragmentation) element, (3) fuse, (4) pin, (5) tripwire, (6) stake. The trip wire is stretched at a height of 10-15 centimeters.*
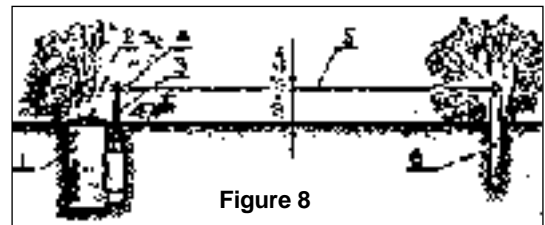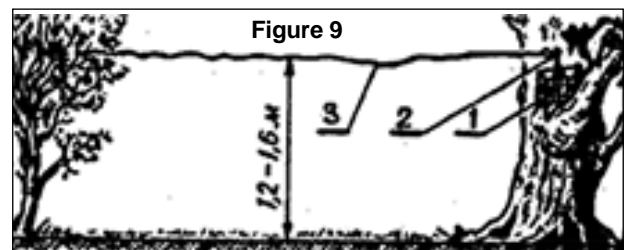

Figure 8

Figure 9. *Anti-personnel fragmentation directional mine laid in a tree. An ordinary mechanical fuse is used to activate it. The explosion produces an aimed swath of fragments that hit the target out to a distance of 180 meters: (1) M18A1 Claymore mine (USA), (2) fuse, (3) tripwire. The mine is mounted at a height of 1.2-1.6 meters.*

Figure 9

But the "ghosts" did not manage to take us by surprise. They miscalculated because they underestimated our sappers' skill. For our part, we drew certain conclusions for ourselves, in particular that steep bottleneck turns on mountain roads

are mined not only on the approach to them but also on the way down.

There are other "ploys" as well. For example, some buildings and bridges close to or on the roadways that the "ghosts" themselves used were not demolished. Tunnels were most often mined in the middle or at the end in order to "draw" in [concentrate] as many vehicles as possible into the area.

On hard-surface roads, mines were usually laid on the shoulder or in the roadway, primarily where there were oil spots or potholes, where repairs were being carried out, as well as on detours.

On gravel and dirt roads, mines were located practically anywhere on the road surface, on the shoulder, or in ditches. But all the same, most often they were laid on well-traveled tracks. The favorite places for laying mines were mountain passes, steep hairpin curves, ledges, defiles, and so on. In a word, mines were laid where it was difficult to bypass them.

In order to make a blast more destructive and hamper search and deactivation, the "ghosts" often laid two to three mines in a single hole (a mine or roadside bomb with an extra explosive charge, fuse, or pressure-release switch). They usually booby-trapped these mines. Figures 2-7 show some versions of such "booby traps."

The "ghosts" often covered anti-tank minefields (mine clusters) with anti-personnel mines. They clustered anti-personnel mines or laid individual mines in ditches or on the shoulder, on detours around destroyed road structures, in rubble, near to and in craters, in vehicle parking and maintenance areas, close to water sources, and so on. The "ghosts" most often laid anti-personnel blast mines on mountain paths, and tripwire-activated fragmentation mines on the adjacent slopes (see Figures 8-9).

The obstacles' locations are marked with signs of a sort — a broken branch or shrub, a notch on a tree, a barely noticeable pyramid of two to three stones on or close to the road, and so on. Areas where anti-personnel or mixed minefields and powerful roadside bombs have been laid were most frequently marked.

To gain the upper hand over an adversary, one must be well acquainted with his strengths and weaknesses and tactics. Sappers must have a sound knowledge of enemy explosive items, mining methods, and the marking system that the enemy uses. Only then, by combining their knowledge with strong mine neutralization skills, can they effectively figure out all sorts of "tricks" to prevent casualties and the destruction of materiel. It is the duty of commanders to teach sappers all of this.

IEDs are nothing new to the Afghanistan battlefield, and the Soviet experience still holds value today. This is a look back at the history of the IED before the introduction of the high-tech, remote fusing systems. The Mujahideen used some remote fusing during the Soviet-Afghan War, but they were primarily hard wired. High-tech counter-IED systems are valuable, but the trained soldier, who understands the enemy's patterns, history, and techniques is still the most effective counter-IED system in the force.

Notes

[1] Boris V. Gromov, *Ogranichennyy kontingent [Limited contingent]*, Moscow: Progress Publishers, 1994, 312.

[2] Aleksandr Lyakhovskiy, *Tragediya i doblest' Afgana [The Tragedy and Valor of the Afghanistan Veteran]* (Moscow: Iskona, 1995), appendix. This figure and the preceding and following paragraphs were used from Lester W. Grau, William A. Jorgensen, and Robert R. Love, "Guerrilla Warfare and Land Mine Casualties Remain Inseparable," *Army Medical Department Journal*, October-December 1998, 10-16. Similar information is available from Lester W. Grau, "Mine Warfare and Counterinsurgency: The Russian View," *Engineer*, March 1999.

[3] Petr Antonov, "Chemu uchit opyt" [What does experience teach?], *Armeyskiy sbornik [Army Digest]*, January 1997, 35.

[4] G. F. Krivosheev, Grif sekretnosti snyat [The secret seal has been removed] (Moscow: Voyenizdat, 1993), 401-405. These are official figures, but recent material suggests that the actual casualty rates are higher — some suggesting twice the reported figures. See "The Russian General Staff" (Lester W. Grau and Michael Gress translators and editors), *The Soviet-Afghan War: How a Superpower Fought and Lost* (Lawrence, KS: University Press of Kansas, 2002).

[5] E. A. Nechaev, A. K. Tutokhel, A. I. Gritsanov, and I. D. Kosachev, "Meditsinskoe obespechenie 40-iy armii: tsifry i fakty" [Medical Support of the 40th Army: Facts and Figures], *Voenno-meditsinskiy zhurnal [Military Medical Journal]*, August 1991, 4.

[6] For an examination of the nature of injuries and evacuation procedures, see Lester W. Grau and William A. Jorgensen, "Handling the Wounded in a Counter-Guerrilla War: The Soviet/Russian Experience in Afghanistan and Chechnya," *Army Medical Department Journal*, January-February 1998.

[7] Yu.K. Yanov, V.R. Gofman, L.A. Glaznikov, A.T. Grechko and Yu.A. Shulev, "Diagnostika povrezhdeniy slukhovoy sistemy v ranniy period minno-vzryvnoy travmy i optimizatsiya lecheniya postradavshikh" ["Diagnosis of Damage to the Auditory System in the Early Period of Mine-explosion Trauma and Optimum Care of the Victim"], *Voenno-meditsinskiy zhurnal [Military Medical Journal]*, April 1997, 26.

[8] E. I Kaminsky, ["Dirty Tricks of the 'Ghosts'"], *Armeyskiy sbornik [Army Digest]*, August 2009.

[9] The Italian plastic TC-6 antitank mines were a great favorite with the Mujahideen, and they received a good quantity of them. Afghans often double-stacked these mines in order to insure that they killed their target.

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