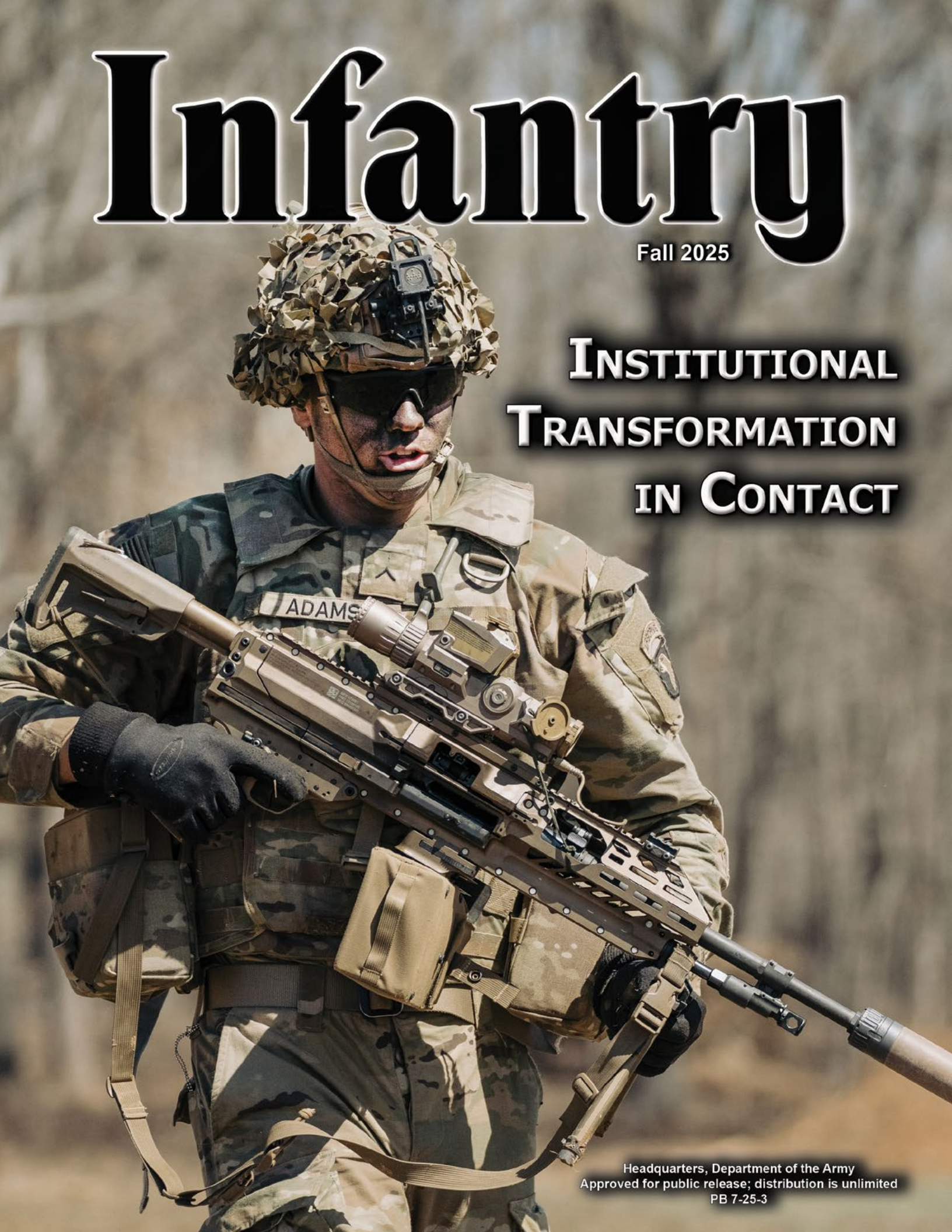
Infantry

Fall 2025



Institutional Transformation in Contact

Headquarters, Department of the Army
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PB 7-25-3

PB 7-25-3

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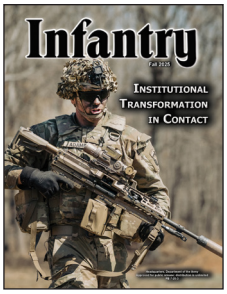

FRONT COVER:

A Soldier in the 1st Mobile Brigade Combat Team, 101st Airborne Division (Air Assault) participates in a combined arms live-fire exercise for the first time with the M250 Next Generation Squad Weapon-Automatic Rifle at Fort Campbell, KY, in March 2025. (Photo by SGT Jewell Fatula)

BACK COVER:

For more information on the 2026 Infantry Week events, scan the QR codes on the back cover or visit https://www.benning.army.mil/Competitions/. (Illustration by Patrick A. Albright)

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Infantry

FALL 2025 Volume 114, Number 3

Infantry (ISSN: 0019-9532) is an Army professional bulletin prepared for quarterly publication by the U.S. Army Infantry School at Fort Benning, GA. Although it contains professional information for the Infantry Soldier, the content does not necessarily reflect the official Army position and does not supersede any information presented in other official Army publications. Unless otherwise stated, the views herein are those of the authors and not necessarily those of the Department of Defense or any element of it.

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Commandant's Note

BG PHILLIP J. KINIERY

The evolving global security landscape — marked by the ongoing war in Ukraine, China's increasing assertiveness in the Indo-Pacific, and the volatile complexities of Israel's recent conflicts — demands a rapid and fundamental transformation of the U.S. Army. These recent and ongoing conflicts have starkly underscored the urgent need to deliver warfighting capabilities at speed and scale, keeping pace with the relentless technological advancements revolutionizing modern warfare. It's about proactively shaping a force capable of deterring aggression and decisively prevailing in a contested, multidomain environment. The era of predictable, linear battlefields is over.

Recent engagements demonstrate the inadequacy of traditional, lengthy acquisition timelines and rigid training methodologies. Waiting years for new equipment or updated doctrine is no longer viable. Army leaders recognize a need for a paradigm shift to maintain a competitive edge against near-peer and peer adversaries. The Army's forthcoming Army Warfighting Concept will drive this transformation, and one of its primary notions, expanded maneuver, will ensure our maneuver forces consider time and space to engage adversaries across all domains. The Transformation in Contact (TiC) initiative is already underway across the force to increase our Army's adaptability and lethality. In addition to brigade combat team transformation, the U.S. Army Infantry School (USAIS) is also transforming through doctrine, training, and leader development, and you can read about some of these initiatives within the pages of this edition.

Our branch plays a critical role in advancing the Army's ability to dominate in large-scale combat operations. We aren't simply responding to change — we are leading it, driving transformation across doctrine, training, and leadership development. We're reshaping how we prepare formations for the close fight. These efforts aren't purely conceptual, they are happening now — in our classrooms, in the field, and at our training centers. We understand what's at stake; our Soldiers must be prepared to win the close fight — anywhere, anytime.

The first article of this issue introduces the new Infantry Master Trainer Strategy (IMTS), which will govern and standardize institutional training for weapons and systems-based Infantry functional training across the force. MAJ Richard Chandler provides an overview of the strategy and discusses three new programs of instruction — the Rifle Squad Weapons Master Trainer Course, Rifle Platoon Weapons Master Trainer Course, and Stryker Master Trainer Course. This initiative increases the number of NCO subject matter experts within units who can assist leadership with planning and executing a training strategy for organic weapons and unmanned aerial systems (UAS), ultimately creating more lethal and ready formations.

We are also addressing gaps in the Modern Army Combatives Program (MACP). The program has been a valuable tool for commanders over the past 30 years, but changes in the operational environment and threat call for updates to better prepare Infantry Soldiers for the realities of large-scale combat. Future improvements include refining the technical curriculum to introduce other techniques, prioritizing weaponized fighting, and enhancing combat scenario-based training. The changes will not only increase our Soldiers' skillsets but ensure they maintain the decisive edge in close quarters combat on the modern battlefield.

Leader development also continues to be a top priority. Updates to the Infantry Basic Officer Leader Course (IBOLC) and the Infantry Advanced Leader Course (ALC) emphasize adaptability and lethality, ensuring we produce combat-ready officers and NCOs who are ready to lead in uncertain environments. Ultimately, the Infantry's success hinges on the physical toughness, mental resilience, and grit of its Soldiers and leaders. Cultivating these qualities requires a commitment to rigorous, realistic training, and we must continue to prioritize increasing the number of Ranger Course graduates across the operational force. It remains a demanding crucible for forging leaders capable of operating with initiative, resilience, and a warrior spirit.

This issue also includes a handful of articles that discuss new formations brought about through TiC. CPT Preston Wiley, an instructor with the Reconnaissance and Surveillance Leaders Course, shares observations his team made while observing a Multi-Functional Reconnaissance Company (MFRC) during its Joint Readiness Training Center rotation. His insights highlight the importance of understanding and effectively employing these evolving reconnaissance assets.

In another article about the MFRC's multi-domain effects platoon (MDEP), 1LT Parker Mitchell shares how the 2nd Mobile Brigade Combat Team, 101st Airborne Division (Air Assault) executed the new concept to bring multidomain effects to the brigade fight, leveraging electromagnetic spectrum and robotic systems to enhance lethality and survivability. Mirroring some multi-domain task force principles on a smaller scale, the platoon, alongside two hunter-killer platoons (HKPs), provided the brigade commander with a multi-functional reconnaissance asset, harnessing effects usually only available at higher echelons.

I am the Infantry! Follow me!

The Infantry Master Trainer Strategy:

Transforming Marksmen into Master Trainers

MAJ RICHARD CHANDLER

The Infantry Master Trainer Strategy (IMTS) is a comprehensive modernization initiative aimed at overhauling U.S. Army Infantry School (USAIS) programs of instruction (POIs) to create formation-based master trainers for infantry formations. It was developed to govern and standardize institutional training for weapons and systems-based Infantry functional training across the force, ensuring consistency and excellence in leader development and readiness. IMTS replaces three current POIs — the Marksmanship Master Trainer Course (MMTC), Heavy Weapons Leader Course (HWLC), and Stryker Master Gunner Course (SMG) — with a new progression of master trainer courses:

- Rifle Squad Weapons Master Trainer Course (RSWMTC)

- Rifle Platoon Weapons Master Trainer Course (RPWMTC)

- Stryker Master Trainer Course (SMTC)

Genesis of the Strategy

The need for IMTS arose after leaders observed that Career Management Field (CMF) 11 NCOs lacked institutional competencies to plan, prepare, execute, and assess direct fire training for their respective organizations and were unable to serve as subject matter experts (SMEs) on the wide array of weapons organic to their units.

The MMTC and HWLC were designed specifically to produce marksmanship master trainers capable of leading direct fire training and serving as SMEs for individual and crew-served weapons. Despite consistently high graduation rates, infantry units continued to lack personnel meeting the intended outcomes of these courses.

Confronting Systemic Challenges

In response, USAIS conducted a deep analysis of the disconnect between POI outcomes and operational needs, identifying two primary challenges:

Misaligned Student Population: A large portion of MMTC and HWLC students were non-CMF 11 Soldiers. CMF 11 Soldiers made up only about one-fifth of MMTC students and one-third of HWLC students. Although these courses produced many graduates, most did not return to U.S. Army Forces Command (FORSCOM) units — the formations that required their expertise most urgently.

Curriculum Limitations: The POIs leaned heavily toward technical instruction and lacked emphasis on developing master trainers capable of designing and executing compre-

A Soldier in the 101st Airborne Division (Air Assault) fires the M7 rifle at Fort Campbell, KY, on 15 April 2024. (Photo by Jason Amadi)

hensive unit training plans (UTPs) at echelon. As a result, course graduates possessed strong individual weapon competencies but were not equipped to elevate collective proficiency across squads and platoons.

Strategic Realignment in IMTS

To address both challenges, the IMTS team proposed a deliberate and synchronized overhaul of existing training architecture.

Redefining the target audience — The redesigned POIs specifically target CMF 11 NCOs in the ranks of E5-E7 who are in leadership roles at the squad and platoon level or are approaching such responsibilities. These NCOs are best positioned to lead formation-based training strategy.

A student in the Heavy Weapons Leader Course conducts a MK19 live-fire training at Fort Benning, GA, on 15 December 2022. (Photo by Patrick A. Albright)

Aligning with ALC and Retaining Institutional Access — To eliminate reliance on mobile training teams and reduce disruption to FORSCOM training cycles, the new courses were synchronized with Advanced Leaders Course (ALC) rotations. CMF 11 NCOs attending ALC at Fort Benning now have the opportunity to complete RSWMTC or RPWMTC either prior to or immediately following their ALC cycle. This logistical solution ensures access to the target demographic in one central location and creates a long-term institutional pipeline to produce master trainers.

Course Development and Integration

The IMTS strategy led to the creation of two foundational master trainer courses and one advanced course — all designed to build upon each other and emphasize both technical proficiency and institutional training design.

RSWMTC – Successor to MMTC – The current version of MMTC (v4.0) concentrates on the Army pistol and rifle. The **Rifle Squad Weapons Master Trainer Course** expands that focus to all infantry squad weapons and integrates training plan development into its curriculum. RSWMTC's principal aim is to produce NCO master trainers capable of assisting commanders in designing formation-based UTPs for organic weapon systems at echelon. Students develop technical proficiency across weapon systems and learn to translate that knowledge into executable, realistic, and measurable formation-based training strategies at the squad level.

RPWMTC – Successor to HWLC – The **Rifle Platoon Weapons Master Trainer Course** succeeds HWLC (v5.0), which was built around technical mastery of platoon-level systems such as the M2 .50 caliber machine gun, MK19 grenade launcher, Carl Gustaf, Javelin, M41 Improved Target Acquisition System (ITAS), and tube-launched, optically tracked, wire-guided (TOW) missile system. RPWMTC retains this technical instruction but extends course duration from two weeks to four weeks. The additional time is devoted to UTP development and culminates in a capstone assessment where students demonstrate their ability to create, execute, and assess live-fire training events aligned with their UTPs at the platoon level.

SMTC – Replaces SMG – The **Stryker Master Trainer Course** replaces the Stryker Master Gunner course and produces SMEs on planning and implementing direct fire gunnery training and integrating weapon platforms found within Stryker brigade combat teams. SMTC prepares students to design company- and battalion-level UTPs and emphasizes the integration of live-fire exercises, collective simulations, and systems training — giving graduates the skills to elevate operational readiness across entire formations.

Conclusion

The Infantry Master Trainer Strategy directly confronts a lack of formation-based master trainers in the NCO Corps by transforming three legacy POIs into a cohesive, progressive system that produces NCOs not only with technical weapons knowledge but also with the institutional training acumen required to influence entire units. By strategically aligning the new courses with ALC and refining curricular content to prioritize training development, IMTS ensures that the Army's Infantry leaders are equipped to build lethality, foster marksmanship excellence, and prepare their formations for combat.

MAJ Richard Chandler currently serves as the executive officer (XO) of 1st Battalion, 29th Infantry Regiment, 316th Cavalry Brigade, Fort Benning, GA. He previously served as a company commander and battalion XO with the Denver Recruiting Battalion. MAJ Chandler's other assignments include serving as the cavalry squadron logistical officer observer controller/trainer at the National Training Center, Fort Irwin, CA; company commander in 3rd Battalion, 41st Infantry Regiment, 1st Brigade Combat Team, 1st Armored Division, Fort Bliss, TX; company commander in 1st Battalion, 50th Infantry Regiment, 198th Infantry Brigade, Fort Benning; and heavy weapons platoon leader and executive officer in Delta Company, 1st Battalion, 506th Infantry Regiment, 4th Brigade Combat Team, 101st Airborne Division, Fort Campbell, KY.

The Knife's Edge:

Adapting Army Combatives for Tomorrow's Fight

CPT LUKE HODSDEN

Earlier this year, a chilling viral video out of Ukraine emerged depicting the stark reality of modern warfare. The footage showed a Ukrainian soldier engaging in brutal hand-to-hand combat with a Russian soldier, who mortally wounds the Ukrainian with his knife. As the Ukrainian soldier lay dying, he spoke to his enemy: "This is the end. Let me die in peace… You were better." The raw footage is a reminder that even in the age of drone warfare and precision strikes, hand-to-hand engagements remain a real possibility for Soldiers on the ground. The video is a testament to the fact that the technical skills required to fight and survive on the modern battlefield are not merely advantageous; they are essential for survival.

The Modern Army Combatives Program (MACP) has been a cornerstone of the U.S. Army's close-quarters combat (CQC) training for nearly two decades. Born at the onset of the global war on terrorism (GWOT), MACP was forged in the fires of Iraq and Afghanistan, where it provided a vital skillset for Soldiers operating in environments characterized by asymmetrical warfare and frequent dismounted patrols. However, the strategic landscape has now shifted from counterinsurgency to the focus on Great Power Competitors, particularly China and Russia. This change necessitates an evolution in the current iteration of Army combatives to address the evolving threat. This article argues that while the foundational principles of MACP remain valid, adjustments to the program are necessary to best prepare Infantry Soldiers for the realities of potential large-scale conflict.

The Evolving Threat: A Different Kind of Enemy

The problem sets posed by potential adversaries such as China and Russia are complex and markedly different from those faced during GWOT. These countries have shown an ability and willingness to employ aggressive offensive tactics of varying scale. Their strategies encompass both conventional large-scale assaults and small-unit actions designed to disrupt, delay, or isolate U.S. forces. These can involve probing attacks, feints, and audacious maneuvers aimed at overwhelming key positions.

Above, a Soldier engages a combatant during the tactical scenario of the 2025 Lacerda Cup Competition on 11 April. (Photo by Daniel Marble)

China, for example, will likely engage in combat with a much larger force, preferring to fight with a 4:1 dismounted troop advantage and up to a 10:1 advantage against a main effort target force. Additionally, the hybridization of these modern armies means that U.S. Soldiers may not only encounter large amounts of conventional military forces but also well-trained irregular forces operating in support of their nation's strategic objectives. These irregular soldiers, at the very least, will likely be proficient in close-quarters combat techniques.

MACP and Threat Combatives Comparison

MACP's development and proliferation in the 21st century is undeniably a success story. It is a valuable tool for commanders to provide not only physical conditioning but also a means to build confidence and foster a warrior culture, all the while instilling a fundamental understanding of grappling through a tactical lens. The emphasis on positional dominance and ground control lays a solid foundation to build a combatives framework. However, the program's strong focus on unarmed grappling may tend to overlook other important aspects of a fight, potentially putting Soldiers at a disadvantage against opponents trained in a broader variety of striking and weapons-based martial arts.

Heavily influenced by Brazilian Jiu-Jitsu, MACP prioritizes

ground fighting by recognizing that engagements often transition to the ground. Training focuses on achieving and maintaining positional dominance — securing mount, rear mount, or side control — and utilizing submissions to subdue an opponent. While striking techniques (punches, kicks, knees, elbows) are incorporated, they are primarily taught as ways to close distance, initiate takedowns, or create openings for submissions.

In contrast, Russian Systema and Chinese Sanda/Sanshou are combatives systems that emphasize fluidity, adaptability, and the exploitation of an opponent's weaknesses. They are known for their dynamic kicking and punching combinations, relying more on instinctual movements than rigid technical sequences. Both systems incorporate weapons training, including knife fighting and the use of bayonets, into their regimens as well.

Taking down a Russian or Chinese fighter to the ground might initially seem like a suitable option to neutralize their striking advantage. However, the superior number of enemy combatants must be considered as well. Combatives can no longer be viewed as a one-on-one cage fight scenario; Soldiers need to be able to anticipate multiple threats and work as a team to eliminate them effectively.

The threat's heavy focus on the integration of firearms, knives, and improvised weapons into close-quarters engagements demonstrates that it must be an area of renewed focus moving forward. While weapon retention is currently addressed, the dynamic interplay between transitioning from a firearm or knife to a grappling exchange and back again is a vital skill that must be stressed. The ability to seamlessly blend shooting, moving, and grappling is paramount in a modern battlefield.

Lastly, the current curriculum lacks a robust focus on fighting in restrictive terrain and under stress. Most of the current training takes place in relatively controlled environments, such as on a padded mat with a referee closely monitoring the participants. Infantry Soldiers will likely face CQC engagements in complex urban environments, dense forests, or within the confines of a bunker or trench system — conditions that significantly alter the dynamics of a fight. Furthermore, the psychological stress of combat substantially impacts performance, and MACP needs to incorporate more realistic scenario-based training such as limited visibility and confined spaces to better prepare for these situations on the battlefield.

Recommendations for Program Enhancement

To prepare Infantry Soldiers for the challenges of large-scale conflict, MACP must evolve. Here are some recommendations:

• **Refine the Technical Curriculum:** Introduce training in a broader range of disciplines, including those found in threat systems like Systema and Sanda. This doesn't mean abandoning the MACP's core principles but rather augmenting them with techniques that address potential vulnerabilities.

The Modern Army Combatives Program has served the Army well, but the evolving threat landscape demands adaptation.

• **Prioritize Weaponized Fighting:** Invigorate a focus on the integration of firearms, knives, and grappling. This should include drills on transitioning between shooting and grappling, fighting while armed, and defending against attacks while reloading or manipulating a weapon. Reintroduce bayonet fighting techniques.

• **Enhance Reality-Based Training:** Increase the emphasis on training in realistic environments. This includes conducting CQC training in confined spaces such as trenches and bunkers, as well as in urban terrain such as hallways and stairs. Utilize force-on-force exercises with realistic weapons and protective gear. Integrate stress inoculation into tactical scenarios, including physical challenges, sleep deprivation, and exposure to simulated combat scenarios such as fighting in smoke and noise or at night.

The Way Forward

The U.S. Army Combatives School at Fort Benning, GA, is committed to providing the most dominant and lethal combatives program to the force. The primary focus of instructors is revising Training Circular 3-25.150, *Combatives*, to reflect large-scale combat operations (LSCO) and making subsequent adjustments to the Combatives Master Trainer Course. This includes in-depth research on knife, bayonet, rifle, and improvised weapons techniques that are being tested and refined. Additionally, instructors are looking at LSCO scenarios that can simulate close combat engagements and aid in the application of offensive tactical collective tasks (enter/clear a trench, enter/clear a room, etc.) The work being done at Fort Benning will prepare our Infantry Soldiers to fight and win in the complex and dynamic environment of LSCO.

Conclusion

The Modern Army Combatives Program has served the Army well, but the evolving threat landscape demands adaptation. By addressing the threat outlined above, we can ensure that Infantry Soldiers are equipped with the skills and knowledge necessary to prevail in close-quarters combat against a determined and capable enemy. Investing in a more comprehensive and realistic combatives program is not merely a matter of improving individual skillsets; it's a matter of ensuring the survivability and effectiveness of our Infantry forces on the modern battlefield.

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Transformation Before Contact:

A Rapid Transition to Improve Quality of Life, Instructors, and Instruction

CPT SAMUEL J. QUATTRONE

The Infantry Basic Officer Leader Course (IBOLC) at Fort Benning, GA, is the first step for aspiring Infantry officers who need branch qualification and certification before joining the operational force. Led by the cadre of the 2nd Battalion, 11th Infantry Regiment, this 95-day program of instruction (POI) serves as the standardization gauntlet for all Officer Candidate School (OCS), Reserve Officer Training Corps (ROTC), and U.S. Military Academy (USMA) graduates. The POI has seen different areas of emphasis evolve throughout the years as the art and science of war have changed and the expectations of junior officers have adapted to meet the requirements of the global force. Still, whether you knew the course as the Infantry Officer Basic Course (IOBC) or IBOLC, the need for raising a corps of officers rooted in infantry basics has remained at the forefront. To that end, IBOLC has recently undergone a major structural transformation into a committee model to maximize the quality of instructor — and instruction — that is rooted in the basics: troop leading procedures (TLPs), unit training management (UTM), fires integration, fitness, and leadership.

Committee Model Transition

Every schoolhouse has its unique method of delivering its POI to students. These methods typically factor in things like course length, student/instructor ratios, content complexity, and student knowledge to determine how information is presented. IBOLC has utilized a "cradle-to-grave" method of instruction (i.e., "legacy model") for most of the last decade to deliver a POI built upon priorities that have remained largely

A cadre member (center) from the 2nd Battalion, 11th Infantry Regiment demonstrates the use of an unmanned aerial system to Infantry Basic Officer Leader Course students during platoon live-fire training on Fort Benning, GA, on 9 October 2024. (Photo by Joey Rhodes II)

unchanged. This method involved an IBOLC class being assigned to a specific training company that it would remain with for the entire 19 weeks of instruction.

In 2023, 2-11 IN noticed impacts from a manning shortage that saw instructors experiencing substantial burnout with minimal recovery time between training cycles. Most companies were operating at nearly 40-percent instructor strength. This meant that each company had approximately 24 instructors responsible for the professional training and personal well-being of 160 initial military trainees per class, training up to three classes per year. This number only decreased when factoring in other life factors that pulled instructors away from the course for any duration of time. These observations led the battalion operations cell to test the feasibility of transitioning from the legacy model to a committee model, like that of the Basic Combat Training (BCT) brigades on Sand Hill.

Significant analysis of personnel, resourcing, and mission requirements determined such a transition would either require approximately 15 percent more personnel than the unit's existing table of distribution and allowances (TDA) allotted and increase the burden on existing instructors or would require permanent support from other organizations. These results caused the battalion to put a hard stop to any further transition to this model because of the unrealistic requirements. The legacy model POI continued for the next year without a feasible alternative to address the strenuous demands.

Then, in 2024, the battalion's first sergeants reengaged the battalion commander about their collective desire to consider the committee model. Strong in their belief that it would alleviate some of the pains from the manning challenges, a small team was selected to create an initial concept. The team realized that the first analysis had assumed all things POI would generally remain equal — classes, week-to-week flow, ratios, and so on. This time the approach was different. Operation Burn the Ship, a nod to Hernan Cortes' "no return" strategy, sought to completely restructure the organization and the POI model. Traces of the legacy model remained, but the course was completely reworked. The new approach prioritized cadre (quality of instructor), specifically the NCOs, and their development and well-being with the understanding that they make or break the POI. Well-trained, well-balanced, and invested cadre provide the best instruction (quality of instruction) to the students.

Qi2: Quality of Instructor and Quality of Instruction

Life as an instructor is grueling. While long and odd hours are not unusual for Soldiers, instructors must maintain a perpetually high level of physical and mental acuity to deliver top-tier instruction to students. Under the legacy model, instructors were required to perform every physical task (e.g., ruck progressions, weeks of patrols, and countless live-fire repetitions) while performing mental acrobatics to plan, resource, coordinate, and execute the finer details of the POI. This is compounded with the burden of leveling the intellectual baseline as students arrive from their commissioning sources with varied levels of knowledge and understanding of even the most basic warrior tasks and drills.

...IBOLC has recently undergone a major structural transformation into a committee model to maximize the quality of instructor — and instruction — that is rooted in the basics: troop leading procedures (TLPs), unit training management (UTM), fires integration, fitness, and leadership.

Instructors were left physically and mentally drained at the end of a cycle, yet some companies rarely saw more than a week of cycle break (i.e., time without students) to rest and refit. It certainly left no amount of time for professional development that would not noticeably hurt the team nor provide an opportunity to conduct thorough after action reviews (AARs) and implement meaningful changes. This seemingly endless cycle of exhaustion quickly reduced effectiveness among even the best instructors and kept interested parties away from the team. It needed to change if the organization wanted to see the new model flourish.

The quality of instructor initiative driving this program change considered several factors, such as the quality of life, professional development, and instructor certification. The team needs instructors who want to be there and feel supported by a network of like-minded, driven teammates. Under the committee model, time in the field and garrison became generally balanced across the committees, and field time saw a drastic cut. With the legacy model, more than two-thirds of the 95-day course were spent in the field, but the new model reduced it to about one-third. This provided more time to the instructors (fewer overnight shifts), reduced resource demands, and lessened physical demands.

Beyond the field-time balance, the new model increased the balance of cycle breaks. Each committee is responsible for three to four weeks of training and would provide that training to every class that rolled through. These training weeks are followed by an almost matching amount of cycle break that is dedicated to professional development (e.g., POI-enhancing and career-enhancing schools), recovery, and preparation for the next class. The routine cycle breaks of nearly three weeks were a stark improvement from the cumulative three weeks that some of the companies endured.

The structural changes to the POI were critical, but talent management proved to be even more so. Instructors are placed on committees based on perceived strengths, interests, and, perhaps most importantly, team compatibility. They remain in assigned committees for approximately one year where they move through the instructor progression as an assistant instructor (AI) to primary instructor (PI) and eventu-

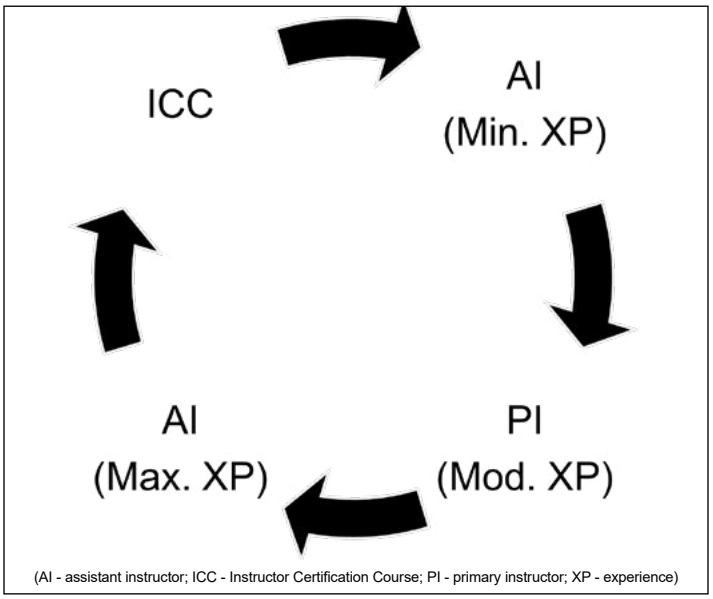


Figure 1 — Instructor Progression

ally back to an AI position near the end of their tenure so they can train their successors (see Figure 1). During this time, cycle breaks are used to address potential weaknesses and hone skills. This is crucial as instructors transition to different committees at the end of their one-year mark. This transition ensures instructors remain well-balanced and continue to develop throughout their three-year assignment; however, it requires the oversight of and a second visit to the Instructor Certification Cell (ICC).

The ICC is the first stop for instructors arriving at the battalion and serves as the connection between the quality of instructor and quality of instruction. While the legacy model lacked sufficient time to train the trainer, the committee model prioritizes it. Every instructor, regardless of rank, is required to pass through the ICC for at least two weeks. During this time, seasoned instructors train the "rookies" in U.S. Army Training and Doctrine Command (TRADOC) and organizational policies; assess knowledge, skills, and abilities; and provide initial repetitions at instructing in front of an audience of peers. During this certification process, the prospective instructors are challenged physically (12-mile ruck, Army Fitness Test [AFT], and team-building events) and mentally (knowledge assessments and a comprehensive exam). This time culminates with prospective instructors going before a board of the command teams to introduce themselves and explain their self-professed passions and abilities. Instructors are then assigned to a company and committee based on their strengths, compatibility, and organizational needs.

As the instructors move through the previously mentioned instructor progression, they are validated by the company command team and certified by the battalion commander. While the instructors leave the ICC with most of their certification requirements, this is their opportunity to learn the specific POI classes that their new committee is responsible for. This creates a standard of instruction that is provided to every IBOLC class, ensuring that each student leaves with the same knowledge and experience provided by a subject matter expert (SME). This is a marked improvement from the legacy model that attempted to make all instructors in every company SMEs on all 19 weeks of POI. Now IBOLC sees a high quality of instruction from instructors who have been certified on and dedicated to their small piece of the greater picture of POI.

TUFF Leadership

With the structural changes came a renewed vision and a look at the POI priorities. The collective of commissioned officers, guided by the NCOs, came together to assess what an Infantry lieutenant must leave the course understanding. The organization had already put the "L" of leadership back in IBOLC (see https://www.ausa.org/articles/learning-leadership-new-course-emphasizes-key-command-tenet). The focus had to be on the basics. Following guidance from the U.S. Army Infantry School (USAIS) commandant, the team came to the following four priorities after boiling down the initial thoughts and concepts: TLPs, UTM, fires, and fitness (TUFF). These four priorities became the focus. All POI material needed to nest within and contribute to the development of these training priorities because of their vital nature in the force and on the battlefield.

Troop Leading Procedures

Operation orders (OPORDs) have always been an essential component of IBOLC. Historically, students were provided two or three complete OPORDs to build and brief throughout the course, supplemented by "field expedient" orders during their graded patrols. The committee model condenses the TLP classes into a three-week block of the course where students' primary focus is learning the operations process to standard and conducting the necessary repetitions. The three orders are progressive, increasing complexity through the addition of enablers and enemy capabilities. Additionally, the three orders cover an attack, a defense, and a movement to contact, thus ensuring the students have experience in planning and briefing more than one type of operation. The foundation students built in the TLP committee are further developed as they transition to the patrol committee and continue to apply their tactical planning in real-world situations.

Unit Training Management

One of the most significant yet often overlooked components of platoon leadership is the unit training plan. Lieutenants left IBOLC technically and tactically proficient as individuals, yet they often arrived at their gaining units without knowing how to train their platoon to standard. To address this gap, 2-11 IN implemented two weeks of deliberate training in UTM. These weeks address the mission-essential task list (METL), resources like the Army Training Network (ATN), and the use of Army doctrine and local regulations (e.g., Training Circular 3-20.40, *Training and Qualification - Individual Weapons*, and range control standard operating procedures).

During the first block of instruction, students are divided into small teams to plan an M4 qualification range. At the end

of the week, they are required to brief a concept of operation to their instructors as if they were briefing their company commander, providing detailed timelines, resource requirements, limiting factors, and more. They then transition the following week to conduct Basic Rifle Marksmanship (BRM), where they can observe a qualification range executed to the book standard. Classes get their next look at UTM approximately 13 weeks later, but they progress from an M4 range to a team live fire. This specific training event was selected since platoon leaders are responsible for the training and certifying of their fire teams. Unique to this block of instruction is that the students get to execute a blank iteration of the plans that they created. These two weeks help minimize the amount of on-the-job training the lieutenants' gaining units must conduct and build confidence when they are tasked with planning training events.

Fires

The Infantry is expected to close with and destroy the enemy on the ground through a combination of fire and maneuver. Students have previously received surface-level instruction on company-level indirect fire (IDF) capabilities and the principles of direct fire control, but there was much to be desired regarding their ability to adequately integrate IDF and direct fire assets through echelonment of fire. A team from the fires cell of the Maneuver Center of Excellence Combined Arms Integration Directorate collaborated with the IBOLC cadre to reinvigorate IDF classes and exposure throughout the course. The combined efforts added touchpoints to every committee. Students receive face-to-face instruction on capabilities, gain confidence through practical exercises at the simulation center, leverage enablers in TLPs and patrols, and culminate in a fire support coordination exercise (FSCX). The FSCX allows the students to see firsthand what echelonment of fires looks, sounds, and feels like. They gain an increased appreciation for the resources at their disposal and the combat multiplier that well-timed and well-emplaced fires become.

Fitness

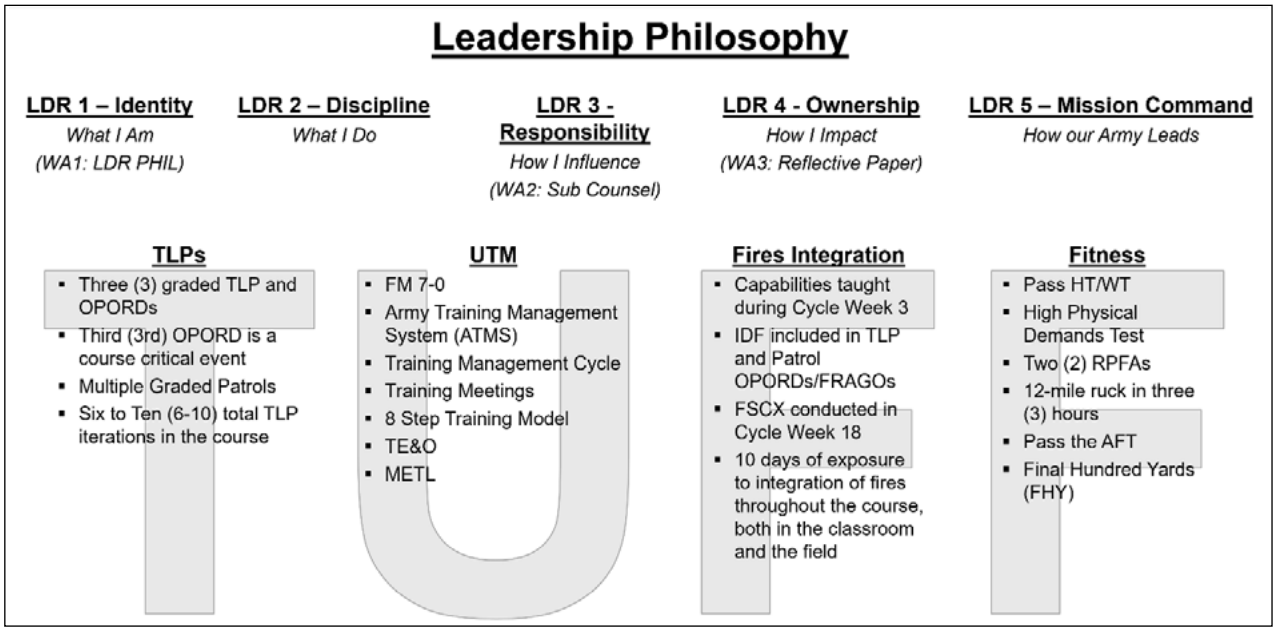
As the cornerstone of the Army, fitness is paramount at IBOLC. The Infantry lieutenant must understand the integral role of fitness in the lethality and survivability of their formation, along with the crucial role it plays in building cohesive teams. The focus on fitness extends beyond the standard fitness assessments expected at the course (e.g., ruck progressions, AFT, and Ranger Physical Assessment). In collaboration with the experts at the 199th Infantry Brigade's Tactical Athlete Performance Center (TAPC), 2-11 IN built a standardized 19-week training plan to set an example for students and to build strength among the future platoon leaders. This plan is technology-enhanced, allowing students and cadre to access the plan from their smartphones or computers, which increases availability and consistency. The training plan is rooted in the pillars of the Army's Holistic Health and Fitness (H2F) program, ensuring students understand the greater picture of their physical needs.

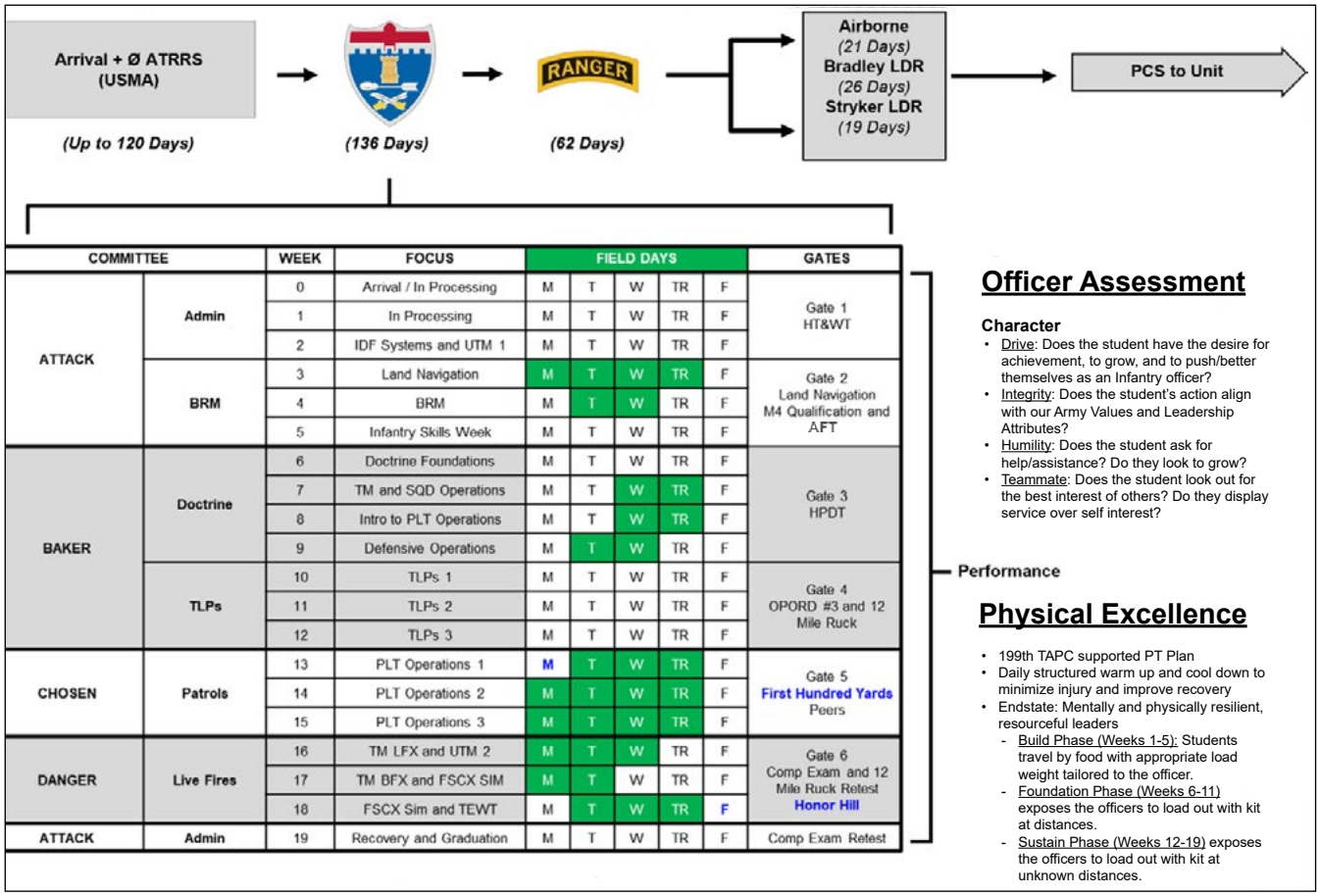
Outside of traditional physical training (PT), the field weeks presented a significant physical demand on the students. The cadre performed an exhaustive study of students' physical performance, the physical demands of each training week, week-by-week mileage, ideal loads, and more. This study forced students and cadre to begin critically thinking about the training being conducted and the loads to carry. This then translated into the tactical realm as students began optimizing the load in their rucks and kits, allotting additional time and thought to the sustainment paragraph of their OPORDs, and considering the impact of physical readiness on their operations.

Conclusion

The Infantry Basic Officer Leader Course is "one giant leap"

Figure 2 — IBOLC Core Principles





COMMITTEE		WEEK	FOCUS	FIELD DAYS					GATES
ATTACK	Admin	0	Arrival / In Processing	M	T	W	TR	F	Gate 1 HT&WT
		1	In Processing	M	T	W	TR	F	
		2	IDF Systems and UTM 1	M	T	W	TR	F	
	BRM	3	Land Navigation	M	T	W	TR	F	Gate 2 Land Navigation M4 Qualification and AFT
		4	BRM	M	T	W	TR	F	
		5	Infantry Skills Week	M	T	W	TR	F	
BAKER	Doctrine	6	Doctrine Foundations	M	T	W	TR	F	Gate 3 HPDT
		7	TM and SQD Operations	M	T	W	TR	F	
		8	Intro to PLT Operations	M	T	W	TR	F	
		9	Defensive Operations	M	T	W	TR	F	
	TLPs	10	TLPs 1	M	T	W	TR	F	Gate 4 OPORD #3 and 12 Mile Ruck
		11	TLPs 2	M	T	W	TR	F	
		12	TLPs 3	M	T	W	TR	F	
CHOSEN	Patrols	13	PLT Operations 1	M	T	W	TR	F	Gate 5 First Hundred Yards Peers
		14	PLT Operations 2	M	T	W	TR	F	
		15	PLT Operations 3	M	T	W	TR	F	
DANGER	Live Fires	16	TM LFX and UTM 2	M	T	W	TR	F	Gate 6 Comp Exam and 12 Mile Ruck Retest Honor Hill
		17	TM BFX and FSCX SIM	M	T	W	TR	F	
		18	FSCX Sim and TEWT	M	T	W	TR	F	
ATTACK	Admin	19	Recovery and Graduation	M	T	W	TR	F	Comp Exam Retest

Performance

Officer Assessment

Character

- Drive: Does the student have the desire for achievement, to grow, and to push/better themselves as an Infantry officer?
- Integrity: Does the student's action align with our Army Values and Leadership Attributes?
- Humility: Does the student ask for help/assistance? Do they look to grow?
- Teammate: Does the student look out for the best interest of others? Do they display service over self interest?

Physical Excellence

- 199th TAPC supported PT Plan
- Daily structured warm up and cool down to minimize injury and improve recovery
- Endstate: Mentally and physically resilient, resourceful leaders
  - Build Phase (Weeks 1-5): Students travel by food with appropriate load weight tailored to the officer.
  - Foundation Phase (Weeks 6-11) exposes the officers to load out with kit at distances.
  - Sustain Phase (Weeks 12-19) exposes the officers to load out with kit at unknown distances.

Figure 3 — Infantry Lieutenant Glide Path at Fort Benning

for our future rifle platoon leaders. The time they spend at Fort Benning for the first months of their career as a commissioned officer is incredibly formative for both them and the formations that they go on to lead. The cadre assigned to 2-11 IN face no small feat. In many regards, they are the face of the Army and the NCO Corps for every Infantry officer who enters the force. They set the tone for our fighting force and must be top-tier Soldiers who build a cohesive and passionate team dedicated to excellence. Their efforts ensure that the students leave the schoolhouse standardized with the foundational knowledge of the Infantry officer — TLPs UTM, fires, fitness, and leadership. The transition to the committee model has set conditions for success in creating a healthy cadre team dedicated to producing high-quality Infantry lieutenants who are competent and confident rifle platoon leaders of character.

An instructor (center) from the 2nd Battalion, 11th Infantry Regiment observes IBOLC students during platoon live-fire training at Galloway Range on Fort Benning, GA, on 9 October 2024. (Photo by Joey Rhodes II)

CPT Samuel J. Quattrone serves at the chief of tactics for 2nd Battalion, 11th Infantry Regiment (Infantry Basic Officer Leader Course) at Fort Benning, GA. His previous assignments include serving as an instructor and company commander with 2-11 IN (IBOLC) and as a platoon leader and executive officer with 2nd Battalion, 14th Infantry Regiment at Fort Drum, NY. He earned a bachelor's degree in exercise science from Cedarville University.

Preparing for the Next Fight:
The Final FTX at Infantry OSUT

CPT CHARLES J. GULOTTA
LTC MICHAEL B. MOORE

As the U.S. Army shifts its focus from counterinsurgency operations to large-scale combat operations (LSCO), the U.S. Army Infantry School at Fort Benning, GA, has taken deliberate steps to reshape initial entry training. At the center of this transformation is the Infantry One Station Unit Training (OSUT) pipeline — a 22-week course designed to forge fit, disciplined, lethal, and resilient Infantry Soldiers. The culminating event of this transformation is the field training exercise (FTX), a rigorous, multi-day, immersive event that evaluates each trainee's tactical competence, leadership potential, and mental fortitude under conditions that replicate the demands of LSCO.

From a battalion-level perspective, the FTX represents the capstone evaluation in the transformation from civilian to Infantry Soldier. From the company commander's viewpoint, it is the final opportunity to pressure-test each Soldier in the crucible of combat simulation — while instilling confidence in their training, leadership, and lethality. The FTX offers a critical proving ground, allowing trainees to demonstrate the skills they've acquired while facing the physical and psychological stresses of simulated LSCO environments.

Building the Fight: LSCO as the Training Standard

It is a common shortfall in military training to prepare for the last war rather than the next. At 2nd Battalion, 58th Infantry Regiment, we challenge this tendency. For our companies, the FTX is designed as a scaled-down combat training center (CTC) rotation, built with minimal administrative pauses to sustain tactical immersion. The company's operations begin

A first lieutenant assigned to Alpha Company, 2nd Battalion, 58th Infantry Regiment, briefs an operation order off a terrain model during a field training exercise during Infantry One Station Unit Training at Fort Benning, GA. (Photo by CPT Stephanie Snyder)

Trainees assigned to 2-58 IN are dug into their fighting positions during their final training exercise. (Photo by CPT Stephanie Snyder)

with a deliberate defense and evolve through a variety of offensive and reconnaissance-based missions — all under the umbrella of LSCO realism, within our capabilities.

Scenario development begins with the operation order (OPORD). From the company level down, leaders brief their formations in accordance with doctrinal troop leading procedures. The situation paragraph includes notional friendly units, enemy capabilities that reflect near-peer doctrine, and well-defined boundaries that shape the battlefield. The opposing force (OPFOR) is equipped with inert weapons and tactics that replicate modern adversaries, ensuring trainees must respond to realistic, dynamic threats.

The Company Fight: Executing the FTX on the Ground

As an OSUT company commander, I approach the FTX not just as an evaluation, but as the final opportunity to mold my trainees into Infantry Soldiers capable of surviving and thriving in LSCO conditions. Per the Infantry OSUT program of instruction (POI), the first objective is the development of the company's defense. From day one, Soldiers dig fighting positions with overhead cover, camouflage their locations, and prepare for both direct and aerial threats. When available, Class IV materials — such as sandbags and lumber — are used to enhance the realism of a deliberate fighting position.

The use of small unmanned aerial systems (sUAS) is integrated into the scenario based on lessons learned from Ukraine and other contemporary conflicts. Two days of sUAS instruction are directed by the OSUT POI. We typically dedicate one day to friendly drone use and one day to enemy use, employing a company-owned, U.S. software-hardened mini-drone.

Enemy drones conduct overflights of both patrol routes and static positions, forcing trainees to react using new doctrinal drills and to validate their fighting position construction. Friendly drone use is leveraged for reconnaissance, giving our Soldiers intelligence, surveillance, and reconnaissance (ISR) exposure they will almost certainly need in future combat. With help from a drill sergeant, trainees fly the drone over the final objective to identify enemy presence and equipment. The leadership then uses this information to adjust the plan and execute the mission.

Missions throughout the FTX scale in complexity and size based on class performance. A high-performing company may execute platoon-level attacks, ambushes, and movements to contact. A struggling class might remain focused on squad-level operations. The culminating mission — typically the final 48 hours of the FTX — includes a 12-mile movement and often involves an attack to seize an objective, immediately followed by a hasty defense in urban terrain. This scenario simulates combat in dense, complex environments. Over the course of these 48 hours, trainees will have moved more than 16 miles, operating on minimal rest under continuous pressure. This final test demands not only tactical proficiency but immense physical endurance and mental toughness.

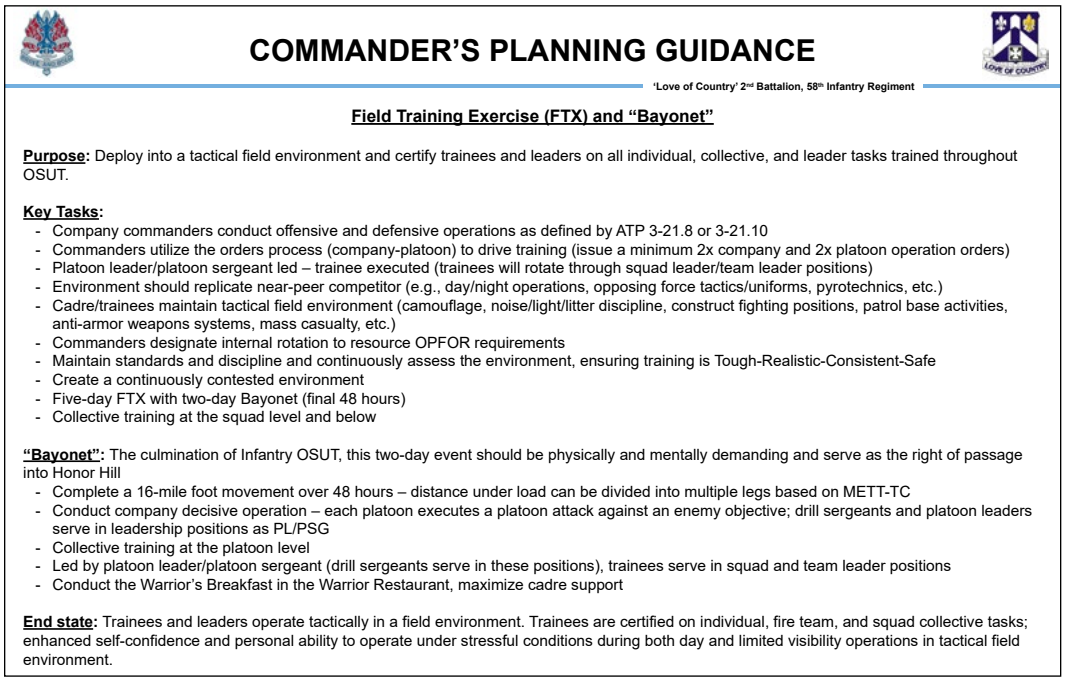
Leadership Development and Role Modeling

Our battalion makes intentional efforts to integrate leadership into the exercise in ways that build credibility and provide mentorship. We often recruit Infantry Basic Officer Leader Course (IBOLC) graduates to serve as platoon leaders during the FTX. This provides invaluable repetitions

A mini-drone operated by Bravo Company, 2-58 IN observes opposing force soldiers on the objective during the company's final field training exercise. (Photo courtesy of author)

for the lieutenants and gives trainees realistic experience with junior officer leadership before arriving at their operational units. It also allows lieutenants the chance to lead Soldiers they may serve with in their next unit of assignment.

Within the squads, drill sergeants serve as squad leaders. Their diverse experience across all infantry formations provides a doctrinally grounded model of what "right" looks like at the small-unit level. This builds leadership credibility with the trainees, reinforcing standards through presence and examples.



COMMANDER'S PLANNING GUIDANCE

'Love of Country' 2nd Battalion, 58th Infantry Regiment

Field Training Exercise (FTX) and "Bayonet"

Purpose: Deploy into a tactical field environment and certify trainees and leaders on all individual, collective, and leader tasks trained throughout OSUT.

Key Tasks:
- Company commanders conduct offensive and defensive operations as defined by ATP 3-21.8 or 3-21.10
- Commanders utilize the orders process (company-platoon) to drive training (issue a minimum 2x company and 2x platoon operation orders)
- Platoon leader/platoon sergeant led – trainee executed (trainees will rotate through squad leader/team leader positions)
- Environment should replicate near-peer competitor (e.g., day/night operations, opposing force tactics/uniforms, pyrotechnics, etc.)
- Cadre/trainees maintain tactical field environment (camouflage, noise/light/litter discipline, construct fighting positions, patrol base activities, anti-armor weapons systems, mass casualty, etc.)
- Commanders designate internal rotation to resource OPFOR requirements
- Maintain standards and discipline and continuously assess the environment, ensuring training is Tough-Realistic-Consistent-Safe
- Create a continuously contested environment
- Five-day FTX with two-day Bayonet (final 48 hours)
- Collective training at the squad level and below

"Bayonet": The culmination of Infantry OSUT, this two-day event should be physically and mentally demanding and serve as the right of passage into Honor Hill
- Complete a 16-mile foot movement over 48 hours – distance under load can be divided into multiple legs based on METT-TC
- Conduct company decisive operation – each platoon executes a platoon attack against an enemy objective; drill sergeants and platoon leaders serve in leadership positions as PL/PSG
- Collective training at the platoon level
- Led by platoon leader/platoon sergeant (drill sergeants serve in these positions), trainees serve in squad and team leader positions
- Conduct the Warrior's Breakfast in the Warrior Restaurant, maximize cadre support

End state: Trainees and leaders operate tactically in a field environment. Trainees are certified on individual, fire team, and squad collective tasks; enhanced self-confidence and personal ability to operate under stressful conditions during both day and limited visibility operations in tactical field environment.

Figure 1 — Commander's Planning Guidance

Orders and Communication: Enforcing Discipline and Doctrine

To maximize realism, all operations follow doctrinal troop leading procedures. Company OPORDs are delivered by the commander, followed by platoon-level terrain model briefs and rehearsals. The goal is shared understanding, practiced execution, and rapid decision-making. This allows trainees to gain valuable experience by hearing an order from an Army leader and seeing a terrain model — often for the first time.

Daily fragmentary orders are delivered via radio to simulate battlefield communication constraints. Trainees must receive, digest, and execute orders quickly — without face-to-face clarification. This builds confidence in their leaders and enforces disciplined communication, which is essential in the chaos of LSCO.

The company tactical operations center conducts battle tracking, receives reports, and issues sustainment through doctrinal processes. Trainees must radio in 9-line medical evacuation requests, SALUTE (size, activity, location, unit, time, equipment) reports, situation updates, and logistics requirements. They are expected to request food, water, and ammunition over the radio, minimizing administrative pauses in training. This interaction reinforces the necessity of effective reporting and decentralized execution in a distributed, high-tempo fight.

Training for Tomorrow's Fight

The FTX is more than just a capstone event — it's the crucible that forges civilians into Infantry Soldiers prepared for tomorrow's fight. By simulating LSCO with realism, integrating leadership, reinforcing the orders process, and incorporating modern threats like sUAS, the FTX ensures OSUT graduates enter the operational force with the foundational skills and mental resilience required to win in combat.

From the battalion to the company level, our shared goal is clear: prepare Infantry Soldiers to thrive in the demands of large-scale combat. The FTX provides the proving ground to ensure that goal is met.

GEN Gary M. Brito, commanding general of the U.S. Army Training and Doctrine Command, summarized it best: "We need to train the most lethal warfighting Soldiers and develop competent leaders. …That's the core mission."[1]

At 2-58 IN, we take that mission seriously — knowing that every iteration of OSUT shapes the strength, discipline, and lethality of the force that will fight and win our nation's future battles.

Notes

[1] GEN Gary Brito, "Brito Calls on Leaders, Soldiers to Master the Basics," Association of the United States Army (AUSA), 27 September 2024, https://www.ausa.org/news/brito-calls-leaders-soldiers-master-basics.

CPT Charles J. Gulotta commanded Bravo Company, 2nd Battalion, 58th Infantry Regiment, 198th Infantry Training Brigade, Fort Benning GA. His previous assignments include serving as a heavy weapons platoon leader in Delta Company, 1st Battalion, 508th Parachute Infantry Regiment, 3rd Brigade Combat Team (BCT), 82nd Airborne Division, Fort Bragg, NC; scout platoon leader in Charlie Troop, 5th Squadron, 73rd Cavalry Regiment, 3rd BCT, 82nd Airborne Division; and executive officer in Charlie Troop, 5-73 CAV. CPT Gulotta earned a bachelor's degree in mechanical engineering from the U.S. Military Academy at West Point, NY, and a master's degree in organizational leadership from Columbus State University.

LTC Mike Moore recently commanded 2-58 IN. He has proudly led many of our Army's greatest Soldiers in Airborne, Stryker, and Infantry training formations in Iraq, Afghanistan, and home stations. He received his undergraduate degree in mass communication at Miami University and a master's in aeronautical science at Embry Riddle Aeronautical University.

A Soldier in the Multi-Functional Reconnaissance Company, 2nd Battalion, 327th Infantry Regiment, 1st Mobile Brigade Combat Team "Bastogne" uses a Skydio drone during a training exercise at Fort Campbell, KY, on 16 June 2025. (Photo by SGT Jewell Fatula)

The MFRC and the Future of Army Reconnaissance

CPT PRESTON B. WILEY

At the Reconnaissance and Surveillance Leaders Course (RSLC), our team trains more than 300 students annually across the joint force — including Infantry scouts, reconnaissance Marines, tactical air control party (TACP) Airmen, and a range of special operations personnel. Our program of instruction spans fundamental small-unit tactics, high frequency (HF) radio communications, advanced land navigation, and troop leading procedures (TLPs)/military decision-making process (MDMP) as applied to reconnaissance teams. Although RSLC has operated for over 25 years, the force it serves, and the demands placed upon it, have changed significantly. Once focused on validating and certifying members of long-range surveillance units (LRSUs), RSLC now supports a force in transition from the global war on terrorism to a large-scale combat operations (LSCO) environment. One of the most notable changes is the casing of the colors for every infantry brigade combat team cavalry squadron and the emergence of a new entity: **the multi-functional reconnaissance company (MFRC)**.

The MFRC concept was first rolled out in the 2nd Mobile Brigade Combat Team (MBCT), 101st Airborne Division (Air Assault), and it has remained a point of intrigue over the past two years. MFRCs emerged out of necessity; with the deactivation of the cavalry squadrons' dismounted reconnaissance troops, the brigade commanders were left without a dedicated infantry reconnaissance formation to answer priority intelligence requirements (PIRs). It is no surprise then that many of these emerging MFRCs are pulling a noticeable number of personnel from the old C troops and training them for this new approach to brigade reconnaissance.

These questions then remain:
- What exactly are these new units?
- How are they manned?
- What technologies do they employ?
- What is their mission set?

To answer any of these, we must begin with a simple truth: **Every MFRC is different**. There is no existing doctrinal publication that defines their employment. In many ways, these units are writing doctrine as they go: adapting to their brigade's needs, experimenting at combat training centers (CTCs), and informing what will likely become the Army's future approach to echeloned reconnaissance.

Through virtual teleconferences (VTCs), planning meetings, and our most recent temporary duty (TDY) to the Joint Readiness Training Center (JRTC), RSLC is forging relationships with MFRCs to inform their development, coordinate their efforts, and provide structured feedback during training events. Each MFRC shares some level of commonality, but each has a modified table of organization and equipment (MTOE) designed with noticeable differences. What unites them is a core synthesis of Infantry scouts, robotics and autonomous systems (RAS), and electromagnetic warfare (EW) assets. The size and scope of these sub-formations are broadly mission-set based, as some MFRCs are focusing heavily on attrition for the brigade high-priority target list (HPTL), while others are taking the more traditional approach of answering PIRs while remaining undetected.

During RSLC's recent observation of 1/101's MFRC at JRTC, we identified key areas for improvement. Chief among them was something RSLC emphasizes daily: the enduring relevance of **reconnaissance fundamentals** that have broadly been unchanged since the long-range reconnaissance patrols (LRRPs) of the Vietnam era. These fundamentals include:

- **Stealth across all domains:** counter-tracking, communication window discipline, deliberate patrolling, and thermal defeat systems;

- **Deliberate mission planning** with robust contingency frameworks to offset risk (engagement criteria, compromise plans, evasion and escape corridors); and

- **Reconnaissance-specific fieldcraft:** camouflage, surveillance techniques, and codified North American Treaty Organization (NATO) reporting procedures.

While the MFRC demonstrated an impressive ability to project combat power deep into enemy territory, multiple casualties were preventable had these fundamentals been more strictly enforced.

As an Infantry Squad Vehicle (ISV)-enabled MBCT, 1/101's MFRC relied heavily on their wheeled mobility to make their thrust into enemy-held territory. When employed correctly, the ISV offers a significant tactical advantage as a synthesis of speed, extended reach, and improved logistical flexibility. MFRCs need to have the requisite knowledge in both planning and utilization of these assets to include instruction on ISV navigation, camouflage and signature management, and mission-specific load plans. While a great asset for enabling deep standoff operations, insufficient use of counter-tracking techniques, route and vehicle drop-off (VDO) offsetting, and camouflaging create a visual signature that can greatly

degrade stealth and survivability. Likewise, the absence of reconnaissance-specific standard operating procedures (SOPs) for ISV load plans can limit a unit's ability to sustain operations forward of the forward line of own troops (FLOT) without external resupply.

MFRC Soldiers in 2/101 MBCT conduct area reconnaissance using an unmanned aerial system during an exercise at Fort Campbell on 25 April 2024. (Photo by SGT Caleb Pautz)

Another area of improvement, not just within the MFRC but across the force, is the approach to tactical communications. HF radio remains the single most scalable, secure, and low-signature form of communication available to reconnaissance formations. For decades, RSLC has trained students to conduct directional HF shots over distances of hundreds of kilometers. However, HF proficiency remains rare in operational units, forcing many of these recon teams to default to frequency modulation (FM) communications and Android Team Awareness Kit (ATAK) messaging (methods lower in the primary, alternate, contingency, emergency [PACE] plan, but higher in risk). These alternatives often suffer from line-of-sight limitations in denied terrain and emit a larger electromagnetic signature, making command and control unreliable at best and hazardous at worst. If MFRCs are to operate effectively forward of the FLOT, HF communications must be mastered. The capability is not optional, but rather, essential for survivability and operational reach.

The rapid proliferation of unmanned aerial systems (UAS) down to the team level has been one of the most impactful transformations to emerge from the ongoing war in Ukraine. Yet, as a force, we've become so focused on acquiring the technology that we've neglected to develop disciplined employment standards. Without an SOP for offset launch/return or displacement, MFRCs can find themselves compromised due to their use of UAS. UAS variants without designated displacement criteria upon launch become liabilities — allowing enemy forces to track and target the launch points with both direct and indirect fire. There exists a meaningful use case for these drones in reducing the kill chain and bypassing the fire direction centers (FDCs) for softer targets on the HPTL, but we must be disciplined in our use of such systems. Forward of the FLOT, compromise kills. And improperly employed drones are one of the easiest ways to give reconnaissance teams away.

The final point of friction we observed during this rotation was conceptual in nature: **What is the MFRC's true purpose?** Are these units intended to be a reconnaissance "Swiss Army Knife," a hammer, or something in between? While the MFRC showed a tangible capability to attrit the HPTL, this target focus can mean that brigade leadership won't be able to fully leverage assets to pull PIRs for their course-of-action development. Historically, the strength of these forward-operating reconnaissance units has been in their ability to **infiltrate, collect information, and hand off named areas of interest (NAIs)** to maneuver elements for maximal attacks/seizures. This focus has made those formations necessarily small teams of well-trained experts tasked with high-risk, high-reward missions. Today, we are inserting larger formations into the same spaces, all while tasking them with both collection and strike roles. These companies are unquestionably valuable, but their dual-purpose nature raises a doctrinal question: How do we achieve persistent, all-weather information collection at the division level?

Just as the MFRC was created to satisfy PIRs at the brigade level, is it now time to consider reestablishing long-range surveillance (LRS) capabilities for divisions? Current doctrine and feedback from MFRCs suggest a clear need. Small, technology-enabled reconnaissance formations are already demonstrating effectiveness in denied environments and under challenging weather conditions. Providing division leaders with a comparable all-weather capability is far from just advisable; it is vital in the current operational environment. As the Army continues to transform in contact, RSLC and its cadre of subject matter experts stand ready to shape the next evolution of Army reconnaissance.

CPT Preston Blaine Wiley currently serves as an instructor for the Reconnaissance and Surveillance Leaders Course, Airborne and Ranger Training Brigade, Fort Benning, GA. His previous assignments include serving as a rifle platoon leader in 2nd Battalion, 325th Airborne Infantry Regiment, 2nd Brigade Combat Team (BCT), 82nd Airborne Division; scout platoon leader in 1st Squadron, 73rd Cavalry Regiment, 2nd BCT, 82nd Airborne Division; and sniper employment officer in 1-73 CAV. CPT Wiley earned a bachelor's degree in defense and strategic studies from the U.S. Military Academy at West Point, NY.

The Multi-Domain Effects Platoon:

A Brigade-Level Solution for Multidomain Operations

1LT PARKER MITCHELL

An electronic warfare (EW) team in a hide site deep in the woods notices a suspected enemy frequency. At the same time, an aerial EW platform using the same equipment finds the same signal. With both platforms locating the emitter, a computer automatically calculates the probable location of the enemy. A platoon leader, seeing this on his integrated EW display, tasks an unmanned aerial system (UAS) to confirm or deny the enemy presence. The UAS spots three enemy armored personnel carriers and an antenna farm. He immediately launches three loitering munitions, stacking them over the target area. As that happens, the platoon leader jams the hostile frequency, then strikes the target and rapidly displaces. The enemy command post is destroyed.

The previous paragraph reads like a fictional scene from a John Antal novel, but it actually happened this spring during a training exercise at the Joint Multinational Readiness Center (JMRC). This vignette, far from fiction, illustrates the emerging capability of the multi-domain effects platoon (MDEP). The scenario underscores how integrating electronic warfare and unmanned systems at the brigade level can produce decisive results in real time. The MDEP is a new formation designed to bring multidomain effects to the brigade fight, enabling rapid detection and destruction of threats by converging capabilities across the electromagnetic spectrum (EMS), cyber, and physical domains. In an era where the Army's doctrine emphasizes that "all operations are multidomain operations," the MDEP provides a practical way for brigade commanders to harness effects traditionally only available at higher echelons.[1] It is a direct response to the Army's ongoing effort to implement multidomain operations (MDO) at lower levels, mirroring some principles of the multi-domain task force (MDTF) concept on a smaller scale. Just as the theater-level MDTFs integrate long-range fires with cyber-electronic effects, the MDEP combines EW and UAS capabilities under one tactical leader to achieve "convergence" or "an outcome created by the concerted employment of capabilities from multiple domains and echelons against combinations of decisive points in any domain to create effects."[2] In short, the MDEP is a brigade-level solution to fight and win in a contested, multidomain environment.

Soldiers assigned to the 2nd Mobile Brigade Combat Team, 101st Airborne Division prepare for a convoy operation during a training exercise on 10 April 2025. (Photos by SGT Collin Mackall)

The MDEP Concept and the Multi-Functional Reconnaissance Company (MFRC)

The MDEP was born from the recognition that brigades

lack an organic means to sense and strike across domains in their close and deep fights. Organizationally, the MDEP is a platoon within the MFRC, working alongside hunter-killer platoons (HKPs). Unlike a traditional cavalry troop or military intelligence company, the MFRC is a separate company under the brigade headquarters, reporting directly to the brigade combat team's (BCT's) commander. This command relationship empowers the brigade to employ the MDEP's effects without layers of coordination, placing multidomain tools at the brigade commander's immediate disposal. The two HKPs provide traditional reconnaissance and small UAS, while the MDEP adds technical sensors and long-range precision effects. Together, these platoons form a layered and multi-functional reconnaissance asset for the brigade commander: The HKPs find and fix the enemy, and the MDEP can find, fix, or finish targets though kinetic or non-kinetic fires. In effect, the MDEP within the MFRC gives the brigade a mini-MDTF: It integrates non-kinetic and kinetic effects under one commander at the tactical level, albeit on a far smaller scale than an MDTF. It is important to note, however, that while the MDEP mirrors the MDTF's principles of convergence and integration, it does not replicate the theater-level range or strategic impact of an MDTF. Instead, it provides a scaled-down, brigade-focused capability that aligns with MDO principles without equating the two formations directly.

Organization and Capabilities of the MDEP

The MDEP is unique in its combination of personnel and equipment from what were previously disparate and siloed career management fields. It includes both EW specialists and UAS operators and maintainers working side by side, forging a new kind of platoon that can sense, kill, and protect on behalf of the brigade commander. While the platoon leadership can be military occupational specialty agnostic, having someone with either maneuver leadership experience or brigade staff experience would be ideal. This leadership blend helps bridge the doctrinal gap between technical EW and UAS operations, maneuver, and synchronization with staff.

Dismounted Electronic Warfare Teams: A portion of the MDEP consists of dismounted EW Soldiers equipped with the Terrestrial Layer System Manpack (TLS Manpack). These are backpack-based electronic support and attack systems that allow Soldiers on foot to detect and jam enemy signals. Carrying the TLS Manpack, MDEP Soldiers can scan for enemy electronic emissions and quickly relay signals of interest. Once an emitter is identified, these Soldiers can conduct electronic support (ES) by precisely locating and identifying the signal source, providing target data to the platoon leader and higher headquarters. If authorized, they can then execute electronic attack (EA) using the manpack's jamming capability, disrupting the enemy's communications or sensors.

Mounted EW Platforms: The MDEP also fields mounted EW teams operating the Tactical Electronic Warfare System – Infantry (TEWS-I), a vehicle-mounted EW suite for mobile brigades. The TEWS-I is integrated onto the Infantry Squad Vehicle (ISV), giving the platoon a mobile electronic sensing and attack platform. These mounted teams complement the dismounted teams by covering more ground quickly and carrying more powerful systems. Networked together, multiple TEWS-I platforms and manpacks can triangulate emitters in real time, dramatically shortening the sensor-to-shooter loop.

Aerial Electronic Warfare and Sensors: To extend its reach, the MDEP employs aerial assets carrying EW payloads. In some configurations, the platoon can mount EW systems that are typically Soldier-borne onto a UAS, creating an airborne EW platform. In addition to official programs of record, MDEP Soldiers have experimented with homegrown solutions, such as attaching commercially available electronic sniffers to quadcopter drones to improvise an airborne collection tool. By elevating sensors, the platoon greatly increases line of sight in the EMS, detecting low power or distant signals that ground teams might miss. Aerial EW assets can also rapidly reposition around the battlespace, enabling the platoon to hunt for enemy emitters across a wide area or to provide overwatch EW support to a maneuver company on short notice. This airborne component of the MDEP brings a unique convergence of air and cyber/EW domains at the platoon level.

A Soldier assigned to the 2nd Mobile Brigade Combat Team, 101st Airborne Division sets up the Kraken during exercise Spectrum Blitz 25 in Germany on 10 April 2025.

Long-Range Reconnaissance and Loitering Munitions: The platoon operates the Anduril Ghost-X and loitering munitions to deliver lethal effects. Once targets are confirmed, the MDEP can launch loitering munitions to strike. The ability to find, fix, and finish an enemy command post with organic sensors and shooters, without calling for assets held above brigade, allows the brigade commander to still provide kinetic fires within the context of Army Structure.

Soldiers assigned to the 101st Airborne Division (Air Assault) train with the new Anduril Ghost-X small unmanned aerial system. (Photo by PFC Richard Ortiz)

Integrating EW and UAS: Overcoming Historical Misuse

The creation of the MDEP also addresses a history of misuse and underemployment of EW and UAS assets in brigade operations. For years, EW teams and tactical UAS existed in parallel, often siloed in separate units with narrowly defined roles. If equipped, EW personnel at the BCT level were typically used for static signals collection, not as a maneuver support asset. Similarly, brigade UAS were managed by military intelligence companies and primarily tasked, if tasked at all, with surveillance of named areas of interest. This resulted in neither capability being fully integrated into the brigade's scheme of maneuver or fires. Commanders tended to view EW as a strategic or theater-level tool, and UAS as an adjunct to the intel staff, not as direct contributors to the close fight. This stove-piped approach led to missed opportunities and, often, skepticism from maneuver leaders as to the effectiveness of either. In training exercises, it was not uncommon for maneuver battalions to ignore available jamming capabilities, or for UAS feeds to go unused by those who needed them most, due to communication gaps and classification issues. Additionally, doctrine for many years lacked clarity on how electronic attacks could be offensively employed at the tactical level. This created a cautious mentality where jammers were seldom used for fear of breaking rules or causing collateral interference.

The MDEP looks to actively change this paradigm, but not without overcoming institutional inertia. A vivid example of breaking the mold occurred during a recent exercise at JMRC called Spectrum Blitz 25. In that event, the brigade's maneuver force was tasked with breaching a well-defended obstacle belt over a 1.5-hour period, under constant enemy observation and fire. Many EW leaders strongly disagreed with this approach. Normally, jamming is done sporadically and for short periods of time for the protection of the jamming unit. In the context of supporting a combined arms breach, this is fundamentally misguided and shows the large gap that exists in understanding how EW should support maneuver. The MDEP leadership saw an opportunity to support maneuver with non-kinetic fires. For the entire breach window, they deployed an EW team to continuously jam a detected signal of interest. This level of prolonged, aggressive jamming was unconventional, but it exemplified the kind of EW support required as the Army adapts to MDO and large-scale combat operations. However, sustaining such extended jamming is only feasible when synchronized with the other warfighting functions. Prolonged jamming is easily detected by enemy sensors, yet refraining from it solely out of fear of detection would be as shortsighted as suggesting engineers refrain from breaching a mined wire obstacle because they might be observed or insisting that artillery never fire because enemy counter-battery radars will track it. Instead, this risk underscores the importance of fully integrating EW into the brigade's scheme of maneuver and across the other warfighting functions, ensuring these capabilities are employed to maximum effect while also improving the EW element's survivability.

Critically, this "non-standard" use of EW was doctrinally justified as both a maneuver support and a fires function. Army doctrine has evolved to recognize electronic attacks as a form of fires: "Electronic attack… is considered a form of fires."[3] By jamming enemy communications, the MDEP effectively delivers suppressive fires in the EMS. Analogous to an artillery smoke screen or a suppression of enemy air defenses (SEAD) mission, it neutralized the enemy's ability to interfere with the breaching force. This action is in line with doctrine that places offensive cyber and EW effects within the fires warfighting function to "deny, degrade, disrupt, and destroy" enemy capabilities as part of the combined arms fight. Moreover, Field Manual 3-12 states, "EW professionals deliver effects in the EMS against adversary networks, systems, and weapons. These actions reduce adversary combat power, protect friendly forces, and enhance friendly forces and weapons' lethality."[4] In this breach vignette, the MDEP's jammer was employed exactly in that spirit, demonstrating that the mindset of holding back EW and having it focus on passive collection is not conducive to supporting the maneuver units and MDO. Brigades must use these capa-

bilities dynamically and even offensively in accordance with doctrine and the tactical situation.

Toward Multidomain Integration at Lower Echelons

The MDEP is more than just an experimental platoon — it is a pioneering model for integrating MDO concepts into brigade-level formations. In an Army that envisions convergence and cross-domain synergy as keys to victory, the MDEP offers a concrete, field-tested way to bring those abstract concepts down to the ground level where platoons and companies fight. It serves as a bridge between the strategic/theater capabilities of organizations like the MDTF and the immediate needs of brigade commanders on tomorrow's battlefields. By mirroring MDTF principles (integrating cyber, EW, information, and precision fires) within a brigade unit, the MDEP fills a critical gap in the force structure. It does so appropriately scaled (the brigade is not launching hypersonic missiles or engaging in offensive cyber operations), but it is leveraging the EMS and robotic systems to enhance its lethality and survivability. This platoon has shown that a brigade can sense and strike across multiple domains in near-real time, creating multiple dilemmas for the enemy and protecting friendly forces.

The need for such formations is underscored by current threat trends. Near-peer adversaries have invested heavily in EW, drones, and anti-access/area denial systems; they will contest U.S. forces in every domain down to the tactical level. Our brigades can no longer afford to regard EW or UAS as niche enablers controlled from afar. The maneuver leader of 2025 must understand and employ these tools as readily as they do organic kinetic fires. The MDEP provides the expertise and command-and-control structure to make that possible. It embeds specialists who can advise and execute, ensuring that multidomain effects are not only planned but also immediately responsive to the fluid tactical fight. This aligns with the Army's doctrine of mission command and initiative: give lower echelons the means to solve problems in real time, in line with the commander's intent but without needing step-by-step direction.

The MDEP has demonstrated that the multidomain battle can be fought and won not just by specialized theater armies or corps but by a brigade's Soldiers.

The MDEP has demonstrated that the multidomain battle can be fought and won not just by specialized theater armies or corps but by a brigade's Soldiers. It harnesses the power of electrons and drones alongside rifles, machines guns, and cannons — bringing the fight to the enemy in novel ways. The enduring lesson is that achieving dominance on the modern battlefield requires integration at the lowest practical level. "Multi-domain operations are the rapid and continuous integration of all forms of warfare;" the MDEP answers that call at the brigade level.[5] It is a proven, scalable model for the kind of agile, lethal, and hyper-enabled formations the mobile brigade needs in order to prevail in the next conflict. By embracing and further developing the MDEP, the Army can accelerate the integration of multi-domain effects into the tactical fight, ensuring that our brigades remain one step ahead of adversaries in every domain of battle. The multi-domain effects platoon is not science fiction or conjecture — it is here now.

Soldiers assigned to the 2nd Mobile Brigade Combat Team, 101st Airborne Division set up a Tactical Electronic Warfare System-Infantry system mounted to an Infantry Squad Vehicle on 11 April 2025.

Notes

[1] Field Manual (FM) 3-0, *Operations*, March 2025.

[2] Ibid.

[3] Army Doctrine Publication, 3-19, *Fires*, July 2019.

[4] FM 3-12, *Cyberspace Operations and Electromagnetic Warfare*, August 2021.

[5] U.S. Army Training and Doctrine Command Pamphlet 525-3-1, *The U.S. Army in Mult-Domain Operations 2028*, 6 December 2018, https://adminpubs.tradoc.army.mil/pamphlets/TP525-3-1.pdf.

1LT Parker Mitchell currently serves as the innovation officer for 2nd Mobile Brigade Combat Team, 101st Airborne Division (Air Assault). He previously served as a multi-domain effects platoon leader, robotics and autonomous systems platoon leader, and rifle platoon leader in 2/101 MBCT.

The Multi-Purpose Company:

Shaping the Future Battlefield through Innovation, Sensors, and Destruction

CPT PATRICK NELSON

The Maxim machine gun was first introduced to significant combat by the U.S. Army during World War I. In 1912, each regiment received four of these machine guns, believing this quantity would be suitable. By 1919, however, the number of Maxims in each regiment had increased to 336. The machine gun proved to be a combat multiplier that changed the history of warfare. Like the introduction of the machine gun, the multi-purpose company's (MPC's) capabilities in sensing and targeting the enemy will also have a sizeable impact on our next battlefield and must not be undervalued. The MPC is beginning to field and test unique capabilities that can change the way the U.S. Army fights, leading with sensors and electronic warfare capabilities to defeat our adversaries in future conflicts.

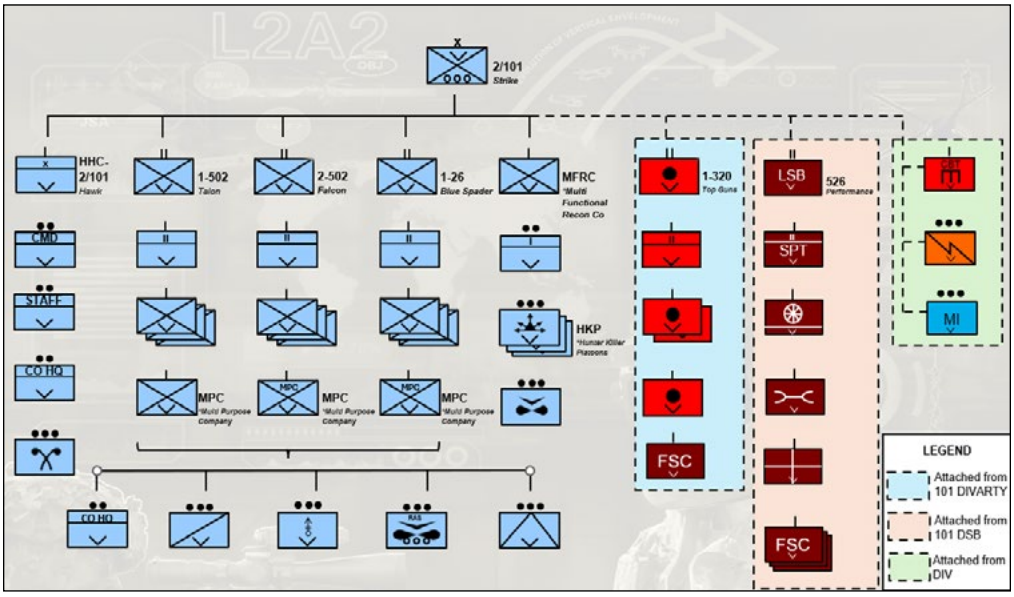
In February 2024, the 2nd Brigade Combat Team, 101st Airborne Division (Air Assault) transitioned into a mobile brigade combat team (MBCT) as part of the Army's Transformation in Contact (TIC) initiative. The MBCT construct consists of three infantry battalions with three organic rifle companies, a headquarters company, and an MPC. When required, enabler battalions such as the field artillery battalion, brigade support battalion, and brigade engineer battalion are then attached to the MBCT from their new respective division headquarters, while the cavalry squadron was deactivated.

The 1st Battalion, 502nd Infantry Regiment, 2/101 MBCT, first activated its MPC (Wardog Company) on 1 March 2024, consolidating historical headquarters and headquarters company (HHC) assets into the company while also standing up a new dismounted anti-tank (AT) platoon and robotics and autonomous systems (RAS) platoon. Wardog Company was task-organized the same as the other two infantry battalions in the MBCT, but we had the freedom to adjust how we fight and manage specific rolling stock within the RAS platoon and AT platoon. We approached this from a mobile, light, and flexible formation containing Infantry Squad Vehicles (ISVs) for mobility and High Mobility Multipurpose Wheeled Vehicles (HMMWVs) for command and control. During several collective field exercises, we developed tactics, techniques, and procedures (TTPs) on how we could synchronize multiple warfighting functions to communicate the reconnaissance picture while preserving the force and accomplishing the mission. Collaboration with the other MPCs in 2/101 MBCT was crucial to developing sound TTPs and sharing lessons learned. Wardog Company found our purpose as defining the enemy composition and disposition on the battlefield, disrupting adversary collection efforts, and when applicable, destroying high-payoff targets through direct and indirect fire.

The MPC currently includes:

• The **scout platoon** consists of three reconnaissance teams and one sniper section. It specializes in area, route, and counter reconnaissance with small unmanned aerial systems (sUAS) and ISVs. To avoid being compromised by aerial observation prior to ground observation, the platoon leads with sensors before scouts establish a surveillance site, reducing risk to the force. The scout platoon currently has two sUAS with a projected gain of four more systems once the RAS platoon receives medium-range reconnaissance (MRR) and long-range reconnaissance (LRR) drones in the near future.

Figure 1 — 2/101 MBCT Task Organization



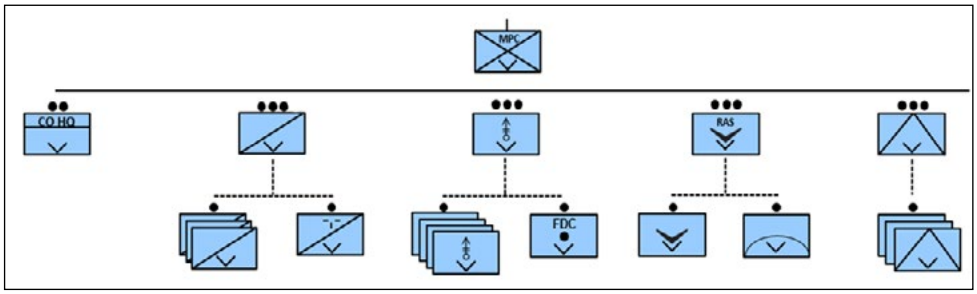


Figure 2 — Multi-Purpose Company Task Organization

• The **mortar platoon** consists of four 81mm squads with a Fire Direction Center (FDC) and headquarters section. The incorporation of purely 81mm mortars allows the platoon to stay mobile with a smaller footprint, moving mortar firing positions consistently to avoid visual contact and counter-battery to provide accurate and timely fires. The removal of 120mm mortars and their respective trailers allows increased flexibility to air assault a greater minimum force of 81mm squads with a hybrid ISV and HMMWV fleet. The incorporation of the mortar platoon into the MPC expedites the platoon's ability to process fire missions since they are synchronized with the MPC's common operating picture while the mortar platoon leader is monitoring reconnaissance reports. The battalion commander still holds tactical authority of the mortar platoon, and the MPC headquarters retains an administrative relationship in tactical operations.

• The **RAS platoon** consists of two UAS sections with each prioritizing named areas of interest (NAIs) and target areas of interest (TAIs) by distance and capability. The first section has medium-range UAS systems to collect priority information requirements (PIRs) and conduct observation handoff with the long-range UAS section that can then target through payloads or as switchblade operators. Both sections have the capabilities to harvest electronic signatures using Raspberry Pi devices that are programmed to detect enemy Wi-Fi and Bluetooth signatures. The platoon also has the capability to employ emitters that produce a simulated signature to disrupt the enemy's collection capability. The platoon is currently operating purely with sUAS with an artificial intelligence (AI) object detection capability. It is projected to receive MRR and LRR UAS, which will increase the platoon's flight range, endurance, and targeting capability.

• The **AT platoon** consists of three sections, each with a blend of short, medium, and long-range AT weapons that can use mobile ISVs to reach a vehicle drop-off (VDO) site, cache their ISVs, and occupy an attack by fire to destroy high-payoff targets observed by the scout platoon or RAS platoon. The AT platoon can assist in isolating, disrupting, and blocking key terrain and routes to enable maneuver companies' freedom of maneuver prior to the probable line of contact. The platoon has the flexibility to detach sections when additional anti-tank combat power is required to maneuver companies.

How the MPC, 1-502 IN Fights

1-502 IN adjusted from the historical employment of specialty platoons with the battalion headquarters by empowering the MPC command team to control the scout, RAS, and AT platoons. The battalion commander maintained the authority for employment and firing of the mortar platoon while the MPC command team tactically employed, coordinated, and reported the other platoons in the fight. This span of control worked effectively, allowing the battalion headquarters to control additional attachments and the three rifle companies by delegating the reconnaissance fight to the MPC headquarters. This enabled the MPC headquarters to consolidate reconnaissance reports and coordinate up and out throughout the chain of command.

A major advantage of this command relationship is the cross-coordination that naturally occurs between adjacent units. While the MPC informs higher headquarters, it also seamlessly promotes collaboration from voice and digital communications between adjacent unit headquarters regarding detailed terrain and enemy analysis of their objective. This allows a maneuver commander to request and receive assistance on advantageous terrain and enemy arrayment from the scout and RAS platoons while the AT platoon isolates key terrain or destroys high-payoff targets.

After answering PIRs or responding to deliberate reconnaissance reporting criteria, the MPC disseminated reconnaissance reports directly through operations and intelligence nets. With several reconnaissance assets sending reports, having a company headquarters consolidate this information created a clear, shared understanding. The MPC command team could effectively communicate accurate situation reports and enemy activity, which mitigated the battalion headquarters from receiving independent situation reports that varied in accuracy and timeliness from the specialty platoons. At times, the platoons submitted redundant reports while observing the same NAIs or TAIs, but assigning a company command post to battle track allowed for sound recommendations and shared understanding to move forward instead of incomplete and piecemeal reconnaissance reports.

Wardog Company employs the scout and RAS platoons from surveillance sites and launch sites to remain ready to cue and/or mix assets in several NAIs. The redundancy of reconnaissance assets is crucial to the MPC's success; observing a PIR from multiple observation platforms and angles provides the clearest picture of the enemy situation to adjacent and higher headquarters. The AT platoon remains in isolation positions to deny an avenue of approach and be in position in the vicinity of a reconnaissance section to move to a high-payoff target to engage, depending on engagement criteria.

The MPC focuses on executing three key tasks in support of the main effort: route reconnaissance, area reconnaissance, and counter-reconnaissance. The following vignettes

highlight the MPC's success as part of a combined team to answer critical PIRs while conducting counter-reconnaissance.

Joint Readiness Training Center (JRTC) 24-10 Route Reconnaissance

During JRTC 24-10, Wardog Company was tasked on the afternoon of 21 August 2024 to conduct route reconnaissance west of Route Iridium. The purpose was to identify a bypass route so that all maneuver companies could pass undetected to the northwest to posture them in vicinity of the Shughart Gordon attack. After hasty troop leading procedures, we identified that the AT platoon would support the scout and RAS platoons during route reconnaissance by isolating key terrain along the reconnoitered routes. The RAS and scout platoons consistently led with sensors (sUAS) before moving ground reconnaissance assets on routes. They moved their ISVs to a concealed cache site in a position of relative advantage to reconnoiter likely enemy positions. The AT platoon made visual and then direct contact with a mounted reconnaissance platoon (minus) at about 1700 that day. It successfully destroyed the opposing force's (Geronimo's) wheeled reconnaissance assets and neutralized enough combat power to force the withdrawal of reconnaissance forces back to the north. A large part of this success was due to the continued observation of Geronimo reconnaissance forces' counter-reaction with sUAS and reconnaissance teams.

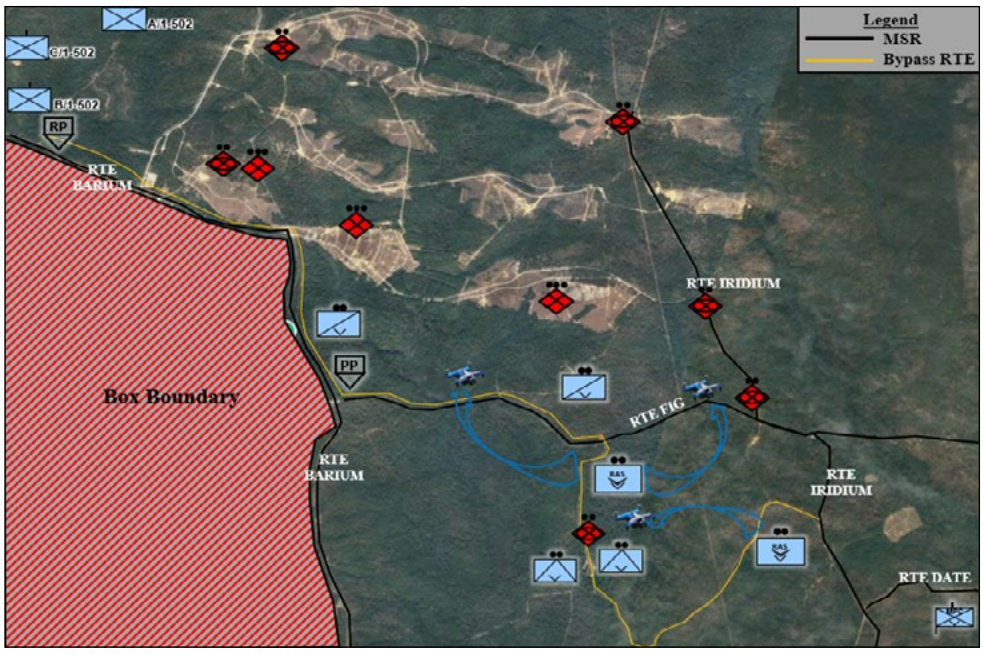
Wardog Company continued to conduct successful bounding with sUAS, covering mounted avenues of approach to trigger the scout platoon to reconnoiter terrain trafficable for the maneuver companies. After nearly 13 hours of conducting deliberate route reconnaissance, Wardog identified a mobility corridor that supported light wheeled vehicles moving in a column formation (ISVs and HMMWVs). The seamless reporting as the MPC conducted deliberate reconnaissance allowed adjacent and higher headquarters to remain informed on the status of the route that differentiated from the planned route. The command relationship with the MPC effectively allowed the battalion headquarters to simultaneously produce digital graphics for the maneuver companies while the MPC headquarters maintained voice communications with the rifle company headquarters to provide detailed information regarding the route. This allowed Wardog Company to guide all three maneuver companies through the passage and release points while isolating key terrain with the AT platoon. The interoperability of the scout, RAS, and AT platoons enabled an infantry battalion to bypass key Geronimo defensive positions and move approximately 7 kilometers to its patrol base while remaining undetected for future operations.

JRTC 24-10 Hasty Counter-Reconnaissance Mission

On the morning of 18 August, 1-502 IN transitioned to defensive operations after seizing a low water crossing. Wardog Company with the scout and RAS platoons executed area reconnaissance to the west to develop the situation and identify Geronimo's course of action while the AT platoon began engagement area development to the east. On or about 0500, a scout platoon reconnaissance team identified one BMP-2 along an unimproved trail (Route Elderberry), denying freedom of maneuver to conduct sustainment operations.

Unable to prosecute a fire mission due to engagement criteria, one AT section deployed to destroy the BMP-2 by moving to a concealed VDO site and conducting a dismounted movement. The reconnaissance team deployed sUAS to continue observation on the target, relaying to the AT section the arrayment and location of the BMP-2 after a near-side link up. This resulted in the AT section successfully destroying one BMP-2 with a Carl Gustaf flank shot. Wardog Company deployed the "hunter-killer" concept several times throughout the rotation, destroying multiple wheeled and track vehicles without being decisively engaged by conducting a reconnaissance and battlefield handover from the scout and RAS platoons to the AT platoon. This example of hasty counter-reconnaissance highlights the efficiency gained by having the MPC headquarters control these platoons. The teams executed deliberate area reconnaissance in coordination with the AT section while the MPC headquarters simultaneously sent situation reports to the battalion headquarters. This provided the commander with the decision space to allocate appropriate resources to neutralize or destroy the BMP-2 and allowed platoon leadership to prioritize tactical employment of their sections. At the same time

Figure 3 — JRTC 24-10 Route Reconnaissance



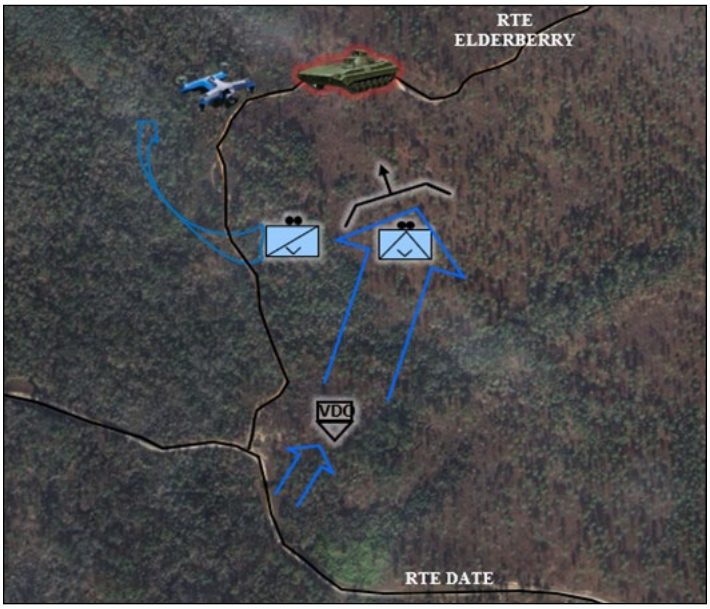


Figure 4 — JRTC 24-10 Hasty Counter-Reconnaissance Mission

the reconnaissance report was sent, the MPC headquarters deliberately informed an adjacent rifle company in the vicinity (Bulldog Company) that the route was not open to use for sustainment. This cross-coordination between multiple echelons allowed the battalion headquarters to conduct simultaneous execution with minimal wasted time.

Unique Capabilities and Initiatives of the MPC

Wardog Company, in coordination with the 2/101 MBCT's other two MPCs, developed innovative ways to influence the battlefield. Among the highlights are the Raspberry Pi and sUAS AI object detection software.

What is a Raspberry Pi?

The Raspberry Pi is a small computer that can be programmed to have multiple functions. The two primary employment techniques used by Wardog Company since the start of transition in contact are to emit Wi-Fi and Bluetooth signals or to detect a Bluetooth and W-Fi signal. You can also use a Raspberry Pi to detect signals — called harvesting — by attaching it to a drone. This allows the drone operator to pull enemy Wi-Fi or Bluetooth locations with the naming convention of their devices.

AI Object Detection using Raspberry Pis

Prior to JRTC 24-10, the RAS platoon installed a trial AI object detection software on the Raspberry Pi devices that were mounted on their sUAS. This allowed the platoon to identify and maintain observation of high-payoff targets that were not visually observed by the drone operator's control station. We tested this capability on 20 August as the RAS platoon was collecting on a NAI along a high-speed avenue of approach. The AI software positively identified several Geronimo vehicles before the Wardog drone operator had visual contact. The identification of both these vehicles resulted the destruction of one BMP-2 and one GAZ Tiger through indirect fires.

Lessons Learned

With the implementation of significant sUAS systems among multiple platoons, clear concise reconnaissance guidance proved critical for the scout, RAS, and even AT platoon to differentiate priorities in the reconnaissance fight. Despite sUAS being able to sense the enemy situation before ground reconnaissance assets can observe it, the requirement for humans to establish hidden surveillance sites has not changed. The RAS platoon detected and observed wheeled and tracked vehicles, general enemy disposition, and locations of significant tactical obstacles effectively.

The scout platoon offers a more refined analysis than what sUAS can observe. Ground reconnaissance teams can efficiently provide maneuver companies with target refinement, arrayment of the enemies' composition and disposition, bypass routes and arrayment of obstacles, and terrain analysis. Reconnaissance teams excel in recommending routes, support-by-fire positions, and assault positions to maneuver company commanders.

A significant lesson learned over the past several months is to refine the AT platoon's task and purpose to incorporate their assets in counter-reconnaissance missions, isolating key terrain and disrupting the enemy beyond the battalion's frontline trace. One of the platoon's shortfalls, however, is its lack of suppression capabilities during these missions. With the current construct, the platoon doesn't have lightweight suppression capabilities but will be augmented with medium machine guns in the short term. In restrictive terrain, the Carl Gustaf proved to be the most casualty-producing weapon for the AT platoon, largely due to the minimum standoff required to employ the weapon system. The platoon's requirement to maintain Javelins has not changed, but we recommend each section is provided two Carl Gustafs to operate in restrictive terrain when open lines of sight are not feasible to employ Javelins.

Why the MPC Has a Future in Infantry Battalions

The Russia-Ukraine War has proven that incorporating new, innovative ways of finding, fixing, and finishing the enemy is essential to accomplishing the mission. The MPC provides an infantry battalion with organic capabilities to shape the battlefield before maneuver elements cross the probable line of deployment. The ability to sense, gain a situational understanding of the enemy, and attrit combat power through agile AT sections and indirect fire enables higher headquarters decision space.

The MPC provides an organic asset in the infantry battalion that not only can shape the battlefield for its battalion headquarters but throughout the whole brigade. I can confidently say when our nation calls upon the 2nd Mobile Brigade Combat Team to fight and win our nation's wars, the Multi-Purpose Company will pragmatically shape the battlefield.

CPT Patrick Nelson served as the commander of the Multi-Purpose Company, 1st Battalion, 502nd Infantry Regiment, 2nd Mobile Brigade Combat Team, 101st Airborne Division (Air Assault), Fort Campbell, KY.

Bridging the Reconnaissance Gap:

The Stryker Brigade Combat Team's MFRC

CPT MARK PARILLO

The 1st Battalion, 23rd Infantry Regiment "Tomahawks" of the 1-2 Stryker Brigade Combat Team (SBCT) employed a multi-functional reconnaissance company (MFRC) during its rotation to the Korea Combat Training Center (KCTC) in March 2025. During the rotation, 1-23 IN worked as a maneuver battalion under a South Korean brigade, and the MFRC worked directly for the Tomahawk battalion. The operating environment of KCTC is unique from any of the U.S. Army's existing combat training centers (CTCs). KCTC consists of severely restricted terrain with peaks up to 4,000 feet in elevation. During the exercise, temperatures fell into the single digits, mountains were covered in snow, and Soldiers were exposed to wind gusts up to 30 knots.

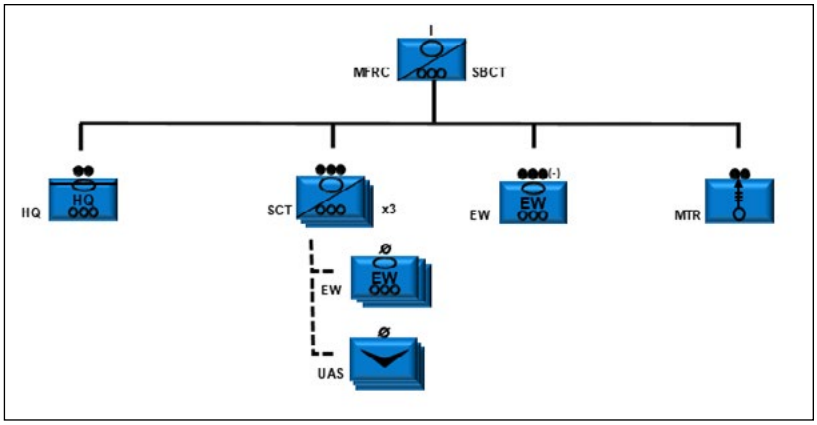


Figure 1 — KCTC MFRC Task Organization

Although the MFRC concept has been employed by the 101st Airborne Division, 25th Infantry Division, and 10th Mountain Division, 1-2 SBCT was the first Stryker brigade to implement the concept. Using existing personnel from throughout the brigade, 1-2 SBCT rapidly organized and developed the company for this training exercise. The MFRC demonstrated enhanced capability through the synchronization of aerial, electromagnetic, and terrestrial reconnaissance in a single company. While development of an organic MFRC will demand personnel and equipment sacrifices across the brigade, the KCTC rotation proved the company's capabilities are worth the investment.

MFRC Employment at KCTC

The MFRC consisted of elements from four battalions. A rifle company provided the headquarters and mortar section; the three scout platoons came from their organic battalions; and the engineer battalion provided the electronic warfare (EW) and unmanned aerial system (UAS) platoons. Prior to KCTC, integration of the MFRC consisted of leader visits to the training area to analyze our operating environment and conduct capability briefs from specialty platoons. The MFRC planned to screen a 5-kilometer front in mountainous and icy terrain. EW and UAS teams attached to each of the three scout platoons to aid in observation and targeting. The Stryker-mounted Tactical Electronic Warfare System (TEWS) operated as a distinct section a significant terrain feature behind the scout platoons and the dismounted EW assets. This distance challenged the company headquarters' ability to effectively control the dispersed reconnaissance assets.

During the KCTC rotation, the integration of EW, UAS, scouts, and indirect fires paid dividends. Dismounted EW assets typically provided the earliest indication of attempted enemy infiltration. Their detection allowed scouts to reposition and gain visual contact through small UAS (sUAS) or direct observation. Scouts called for fire on confirmed positions to disrupt the enemy's attack. The attached 120mm mortar section provided extremely responsive fires. On multiple occasions, the simultaneous use of direction-finding assets from dispersed EW teams allowed the MFRC to immediately suppress the enemy without visual observation.

The synchronization of reconnaissance assets under a single company headquarters effectively disrupted the enemy's infiltration; however, follow-on forces triggered the MFRC's displacement criteria. The enemy's speed and the substantial soldier load of the MFRC prevented the company from utilizing planned passage lanes for a rearward passage of lines. The scout platoons moved into designated no-fire areas (NFAs) and allowed the enemy to bypass their position while continuing to observe and report. The MFRC used this information to provide early warning to adjacent units and the battalion headquarters.

The disruption of enemy infiltration forces and early warning of their main attack allowed the Tomahawk battalion to prevent enemy penetration of its primary defensive line. 1-23 IN was the only battalion to retain its defensive positions, in large part due to the MFRC's integration of reconnaissance assets.

Lessons Learned from KCTC

1-2 SBCT successfully demonstrated the capabilities of a reconnaissance company integrated with EW and UAS assets. However, to be ready to win on the hardest days

of ground combat, this formation deserves the opportunity to train, fight, and sweat together in deliberate training events months before execution. The MFRC operates best as an organic company with an experienced company commander.

The MFRC did not conduct standardized individual and collective training prior to employment as a company. While each section was proficient in their assigned individual tasks, several EW and UAS attachments were unfamiliar with operating dismounted and struggled to maintain pace. This contributed to the MFRC's failure to conduct a rearward passage of lines at KCTC and likely increased casualties during the operation. Scouts demonstrated proficiency with their organic equipment and sUAS, but the company lacked redundancy for dismounted EW operators. During the exercise, an EW Soldier suffered a minor injury but remained in the field to operate his assigned system. While admirable, the lack of cross-training with scouts meant the MFRC could not quickly reposition and employ the asset with a healthy scout.

Although proficient in their assigned mission-essential tasks, each scout platoon used slightly different techniques, equipment, and training progressions led by their organic battalions. In addition, each platoon brought a different number of snipers (some platoons operated with two scout sections while others had three). A different commander had also evaluated each platoon based on different training progressions with slightly varying results.

At KCTC, the MFRC operated as an asset under a single battalion, but the company would normally fall under a brigade-level command. In this operation, the scout platoons operated in relatively close proximity and screened a single battalion's front and flank. In future utilization, the MFRC will increase dispersion, and coordination will only become more difficult. Therefore, standardized collective training is critical to ensuring MFRC platoons can effectively operate independently.

Task Organization

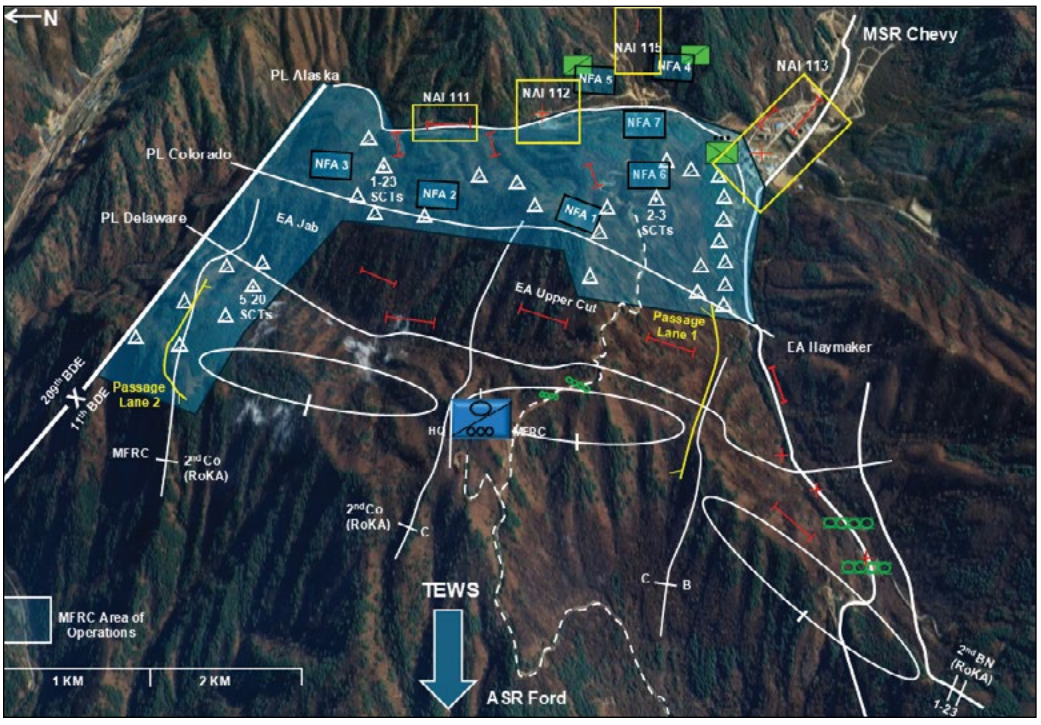
Based on the lessons learned from KCTC, Figure 3 highlights a proposed task organization for the MFRC. The recommended MFRC task organization assumes no changes to personnel assigned to the SBCT for an additional company. Instead, these personnel are already currently assigned throughout the brigade. The MFRC includes a company headquarters, three scout platoons, an EW section, and the chemical reconnaissance platoon.

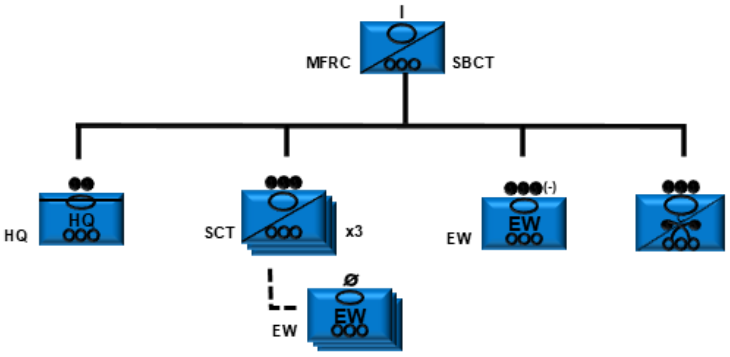
This task organization does not perfectly mirror the version we employed at KCTC. It also doesn't include a UAS platoon as scouts are fully capable of operating sUAS, nor does it maintain an organic mortar section. At KCTC, the attached mortar section allowed the company to provide responsive fires without unmasking a brigade-level indirect fire capability. The MFRC may maintain a similar effect through assignment of a mortar section in direct support of the MFRC. Additionally, the brigade may assign a 155mm battery in direct support of the MFRC during specific phases of the operation to increase lethality.

Company Headquarters. The commander, first sergeant, and executive officer are nominated from across the brigade and selected by the brigade commander as second-time leadership positions. While the brigade does not have an excess of E-8s, O-2s, and O-3s, the opportunity to be selected for leadership in the MFRC is likely to compel motivated officers and NCOs to delay a broadening assignment or Captains Career Course attendance. The same may be true for fire support officers/NCOs; however, nominations for other positions will pull some Soldiers from service in battalions without receiving a backfill.

Scout Platoons. The MFRC absorbs all three battalion scout platoons and their equipment, with the platoons operating their own sUAS. Each scout platoon maintains an attached EW team. Through daily physical and tactical training, EW Soldiers will prove to be the assets demonstrated at KCTC and mitigate some physical limitations. Additionally, this relationship allows EW Soldiers to train scouts on EW equipment

Figure 2 — KCTC MFRC Area of Operations





HQ:
- 1x LMTV
- 2x JLTV
- 1x ICVV

Scout PLT:
- 3x Stryker
- 3x Dismounted sections
- 1x Sniper team attached
- 1x sUAS system
- Dismounted EW systems (attached)

EW:
- Dismounted EW systems (detached)
- TEWS

CBRN Recon PLT:
- 3x NBCRV
- 3x CBRN Recon teams

Position	Rank	"Bill Payer"
Company Headquarters		
CO CDR	O3	Brigade Nominated
CO XO	O2	Brigade Nominated
CO 1SG	E8	Brigade Nominated
RTO	SIG SPT NCO	Infantry Battalion
Training Room NCO	E5	Infantry Battalion
Supply NCO	E5	Brigade Support Battalion
Supply Clerk	E4	Brigade Support Battalion
FSO	O2	Field Artillery Battalion
FSO NCO	E6	Field Artillery Battalion
Scout PLTs		
ORG Scout PLT	Various	All Infantry Battalions
Electronic Warfare PLT		
ORG EW PLT	Various	Military Intelligence Company
EW Chief	WO2	HHC BDE
Chemical Reconnaissance PLT		
ORG Chemical Reconnaissance PLT	Various	HHC BDE

Figure 3 — Recommended MFRC Task Organization

and scouts to train EW Soldiers on reconnaissance fundamentals. Cross-training increases the formation's capabilities while developing critical redundancies. Dismounted EW teams conduct the platoon consolidated electronic warfare training strategy (EWTS) with the EW section.

EW Platoon. The entirety of the EW platoon falls under the MFRC. Dismounted EW operators integrate with their assigned scout platoons, and the mounted TEWS operates as an independent section. Under command of the MFRC, EW platoon leadership controls the TEWS during tactical employment. The EW platoon is responsible for all technical training for both dismounted and mounted EW Soldiers.

Chemical Reconnaissance Platoon. While the MFRC did not contain the chemical reconnaissance platoon at KCTC, the MFRC is a natural headquarters for this reconnaissance asset. Under the new SBCT structure, the chemical reconnaissance platoon reports directly to the headquarters and headquarters company at brigade. The MFRC is more capable of controlling the tactical employment of the platoon. It can synthesize the information passed from the chemical reconnaissance platoon to alleviate the strain of the brigade tactical operations center managing the sustainment and reporting of a single platoon.

Training

As 1-2 SBCT experienced at KCTC, the MFRC is tasked with moving further and living in more austere environments for a longer duration than line companies. This takes a unique mentality that must be developed through realistic training over time. NCOs and officers should attend either the Reconnaissance and Surveillance Leaders Course (RSLC) or Cavalry Leader's Course to rapidly develop MFRC capability and competency. Additionally, the SBCT may provide MFRC leaders priority in schools that train sustained combat in austere conditions like the Cold Weather Leader Course (CWLC) and Jungle Operations Training Course (JOTC). No matter where the MFRC is tasked to operate, the organization needs resident expertise to appropriately train and equip Soldiers.

The proposed MFRC must conduct a deliberate training progression from individual to company certification. Individual training consists of professional military education, emphasis on technical competencies with equipment exclusive to the MFRC, and reconnaissance skills. The first echelon of multi-functional certification by the MFRC commander is section situational training exercise (STX). MFRC section and platoon STX can nest with rifle company and infantry battalion echelon training to maximize concurrent training opportunities. Depending on mission requirements, the MFRC may attach scout platoons directly to a battalion. Concurrent training will ensure both the infantry battalion and the MFRC's scout platoons are prepared for enabler integration. The brigade commander will certify the MFRC through a full mission profile company STX prior to utilization during the brigade culminating training event or CTC rotation.

As the MFRC develops its collective training model, current doctrine is insufficient in defining the company's

proficiency. In the interim, the MFRC should utilize the cavalry troop's mission-essential task list (METL) as a baseline along with platoon battle tasks for scouts, EW, and the chemical reconnaissance platoon. As a brigade asset, the MFRC should work hand in hand with its headquarters to prioritize specific tasks nested within the commander's intent.

The MFRC may struggle to find the frontage required to replicate the brigade's deep area at local training areas. Traditional company STX or combined arms live fires are less likely to provide a realistic training scenario for the MFRC vice a traditional infantry rifle company. To train the MFRC as a collective while limiting additional costs, brigades should seek opportunities to deploy the MFRC as part of larger exercises. SBCT MFRCs are excellent candidates to serve as opposing force (OPFOR) support at the National Training Center (NTC). This presents a unique opportunity to strain communications, logistics, and provide the OPFOR commander a capable asset. This utilization will have to nest within the NTC scenario and requires prior coordination with NTC OPFOR.

Command Relationships

By moving battalion scout platoons to the MFRC, an organic MFRC fills the reconnaissance capability gap at the brigade level by creating a similar issue for the infantry battalions. Depending on the mission, the brigade commander may choose to attach scout platoons to the battalions or maintain the organic MFRC. The MFRC can prepare for both types of employment through two courses of action.

Course of Action 1: *Organic MFRC throughout the training progression*

Scout platoons align under the MFRC headquarters. All training besides MFRC certification is planned and executed by the company. In addition to the MFRC training progression, scout platoons must attach to infantry battalions for specific exercises to train enabler integration. Platoons may certify through an MFRC-specific exercise or as an attachment to an infantry battalion.

Course of Action 2: *Organic MFRC only for collective training*

Scout platoons and their attached EW Soldiers align under infantry battalions for individual through platoon-level training. In this scenario, the brigade must standardize individual and collective gates for the scout platoons. Infantry battalions are responsible for preparing scout platoons to meet these requirements. The MFRC commander works with the infantry battalions to certify scout sections and platoons. Finally, the MFRC must be afforded the opportunity to train and certify as an organic company.

The combination of aerial, electromagnetic, and terrestrial reconnaissance is essential to maximize the brigade's reconnaissance capability.

1-2 SBCT's lessons learned from KCTC reveal the limitations of a part-time MFRC. The standardization of training gates and MFRC certification at the scout section and platoon level will mitigate some of these disadvantages. However, an organic MFRC through the duration of the training progression maximizes the reconnaissance capability in the brigade.

Conclusion

1-2 SBCT's employment of the MFRC at KCTC proved that a SBCT can task organize and equip the MFRC to be an extremely capable asset. The combination of aerial, electromagnetic, and terrestrial reconnaissance is essential to maximize the brigade's reconnaissance capability. The integration of the personnel and equipment assigned to the MFRC requires a deliberate training progression and multi-functional certification. The removal of the cavalry squadron severely limited a brigade's ability to see the battlefield. If the brigade does not maximize remaining reconnaissance assets through training synchronization, redundancy, and survivability, it risks entering the next conflict blind.

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Multi-Functional Reconnaissance Team:
The Fighting Formation of the Future

MAJ JONATHAN R. PAUL
1SG MILES Q. CAPEHART

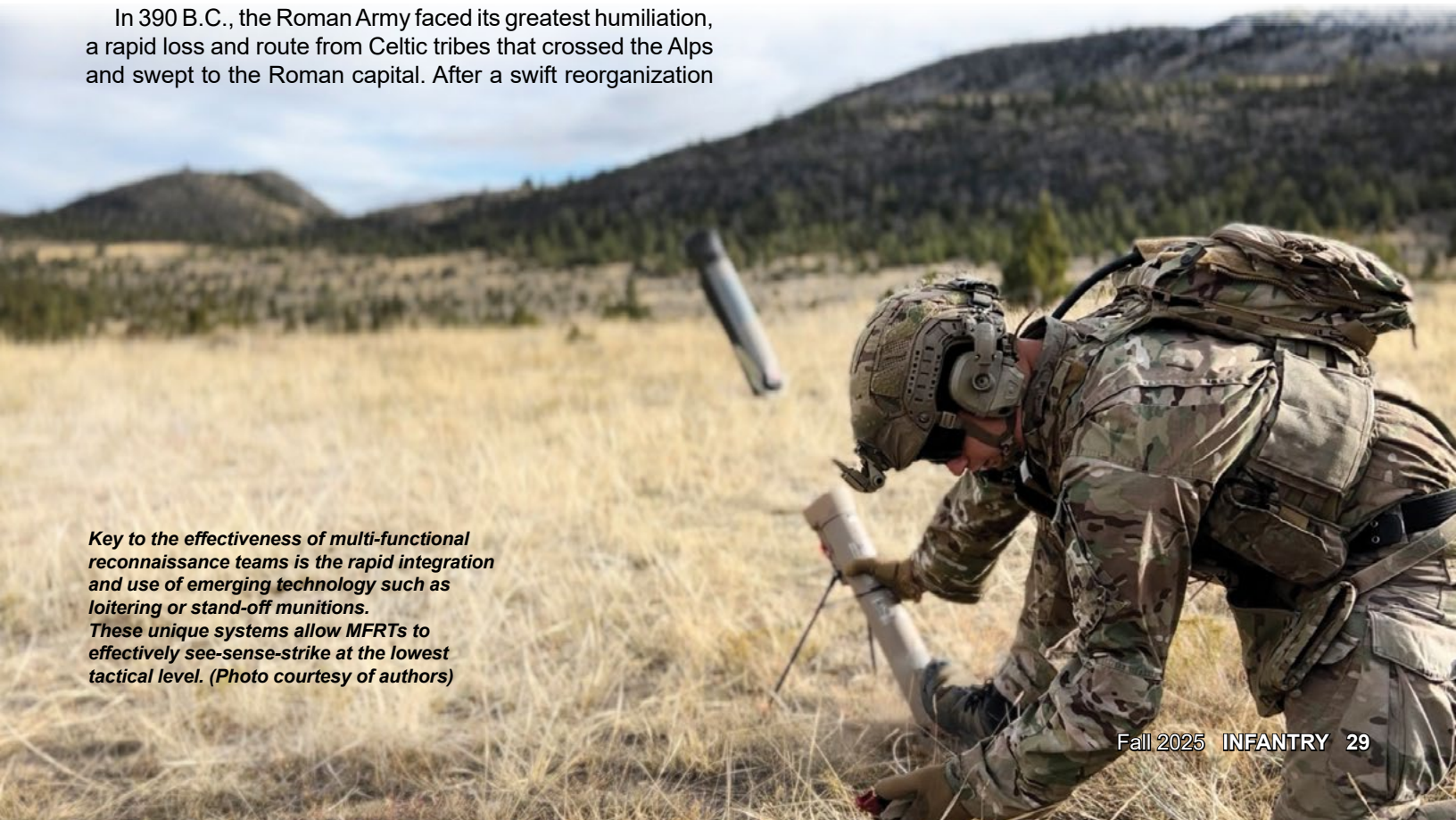
"There are two perils in the arguments surrounding military modernization: that nothing has fundamentally changed, and that everything has."

— Jack Watling[1]

The Information Age demands a fighting formation that can operate on multiple spectrums, fight a multitude of mission sets, and win in the land domain. We must push our formations into the modern era with new ideas and experimentation. The multi-functional reconnaissance team (MFRT) encapsulates these ideas and combines new and old practices into a unified fighting formation. In this article, we will examine the 75th Ranger Regiment's MFRT formation, the operating concepts this element is designed to conduct (see-sense-understand-strike), the task organization that solves these problem sets, and the training methodology we have implemented. This is a time for experimentation and evaluation of our formations with unique problem sets of modern war — "nothing has fundamentally changed, and everything has." Ultimately, a revolution of military arms is on the horizon, and the implication of task organization is foundational for success on the future battlefield.

Introduction

In 390 B.C., the Roman Army faced its greatest humiliation, a rapid loss and route from Celtic tribes that crossed the Alps and swept to the Roman capital. After a swift reorganization and reforms, the Roman Army prepared a new formation. The Romans chose to separate from Greek phalanx tactics that had dominated warfare for a century and adopted a new legion organization focused on flexibility and adaptability. They chose three fighting formations: the hastati in the front, principes, and the triarii in the rear. The hastati comprised two front-rank units which were subsequently divided into smaller tactical units that allowed for fast moment and flexibility. These principal formations continued refinement into the Roman Imperial period, with the Roman legions becoming the world's envy.[2] The Roman Army's strength was developing task organization centered on flexibility, adaptability, and decision-making at the lowest tactical level, later expounded upon by technological advancement and resources. These classical principles remain relevant today and can be viewed as guiding standards for the continuation of the development of our formations, along with the need to continually assess the viability of our formations, paired with the rapid technical advances the Information Age presents. With these first principal dictums, the 75th Ranger Regiment has explored the implementation of a new unit of action that can solve traditional mission sets while maintaining pace and relevancy on the modern battlefield.



Key to the effectiveness of multi-functional reconnaissance teams is the rapid integration and use of emerging technology such as loitering or stand-off munitions. These unique systems allow MFRTs to effectively see-sense-strike at the lowest tactical level. (Photo courtesy of authors)

The MFRT is not just a solution but a unique and formidable one that leverages these principles for dominance in multidomain operations. The MFRT brings a set of unique capabilities and an operating concept that can significantly enhance tactical capabilities at the battalion and brigade levels. These small units, led and trained by NCOs, are at the forefront of contemporary technological and tactical innovation. The MFRT is not just a new formation but an opportunity to experiment with old and new concepts, leading to significant developments in doctrine. In this article, we will delve into implementing the MFRT at the battalion level of the 75th Ranger Regiment and discuss not only its operating concept but also the structure and design of its task organization and our training methodology in its nascent stages. The current period demands rapid development not only in technology but also in the foundation of all military revolutions. The role of NCOs in leading the MFRTs is crucial as they are responsible for the training, discipline, and welfare of the Soldiers under their command and the tactical employment of the unit in combat.

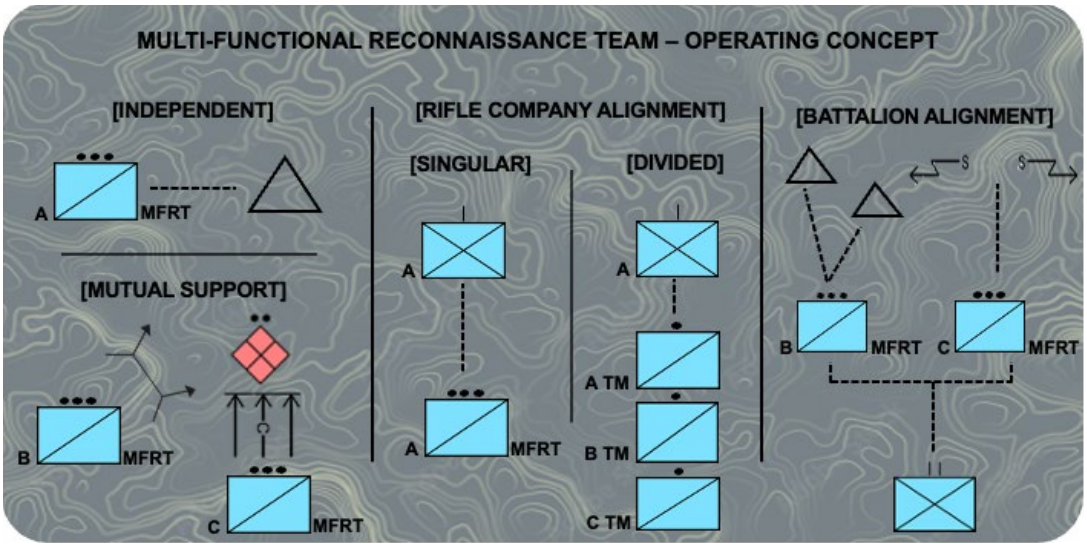


Figure 1 — Multi-Functional Reconnaissance Team (MFRT) Operation Concept

MFRTs have the unique capability to align with different fighting formations at the battalion level to leverage see-sense-understand-strike. They can operate independently or through mutual support, align with a rifle company to solve multiple missions, and conduct reconnaissance tasks at the battalion level.

Operating Concept

The MFRT's primary mission is not just a function but an operational imperative. The baseline function of the MFRT is in reconnaissance, using fundamental principles while also focusing on functionality at the battalion level to solve multiple mission sets. MFRTs need to be led by our senior NCOs with well-trained and equipped Soldiers to meet the demands of the modern battlefield. The driving principle and design of the MFRT is to see-sense-understand-strike. The MFRT relies on the principles of reconnaissance and emerging unmanned technology to see the battlefield. The ultimate goal is to gain battlefield sensor overmatch and situational awareness. Conversely, human eyes remain the greatest sensor on the ground that can report timely and accurate information. Sensing the battlefield comes in an array of capabilities from the space domain to cyber. The MFRT brings unique capabilities to the lowest levels with the reintroduction and development of electronic warfare capabilities. Our sensing capabilities are nascent and will continue progressing in electronic detection, spoofing, and attack. With see-sense, the MFRT can feed information at a controlled pace to understand the battlefield. This information is collected, sent, and processed with many inputs that lead to an accurate and timely strike. Understanding the concept cannot be overstated or neglected without careful consideration. Without the rapid processing of relevant data assaults, precision munitions and resources are wasted. The MFRT operates within see-sense-understand-strike, shaping the battlefield and leading to dominance in the land domain. At the battalion level, the MFRT demonstrates multiple practical capabilities and the ability to enhance tactical utilization at echelon.

The MFRT can operate at the battalion level, conducting reconnaissance and answering priority intelligence requirements (PIRs). These PIRs include specific information that is critical for decision-making at higher levels of command, such as the location and strength of enemy forces, the condition of terrain and infrastructure, and the status of friendly forces. Their role in traditional reconnaissance has not changed and neither has the need to answer and outline critical information for decisions. The methods of reconnaissance, however, have changed, and the capabilities at the MFRT level should be a focus for future technological development to increase efficiency and speed of information. MFRTs also have the unique ability to be aligned with a rifle company. They can bring additional unmanned systems, long-range direct-fire weapons, electronic attack capabilities, and anti-tank/aircraft capabilities at the company level. Company alignment allows for leader development and overall understanding of implementation. In addition, MFRTs are designed, manned, and trained to operate independently or with mutual support. They are equipped with traditional weapons systems: riflemen, grenadiers, and automatic riflemen, giving them the same abilities as a rifle squad. MFRTs can also solve direct fire engagements and clear terrain with these systems. Remember, "multi-functional" is a key part of the MFRT's name.

Task Organization

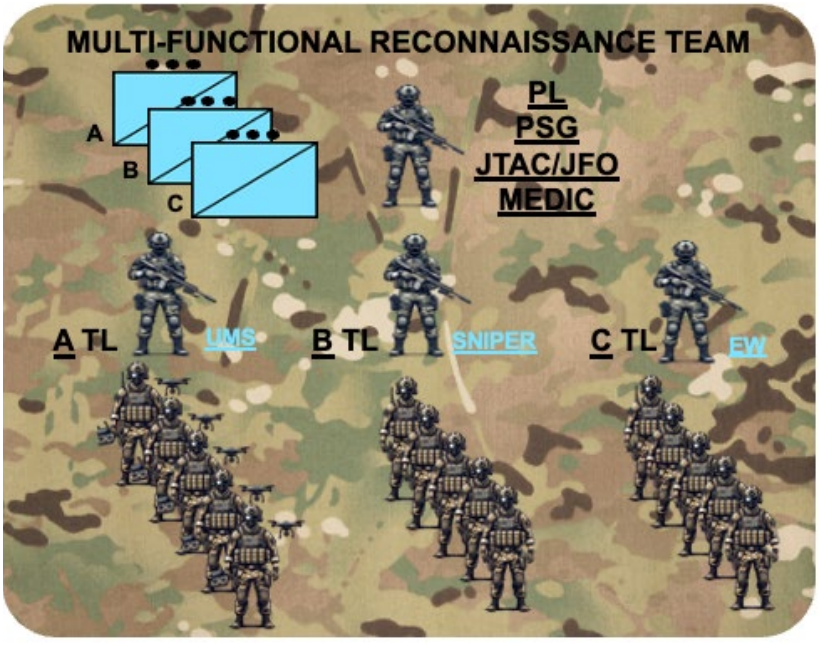
As directed by Force Design Update 2030, our task organization model uses basic principles and weapon systems that have proven themselves during the global war on terror-

ism, paired with the visualization of what a future all-domain battlefield will ask of our future fighting formations. Within the 1st Battalion, 75th Ranger Regiment, Delta Company is designated as a special tactics company with three MFRT platoons and an indirect fires platoon. Having the MFRT and mortar platoon in the same company allows for direct synchronization, cross-training, and lessons shared across see-sense-strike. Task organization has been exploratory in implementation and training management and needs continual refinement. Our MFRT platoons are currently distributed in three sections (A, B, and C) as well as a command-and-control element. Each section aligns with our rifle companies to promote personal relationships and leader development in the long term.

Section A comprises the alpha team leader, scouts, radio-telephone operator (RTO), and unmanned system operators. Section B comprises snipers with long-range direct-fire capabilities. Section C comprises cross-trained electronic warfare operators in counter-unmanned system detection and defeat. The command-and-control elements include a platoon sergeant, a joint terminal attack controller (JTAC) or joint fires observer (JFO), and a medic. The MFRT platoons are enhanced with two operations officers, contributing to training development and operational control, an NCO in charge of unmanned systems, sniper training and proficiency, and an electronic warfare specialist. These positions and functions are essential for the individual and collective training events and knowledge needed for the proficiency and capability of each Soldier. Our current task organization has gone through multiple interactions of testing and implantation but has yet to be perfected. However, it is imperative to solidify the foundation of our task organization and continue to refine what has been learned in training and operational lessons. The ideas are not perfect, but the need for adaptability, flexibility, and experimentation is paramount. Technology will continue to improve, so it is imperative to concisely train and develop the key aspect of our formations — the people.

Figure 2 — The Multi-Functional Reconnaissance Team Organization

There are three MFRT platoons in a special tactics company. MFRT platoons are currently distributed in three sections: A (scout /unmanned systems), B (sniper), and C (electronic warfare), as well as a command-and-control element. The MFRT platoons are enhanced with two operations officers, contributing to training development and operational control, an NCO in charge of unmanned systems, sniper training and proficiency, and an electronic warfare specialist.



Training Methodology

The MFRT's training methodology can and has been challenging in scope and execution. The primary difference from traditional reconnaissance units is their incorporation of emerging technology (unmanned aerial systems, communication equipment, electronic warfare systems, and precision munitions) incorporated into one element. This is normal with forming any new unit, idea, or concept and should be taken with comfort. The training moves along the foundational training model from individual to collective and validation. Individual training focuses on small arms, anti-tank, mobility, and technical training.

The introduction of novel weapons and systems is essential to the MFRT's individual training. These systems take direct education from procurement professionals and usually come with barriers to training with traditional Army facilities. It is commonplace to have these events take months in planning and resourcing or result in missed opportunities. These events need leadership engagement and specialists within the unit to solve any issues. Collective training has been as elemental as team and section live-fire exercises to participating in combat training center (CTC) rotations. We have seen particular gains in contributing to CTC rotations and opportunities for force-on-force due to these events' unique effectiveness for all elements to see shortcomings. In addition, it has been essential to integrate at the rifle company level when practicable to ensure shared understanding and tactics, techniques, and procedures (TTPs) and tactical standard operating procedures (TACSOP) refinement at the lowest level. Validation exercises are crucial to developing MFRTs, emphasizing critical thinking and the ability to train see-sense-strike. We have seen great lengths in validation exercises that increase stress and decision-making on the lowest leaders with multiple domain effects. The training methodology for the MFRT is still in a developmental period and needs to be a continued responsibility at the company level. The more information and ideas are shared, the more the proliferation of methods increases proficiency across the Army.

Conclusion

Modern warfare has changed the preset notions of what has succeeded in the past; nothing has changed. We must establish a framework for an effective unit of action that can operate on first

principles, focusing on flexibility and adaptability in a multidomain battlefield. A disciplined and well-trained unit can use an array of technological advances to solve many mission sets. The foundational changes we implemented with the multi-functional reconnaissance team have set a new precedence in the design, operating concepts, and effectiveness at the battalion tactical level to solve these modern problems. The need for adaptable formations and leaders is paramount, and the MFRT is a flagship in forward military practice and thinking. There will be challenges ahead in the implementation of these formations to break institutional norms and preset notions of warfare. The need for incremental and adaptive solutions is ever present, and we must become comfortable with the rapid nature of modern warfare. We will operate in the conflict continuum and need a formation to adapt and fight.

Soldiers with the 75th Ranger Regiment operate unmanned aerial systems. (Photo by SPC Luke Sullivan)

Notes

[1] Jack Watling, *The Arms of the Future – Technology and Close Combat in the Twenty-First Century* (London: Bloomsbury Academic, 2023).

[2] Graham Webster, *The Roman Imperial Army of the First and Second Centuries A.D.* (London: A. & C. Black ,1979).

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Shifting the Paradigm:
Combat Casualty Care as a Top Training Priority

MAJ JONATHAN AUSTIN

The Shot

"I know I'm going to meet death; evacuation is impossible." These words, spoken by Mykhalio, a soldier in Ukraine's 80th Air Assault Brigade, relay the horror of casualty response and evacuation in large-scale combat.[1] Walking wounded move alone to evacuation points. Frontline troops remain cutoff for days from medical care. Evacuation vehicles are easy targets and therefore never come. When soldiers attempt to move their wounded, they are targeted; the "lucky" ones often carry the wounded distances greater than five kilometers before being evacuated.

Soldiers in the Combat Lifesaver Course conduct training at the Fort Dix Medical Simulation Training Center. (Photo by the Fort Dix Training Support Center)

U.S. forces can avoid the tragedies befalling soldiers in eastern Europe through command prioritization, increased training, and pre-deployment preparation for casualty response, particularly of non-medical personnel. The Golden Hour has expired.[2] America's close combat forces — those who close with and destroy the enemy — will die unless casualty response competency for non-medical personnel becomes a training priority for their units.[3] Currently, close combat forces lack the proficiency required to conduct effective casualty responses, particularly when evacuation is limited or unavailable. There is no equivalent substitute for rapid hospital or surgical intervention of a critically wounded casualty. Frontline forces' only recourse to mitigate a lack of access to higher care is to buy time for casualties with the skills to control bleeding, administer blood, and sustain life for prolonged periods.

The Wounding

Close combat forces own casualties from the point of injury through handoff to higher care, an expanding space of time on the modern battlefield. These forces and their commanders will be the ones who must face and solve this problem. It is incumbent upon them to rethink the casualty care paradigm.[4]

Larger casualty-producing incidents and restricted lines of communication will be the rule rather than the exception. The current Russo-Ukrainian war is replete with applicable examples of the limitations on casualty care and medical evacuation in modern war. The lack of maneuverability due to ubiquitous sensing, volume of wounded, and severity of wounds have returned the character of casualty response to its World War roots. Close combat forces must be proactive in preparation.[5]

Pre-hospital casualty care is a tactical problem. While medics and fleet marine corpsman, battalion physicians, pararescuemen, and forward surgical teams will remain critical to casualty care, the close combat force will own the responsibility to "buy time — tip the scales" toward survival for critically wounded personnel in future conflicts. Effective casualty care preserves future fighting strength, buys time and space for transportation assets to focus on maneuver or sustainment, and maintains morale. Ineffective far-forward care degrades lethality, strains flexibility and freedom of maneuver, and decimates the will to fight. Close combat forces will be the ones to watch comrades linger for hours and die of wounds, hours or days later.

Blood loss is the number one cause of battlefield deaths.[6] Lethal capabilities have become more complex over time, from swords and arrows to artillery and machine guns, to modern day improvised explosives and first-person view drones. However, uncontrolled hemorrhage from explosive penetrative wounds remains the most common lethal injury over the last century.[7] Improvements to combat casualty care during that same time, such as freeze-dried plasma, the combat application tourniquet, and combat lifesaver training,

have saved thousands of lives.[8] However, if U.S. armed forces want to avoid Russian-level casualties as seen in the world's current large-scale combat operations, combat casualty care must be prioritized by close combat units.[9]

The Triage

The term Golden Hour has been applied to trauma care patients for almost a half-century and became the U.S. military's casualty care benchmark during America's global war on terrorism.[10] The Golden Hour is a policy, not physiology. In 2009, Defense Secretary Robert Gates directed a medical evacuation (MEDEVAC) 60-minute mission completion time.[11] The policy enabled quicker intervention, leading to physiological stabilization. Casualties survived at higher rates because first responders, often not medically trained personnel, were able to stop bleeding, and medical personnel could administer blood or alternatives within 30 minutes of injury, either upon arrival or in flight.[12] Almost ubiquitous helicopter transport, made possible by air superiority and a relatively small theater of operations, further enabled lifesaving treatment. Any expectation to operate in the same manner during future large-scale combat operations (LSCO) is folly.[13] This distinction between reliable air evacuation and lifesaving interventions is only exacerbated when considering the future impact of anti-access and aerial denial (A2/AD) capabilities on rotary transport and the expected exponential increase of casualties during LSCO.[14] The standard must now be replicating MEDEVAC intervention capabilities organically within close combat formations.

Department of Defense and service-level efforts to modernize casualty care are many, and they run the gamut of doctrine, organization, training, materiel, leadership and education, personnel, facilities, and policy domains. Training for non-medical warfighters at the most basic level is watered down and subject to the command priorities of any unit. Training proficiency varies from unit to unit, frequency and pervasiveness of training are left up to service or unit standards, and no joint enforcement mechanism or evaluative system exists to assess and measure proficiency of non-medical personnel in casualty care.[15] Department of Defense training frequency requires Tactical Combat Casualty Care (TC3) certification for all service members once every three years or within 12 months of a deployment.[16] The Army requires Combat Lifesaver (CLS) training for at least one Soldier per squad or crew and recertification every 12 months.[17] The Marine Corps Common Skills Training and Readiness Manual mandates specific casualty care tasks to be trained annually.[18] The daily and weekly iterative "reps and sets" given to marksmanship, small-unit tactics, and physical fitness should be congruently applied to casualty response for non-medical personnel. The almost weekly (if not daily) prioritization of weapons and vehicle maintenance presents an ironic contradiction: meticulous care for the tools of war but lack of parity in preserving the lives wielding them.

Failure to prioritize casualty care training will manifest in several ways. Inability to stop hemorrhages will result in an unnecessarily higher died of wounds rate. Unfamiliarity with tourniquet conversion will result in avoidable amputations and fewer wounded returning to duty. A leader's ignorance of blood required versus blood available could lead to combat-ineffective formations as donors are exhausted. In its most visceral form, the cost of casualty care incompetence is the difference between unnecessarily marking casualties as expectant (going to die) or managing a casualty collection point for future evacuation.

Combat medics with 81st Stryker Brigade Combat Team triage patients during a training exercise on Joint Base Lewis-McChord, WA, on 6 August 2023. (Photo by SSG Adeline Witherspoon)

A Patient Case Study

One of the more well-known and exemplary models prioritizing casualty response training for non-medical personnel is that of the 75th Ranger Regiment. As regimental commander, then-COL Stanley McChrystal's Ranger Regiment utilized a "Big Four" model for training prioritization, a practice still in place today.[19] The priorities are physical fitness, marksmanship, small-unit training, and medical training. The medical training evolved with time. Ranger First Responder (a CLS analogous competency) for every Ranger is mandated; training includes a Ranger O Low Titer (ROLO –

walking blood bank) capability, and the Advanced Ranger First Responder Course (teaching non-medical Rangers to assist with blood collection and cricothyrotomy) occurs annually in each battalion.[20] In the past, the training included casualty response training for Ranger leaders, teaching them to help medical personnel make triage decisions, manage combat medic task overload, leverage other trained personnel, and prioritize medical supply usage.[21]

Command prioritization of casualty response training yields results. From 2001 to 2010, Ranger Regiment's killed-in-action rate of 10.7 percent, died of wounds rate of 1.7 percent, and potentially survivable deaths rate of 3 percent were lower than the Department of Defense's average for all three statistics — 16.4, 5.8, 24 percent, respectively.[22] In August 2019, this whole unit commitment to saving lives manifested in executing a rare "buddy transfusion" in rural Afghanistan.[23] Command prioritization, unit pre-deployment screening of personnel for universal donors, organizational stratification of donors on mission, and tactical combat casualty care proficiency enabled the regiment to conduct a point-of-injury whole blood transfusion.[24] The regiment achieved MEDEVAC and hospital capabilities organically within their formation and bought the required time for a critically wounded Ranger. Some conventional unit commanders also recognize the value of preparing and training for casualty response. In 2023, the 2nd Brigade Combat Team, 10th Mountain Division spent operations dollars to prescreen their formations for universal donors.[25] They identified over a third of the formation as universal donors, facilitating active walking blood banks at their outstations across Iraq, eastern Syria, and Kuwait. This should be the rule, not the exception.

The Treatment

Large-scale combat mass casualty events will overwhelm frontline military medical personnel. Commanders must prioritize organic lifesaving capacity at the lowest echelons and train for these inevitable events. Close combat forces must organize themselves with the personnel, skill sets, and equipment to achieve all manner of hemorrhage control, blood administration, and prolonged care. Ownership and actions to address casualty-response capability must occur at the Army brigade or Marine expeditionary unit level and within each subordinate command echelon. Training, training management, unit capabilities, organizational preparation, and external evaluation are immediately adjustable domains that commanders can affect.

Training and training management are lights on the path to increased prioritization. Brigade and battalion training guidance can identify casualty response as a command priority, mandate increased training frequency, and identify specific training thresholds for units to accomplish. Every service member should be CLS qualified, know how to achieve vascular access, apply tourniquets, collect blood from a known universal donor, and have increased confidence managing junctional hemorrhage by wound packing, pressure or hemostatic dressing, and potentially junctional tourniquets.

A U.S. Navy hospital corpsman conducts a blood draw on a simulated casualty during a Valkyrie blood transfusion demonstration during Marine Aviation Support Activity 24 at Fort Bonifacio, Philippines, on 12 June 2024. (Photo by LCpl Jennifer Sanchez, U.S. Marine Corps)

Training programs of instruction like CLS, Ranger First Responder, and the Marine Corps "Valkyrie" (Expeditionary Fresh Whole Blood program) should be promulgated and required of every service member annually.[26] Combat medic students in Advanced Individual Training (AIT) are already drawing and infusing real blood from fellow Soldiers. On 19 April 2022, PVT Kaleb Setliff became the first combat medic trainee in the history of the Combat Medic Specialist Training Program to take and infuse a unit of blood. He used a "walking blood bank" blood transfusion set to take one unit of blood from a fellow trainee and then gave the blood back to the same Soldier using a different arm. TC3 curriculum must include blood collection training for all service members and familiarity with assisting a medic or corpsman in blood administration. Conducting emergency medical technician (EMT) and cardiopulmonary resuscitation (CPR) certification, shadowing emergency room physicians, or making patient rounds with nurses in a hospital may offer competency and experience in casualty response and prolonged care.[27] More importantly, these experiences and certifications will offer confidence and familiarity, providing service members

with opportunities to gain comfort around the sick, injured, and dying. Soldiers and Marines with duty-limiting injuries can better manage their time assisting in clinics or in Role 1 facilities rather than conducting non-developmental tasks. Commanders must direct physicians to abide by the Joint Trauma System Tactical Combat Casualty Care curriculum and clinical practice guidelines. Commanders and physicians at the division level must ensure and enforce parity across their formations and, at echelon, institute external evaluations beyond mandatory training completion data.[28] Commanders need to be less risk-averse in medical coverage for training events. This would allow combat lifesavers and NCOs to provide medical coverage and authorize medics and corpsmen to pursue additional individual training opportunities.

Supplementing unit capabilities, every unit should have a walking blood bank program. Prolonged care is not possible without access to whole blood or blood analogs. Approximately 20 percent of the population has Low Titer O Whole Blood and are universal donors (not all O- blood is safe). In an infantry company of 136 people, this equates to 28 universal donors.[29] Unit operations funds for donor screening and socialization of the results between physicians and company first sergeants will enable training opportunities and lifesaving potential in the event of a severely hemorrhaging patient. Mitigating risk to leverage a walking blood bank capability is easily accomplishable; lab verification of screen results, administrative and physical identification of donors, and medic-conducted transfusion certification by a physician eliminate much of the risk. CLS personnel could assist in blood collection, allowing medics to focus on other injuries before blood administration.

Command-directed adjustments to unit organization could also set conditions to increase survival. Once universal donors are identified, they can be stratified across formations (assuming rank, position, and role parity). If one squad has two universal donor riflemen and another has none, move one of them. Units already designate special teams for enemy prisoner-of-war searches, demolition duties, and aid and litter for carrying casualties. Creating new special teams for walking blood bank or casualty collection point augmentees would lessen the cognitive burden on leaders, medics, and physicians needing assistance in a mass casualty event.

External evaluations and training center rotations can give commanders at echelon immediate and succinct feedback on their unit's abilities. Treated like a deployment, units should prepare for these evaluations by conducting donor screening, training their personnel to conduct walking blood banks, and arriving with transfusion kits. Evaluators can adjudicate extending casualty life if a unit can demonstrate whole blood transfusion competency. Casualty cards used during this training can be updated to account for patient expiration timelines before surgery, how much blood they require to sustain life, and how much additional blood would be required during prolonged care. Units can train triage decisions — a single severe hemorrhage casualty can require enough blood to incapacitate an entire platoon (assuming you have that many donors) — how does an organization determine if the mission or saving a life takes priority? Units must stress their abilities to manage a casualty collection point for up to 12 hours and hold and care for a patient at Role 1 for up to 72 hours.

Units that can care for their wounded efficiently and competently will buy themselves greater lethality, fewer logistical constraints, and a more steadfast will to fight.

Return to Duty

The primary mission of the close combat force is to close with and destroy the enemy. To prioritize anything over that purpose is missing the point. Combat casualty care proficiency is a key enabler of the primary mission. Units that can care for their wounded efficiently and competently will buy themselves greater lethality, fewer logistical constraints, and a more steadfast will to fight. To execute the primary mission, close combat forces must be proactive in establishing more robust medical capabilities, now. Commanders must prioritize an organic casualty care capability. Training that capability to save as many as possible and to sustain life when evacuation isn't possible will require preparation, consistent and iterative effort, and increased proficiency for non-medical personnel.

The days of calling a helicopter in for a single amputee in uncontested airspace are over. Close combat forces must be able to control hemorrhage, administer blood within 30 minutes, and prolong care when medical personnel and evacuation platforms are limited or unavailable. The means to accomplish this capability are present but require prioritization and command oversight. Casualty response capabilities must have parity with physical fitness and tactical proficiency in the eyes of warfighters. Close combat forces have the most to lose from a lack of a casualty response capability but also have the most to gain. Preventing loss of life and limiting the severity of an existing trauma is the surest way of returning warfighters to the fight so they can win.

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Medics assigned to the 2nd Battalion, 3rd Infantry Regiment conduct tactical field care training in the Republic of Korea on 23 January 2025. (Photo by PFC Christopher Antwine)

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As with all *Infantry* articles, the views expressed are those of the author and not necessarily the Department of Defense or any element of it.

Building the Elite — A 5-Day H2F Immersion Program

LTC TYLER PATTERSON
CPT NATHANIEL PISER

In 2024, the Army fielded a Holistic Health and Fitness (H2F) Performance Team to the 3rd Mobile Brigade (MBDE), 25th Infantry Division as one of the first brigades to drive toward the program's goals: improve Soldier readiness, increase lethality, and prevent injuries.[1] Field Manual 7-22, *Holistic Health and Fitness*, defines the Army's H2F program as a comprehensive initiative designed to improve Soldier readiness by addressing physical, mental, nutritional, sleep, and spiritual domains of well-being.[2]

In May 2025, 2nd Battalion, 27th Infantry Regiment partnered with our H2F Performance Team to conduct a five-day H2F immersion program with 43 volunteer Soldiers from across the battalion ranging from specialist to first lieutenant.[3] Our target audience was team leader and above as the audience most likely to proliferate H2F knowledge across the battalion the fastest. We hoped to accomplish two things. First, we wanted every participant to leave the program with as much education and practical tips as possible to improve their sleep, nutrition, physical fitness, and mental and spiritual readiness. This ranged from H2F education to personalized health information, new therapies, or practices that could help build healthy habits. We aimed for our participants to feel like professional athlete-Soldiers for a week where resources came to them and not vice versa. Next, we wanted to provide the best blueprint possible to other battalions wanting to try something similar. To do this, we collected personalized feedback from participants before, after, and throughout the five-day program to measure change and identify areas where we could improve the program.

Our H2F Performance Team consisted of 12 personnel in total: H2F program director, physical therapy team (7), occupational therapist (OT), nutrition team (2), and chaplain. Our team developed a simple schedule that any battalion could use.[4] We adopted a very practical agenda that limited the education to approximately 2.5 hours per day (not including physical training) so that participants could spend the rest of the day leading Soldiers and trying to incorporate or teach some of what they learned to others.

Physical Fitness: Train Smart, Mobilize, and Get Less "Fragile"

For the physical domain, we leveraged our H2F program director, brigade OT, and six physical therapists (PTs). Our program director ran all our workouts that varied between aerobic, anaerobic, strength, and endurance and made them effective, fun, and competitive. Our OT taught recovery classes such as foam rolling, mobility, static stretching, and proprioceptive neuromuscular facilitation (PNF) stretching.[5] Our physical therapy team administered three injury screening assessments: The Biering-Sorenson back test, the Lower Quarter Y-Balance Test (LQYBT), and the Upper Quarter Y-Balance Test (UQYBT).[6] These were selected to assess risk based on recent health of the force musculoskeletal injury (MSKI) pattern trends: low back pain (35 percent), hip-knee-foot pain (45 percent), and shoulder pain (16 percent). Soldiers scoring in the "risk" range immediately

An instructor teaches stretching exercises to Soldiers from 2nd Battalion, 27th Infantry Regiment as part of a holistic health and fitness immersion program. (Photos by SPC Jonathan Melendez)

met with PTs to receive exercise demonstrations and hands-on practice to mitigate risk for future injury right there on the spot.

Every Soldier took the InBody assessment and received a report with an accurate breakdown of body fat percentage, lean body mass, and other information to help determine one's estimated energy (caloric) needs.[7] Participants also received a cold-water immersion demonstration and were encouraged to use this battalion resource throughout the week as needed for recovery.[8] Lastly, we gave a class on heart rate (HR) zone training and then conducted a Zone 2 drift test on approximately half of participants on the second day of the study.[9] We issued Polar 300-Chest strap HR monitors to the Zone 2 group to facilitate the test.

A physical therapist administers a Lower Quarter Y-Balance Test.

What We Learned:

We received mostly positive participant feedback on the workouts. They liked the variety of the workouts, the quality warm-ups and cool downs, the difficulty, and the competition. A 2-27 IN team leader stated, "My favorite part of the week was the recovery. I thoroughly enjoyed the time the physical trainers stretched out before and after each workout. The mobility day helped me understand my weaknesses and gave me exercises to improve my flexibility score to prevent injury."

Participants also liked the more advanced recovery classes. A platoon leader stated, "The time spent in the foam rolling class was surprisingly brutal, but I felt amazing after the fact. I will be using these techniques in the future."

A few squad leaders and senior NCOs asked for more strength exercises and education on programming, prudent additions to future five-day H2F programs.

HR zone training was also popular and proved beneficial among participants. According to surveys, only 36 percent of our participants were familiar with HR zone training before the study. After a one-hour class, this number rose to 88 percent, which indicates 23 additional participants now understand HR zone training. For the Zone 2 drift test, all 15 participants demonstrated less than a 5-percent pace drift (deviation between first and second 20-minute run). This indicates a well-developed aerobic base where a runner's body can effectively deliver oxygen and maintain consistent output with minimal fatigue. With the solid foundation in place, these Soldiers can start to build toward more advanced conditioning with less risk of injury or burnout.

Participants all said to sustain the three PT-led injury screening assessments as part of the five-day H2F immersion program. The average participant scores were above the threshold from an injury screening and injury control perspective, indicating a healthy population. However, males (E-4 and below) and females (E-4 and below, E-5, and E-9), scored slightly below average on the LQYBT, indicating an increased potential risk of injury. These Soldiers immediately met with PTs to receive exercise demonstrations and hands-on practices to mitigate risk for future injury on the spot. Participants appreciated the personalized feedback, and all walked away with practical tips on how to prevent injuries in the future. One E-4 stated, "The guidance was really beneficial. I learned more about myself and what changes I should make."

InBody scores range from 1-100 with 100 being the most ideal body composition. Our average InBody score was 80, suggesting a positive body composition balance. When broken down by rank, E4 and below averaged 75, while E5 and above averaged 85, indicating that more junior Soldiers may need the most H2F support and education. Participants had above average skeletal muscle mass (81 pounds) and an above average body mass index (BMI) of 27.8, suggesting a larger build amongst participants. When comparing participants against the weight for height table from Army Regulation 600-9, *The Army Body Composition Program*, 53 percent exceeded the maximum allowable weight, and 72 percent of participants were classified as overweight, which contradicts the InBody results. This suggests the need to update these tables to reflect a more precise assessment like the InBody score.

Lastly, only 38 percent of our participants used the cold plunge at least once, despite many complaining of muscle soreness during the week. One participant stated, "The time I spend in the cold plunge tub steadily improved my mental focus, helped me physically recover, and added structure to my day," suggesting the need for more exposure to this great resource.

Nutrition: Garbage In, Garbage Out

We front-loaded education in the nutrition domain with a class from our brigade registered dietitian focused on healthy eating habits, macronutrients, fad-diet myth busters, supplementation 101, and fueling for performance. We also implemented the 25th Infantry Division's Meal-Prep Program (MPP) to deliver quality, macro-balanced pre-made meals for each participant throughout the week (breakfast/lunch/dinner) to help mitigate the common nutrition concerns and risks.[10] Our dietitian leveraged feedback from InBody assessments to determine each participant's daily caloric needs and then developed a meal plan based on their performance goals. During the span of five days, four highly trained 92G culinary specialists provided participants with 645 nutrient-dense meals. The MPP is an exceptional resource that has helped 25th ID Soldier-athletes to not only fuel for competitions such as Best Ranger but also assisted others to get healthier and leaner.

What We Learned:

Pre-study, only 42 percent of Soldiers reported eating three meals a day. This number jumped to 74 percent at the end of the program, suggesting that approximately 14 participants made changes after receiving some nutrition education and having easy access to a healthy meal. One E-4 stated, "Having ready-to-go meals saved me a lot of time that was normally used for preparing meals. They also gave me an extra meal (breakfast) that I do not normally eat." A team leader added, "The Meal-Prep Program was a sustain. I got all the calories I needed in a matter of four minutes. It saved me a trip to the DFAC [dining facility], and it tasted good."

Participants all liked the nutrition class and voted to sustain this education in any future immersion program. One squad leader stated, "The class on nutrition as well as the meals that were given to me were a bit of a wake-up call to what I needed to be fueling my body with daily." However, some of the more senior participants stated that they already meal-prep on their own or eat quality, wholesome meals at home. While these participants are unlikely to use the MPP, it remains an outstanding resource for the average Soldier on a budget with limited options in the barracks and limited time.

Sleep: Rem Cycles, Techniques, and Gains

Like nutrition, we front-loaded sleep education on Day 1. This helped our participants understand how critical sleep is to their overall health and provided them with practical tips on how to improve sleep quality. Every morning, we collected feedback on how much sleep participants had gotten and their sleep quality. Additionally, we administered the Pittsburgh Insomnia Rating Scale (PIRS) and the Sleep Hygiene Index (SHI) to assess severity of insomnia symptoms and sleep hygiene behaviors.[11]

What We Learned:

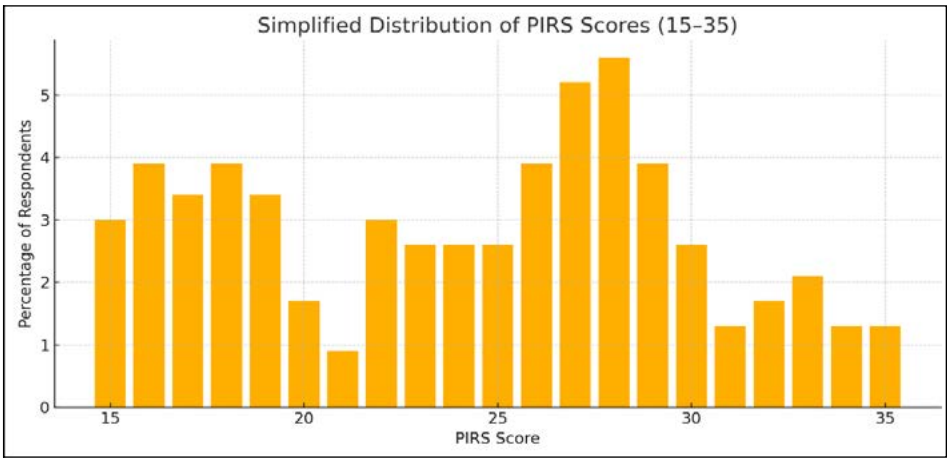
Surveys suggest the average amount of sleep per night increased during the immersion program by 36 minutes (6.2 to 6.8 hours/night), indicating education may have led to some positive change. Before the study, 19 participants reported it was "very difficult" for them to fall asleep at night. After the study, this dropped to only five, suggesting that the sleep hygiene classes may have helped with sleep onset. An E-4 participant stated, "My sleep improved throughout this week by three hours. I get more sleep in a better environment, and I am thinking how I should continue sleeping this way moving forward. I learned that I sleep better in a clean room with the lights off, doors closed, and with no noise. Pillows and blankets help a lot. I would like to look into investing in a better mattress too."

Feedback on the sleep class was overwhelmingly positive. A 2-27 IN squad leader stated, "The sleep readiness class was the most beneficial for me. It identified issues in sleep rhythm and the negative habits I have associated with it. I enjoyed learning how to better implement sleep with recovery. The more I followed the instruction given in the class the more energetic I felt, and my morale was surprisingly boosted as well."

Most of the scores on the PIRS fell within the 15-35 score range, which is indicative of mild to moderate insomnia symptoms (see PIRS scores below). Few respondents scored in the extremes of no sleep issues or severe insomnia. The bell-shaped curve of the data implies a relatively normal distribution of insomnia severity. In the tested population of 43 individuals, approximately 30-34 showed signs of insomnia. This highlights the value of implementing targeted sleep interventions, including sleep hygiene education, cognitive behavioral therapy for insomnia (CBT-I), and mindfulness-based practices.

Similarly for the SHI, most respondents — roughly 25 to 30 people — have moderate to poor sleep hygiene. This is reflected in the clustering of scores between 17 and 29,

Figure 1 — Pittsburgh Insomnia Rating Scale Scores



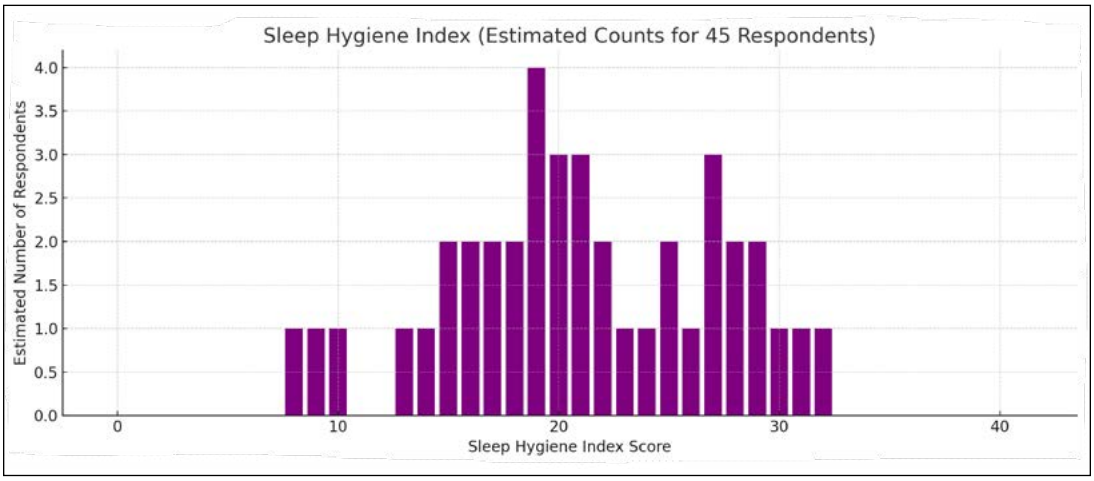


Figure 2 — Sleep Hygiene Index Scores

which are commonly associated with inconsistent or counterproductive sleep habits (see Figure 2). Fewer individuals scored below 10 or above 35, indicating that very few participants have either excellent or severely poor sleep hygiene. For this group of 43, the results suggest a widespread opportunity to improve sleep hygiene practices. Interventions such as conducting sleep hygiene education, establishing regular bedtimes, reducing screen time before sleep, and minimizing caffeine and alcohol intake could meaningfully improve overall sleep quality and reduce the risk of sleep-related issues. Given the association between poor sleep and readiness, mood, and performance, addressing these behaviors is especially important in high-performance or military populations.

Spiritual and Mental Fitness: Slay The Dragons in Your Mind

The two most elusive and complex domains to integrate into our training were spiritual and mental readiness. We spent an ample amount of time to incorporate these two domains because spiritual and mental warfare are as real as physical warfare, and it takes an army to address these topics. During the process, we leaned heavily on our battalion chaplain, brigade OT, and senior mentor to deliver one-hour blocks of instruction followed by some homework assignments.

We asked participants to find time to escape the noise and practice quiet reflection daily. We needed a space where people could escape from the noise to pray, meditate, or just take in the view so we built the No Fear Oasis, a small 15-foot by 10-foot space next to our battalion gym. It was walled off and closed to through traffic and had a commanding view of the Hawaiian mountains. We asked participants to strive to do three 10-minute “reflection/quiet time” sessions per day.

We also asked participants in our pre-study survey about the biggest stressors in their lives to help us identify our problem areas. Lastly, we recruited an Army senior mentor from outside of the unit to speak about some of the most common responses (work stress, family stress, work/life balance) to provide mentorship and coaching.

What We Learned:

The spiritual and mental domains are elusive and extensive. In general, participants wanted more than we could provide in five days on these pillars. One platoon leader stated, “The mental readiness pillar was great; it helped me understand how to tackle difficult tasks, but it was too short.” Similarly, a team leader stated, “The spiritual class really helped expand my knowledge on how to better calm my mind, but I think we need more of this.” To have true transformation in the mental and spiritual domains, it takes time, patience, and lots of practice.

About 57 percent of our participant population did at least one 10-minute “reflection/quiet time” session per day. A team leader stated, “The mental readiness pillar helped me better deal with the most stressful thing in my life right now. I always have some stress, but when I started taking the time to meditate each day, it kind of helped me deal with things better.”

Despite these domain’s weaknesses, surveys showed that participant confidence in managing stress and setting goals rose from 55 to 93 percent from pre- to post-study. Soldiers also reported increased awareness of anxiety and stress triggers, especially regarding workload, school, and family, which implies improved self-regulation.

We suggest a steady drumbeat of exposure in the spiritual and mental fitness domains will work best. This could be monthly Spiritual Fitness PT with the chaplain, a fun marriage counseling group session, or even a financial planning class. These results affirmed how important our battalion chaplains, OTs, and leaders in general who are tuned to spiritual and mental readiness are to the health of our Soldiers.

Final Thoughts: If You Build It, They Will Come

As we examine this five-day H2F immersion program across all the domains of sleep, nutrition, physical fitness, and mental and spiritual readiness, there are three hard truths:

1. The sleep and nutrition domains are the H2F’s low hanging fruit. Grab it! Before starting our program, only 48 percent of our participants felt equipped with information/training in the sleep domain, while 67 percent felt equipped in the nutrition domain. After only 90 minutes of instruction, these improved dramatically to 87 and 97 percent, respectively. Looking at our sleep test scores and nutrition surveys, many of our Soldiers do not sleep or eat very well or enough. While other battalions may have addressed this gap more

directly than 2-27 IN, we recommend programming a nutrition and sleep class with your H2F experts as soon as possible (separate from any five-day immersion program).

2. Information is Power. H2F Performance Teams have a wealth of information, experience, and resources to offer, not to mention master's degrees and PhDs. They also bring resources such as the InBody 770, MPP, assessments, and more. Take advantage. Our fantastic team of physical therapists took the simple task of "personalized, injury prevention education" to a whole new level by researching countless movement screenings and injury trends to find the best three assessments. They also brought the much-needed precision and professionalism to this H2F program. Nearly every brigade has these professionals — we must simply empower and use them.

3. Spiritual and mental fitness unlock superpowers. While these domains are more challenging to address directly, we must continue to train them. Nothing beats engaged leadership, a cohesive squad, and trusted mentors in helping individuals through difficult times and letting them know they are not alone. GEN George C. Marshall famously said, "The soldier's heart, the soldier's spirit, the soldier's soul, are everything. Unless the soldier's soul sustains him, he cannot be relied on and will fail himself and his commander and his country in the end." According to GEN Marshall, these pillars are "everything" and could be the secret to unlock superpowers in each and every Soldier.

Success in H2F may be hard to define as it doesn't always mean higher Army Fitness Test scores or faster 12-mile ruck times. It may look like an entire platoon doing the world's greatest stretch, fewer Soldiers going to sick call with knee or shoulder pain, or possibly a company's Soldiers discussing their "whys" with the battalion chaplain after summiting Mount Ka'ala.[12] No matter what it looks like, if you build it, they will come.

The 25th Infantry Division's Meal-Prep Program delivered quality, macro-balanced pre-made meals for each participant during the five-day immersion program.

> ***"The soldier's heart, the soldier's spirit, the soldier's soul, are everything. Unless the soldier's soul sustains him, he cannot be relied on and will fail himself and his commander and his country in the end."***
>
> **— GEN George C. Marshall**

Notes

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LTC Tyler Patterson currently commands 2nd Battalion, 27th Infantry Regiment, 3rd Mobile Brigade, 25th Infantry Division, Schofield Barracks, HI, and served in this position during the five-day Holistic Health and Fitness (H2F) immersion program. LTC Patterson has taught at the U.S. Military Academy at West Point, NY, and served in multiple assignments in the Infantry, the interagency, and the special operations community.

CPT Nathaniel Piser is an Infantry officer in 2-27 IN and assisted in the planning and execution of the H2F immersion program. He has served as a platoon leader in 2-27 IN and is motivated to pursue a degree in medicine to serve as a future Army physician's assistant.

The Game Tape Shows All:

Using sUAS to Improve After Action Reviews

LTC TEDDY BORAWSKI
CPT CODY MCCURRY

Over the past year, our battalion — 1st Battalion, 27th Infantry Regiment, 2nd Mobile Brigade Combat Team (MBCT), 25th Infantry Division — transitioned from an infantry brigade combat team to an MBCT as part of the Army's Transformation in Contact (TiC) initiative. We fielded the Army's newest equipment, such as the Infantry Squad Vehicle, the XM-250, Small Multipurpose Equipment Transport (SMET), Silent Tactical Energy Enhanced Dismount (STEED), and small unmanned aerial systems (sUAS). Our training path began in January 2024, allowing us to field and integrate this equipment into every training event, from team live-fire exercises (LFXs) through platoon and company combined arms live fires. Our training path culminated in our deployment to the Big Island of Hawaii through a long-range maritime air assault during Joint Pacific Multinational Readiness Center (JPMRC) 25-01 in October 2024.

As we progressed from training event to training event, our Light Fighters worked daily to master the basics as a light infantry battalion under the MBCT construct. We found that our TiC equipment made us faster and more lethal. The more reps we got in something such as launching a short-range reconnaissance (SRR) sUAS or conducting a map reconnaissance to establish a vehicle drop-off (VDO) point, allowed us to be more effective in developing tactics, techniques, and procedures (TTPs) from the squad up to battalion staff. As leaders in 1-27 IN, we observed and pushed the organization

Above, a C-100 unmanned aerial system sits ready for take off. (Photo courtesy of the 25th Infantry Division Public Affairs Office)

through each step of Kolb's Experiential Learning Cycle, which includes active experimentation, concrete experience, reflective observation, and abstract conceptualization.[1] Each training event presented an opportunity to start the model over, allowing us to experiment continually and then cement lessons learned into the next event. Applying this model allowed us to achieve our goal of getting better by 1 percent every day. After completing JPMRC 25-01, we quickly looked ahead at future training opportunities to continue this learning cycle, cementing lessons learned and not creating lessons observed.

Key takeaway: Learning is a cyclical process: Kolb's model emphasizes that learning involves a continuous cycle rather than linear progression.

Fielding of the C-100 medium-range reconnaissance (MRR) system in February of this year presented our battalion with another opportunity. Not only did we have a new UAS with an extended range and more sophisticated camera system to train on, but we also realized that we had an asset that could help us critique ourselves while we conducted training. Our new MRR not only allowed us to progress through Kolb's Experiential Learning Cycle by experimenting with how we operate with this new capability, but it also enhanced the way that we conduct training, focusing explicitly on Step

7 of the Eight-Step Training Model — conduct after action reviews (AARs).

"We have got to use every opportunity to improve individually so we can improve collectively."

— Nick Saban

As infantry trainers, we inherently know that not all individuals learn through the same methods. Some Soldiers learn best through reading, demonstration, or verbal explanation. A large portion (roughly half) learns best from a visual depiction of a task.

The idea of video recording training is not new. Professional and college sports teams have been recording gameplay since they had the means to do so. The most successful teams and players are known to spend hours reviewing game tapes to build upon the team and individual performance. This inspired the idea of using our MRR to create a "game tape" for each of our platoons as they progressed through the blank/live iteration of our platoon LFX lane.

Our platoon-focused training density began with each company deploying to the Kahuku Training Area for 24 grueling hours of platoon situational training exercises (STX). This opportunity provided each platoon with successive missions that ended with trench clearance, mirroring the requirements for the LFX lane they would see approximately 48 hours later. We developed a waterfall schedule, offsetting each company by 24 hours. After completing the STX lanes, each company would self-deploy to Marine Corps Base Hawaii for platoon LFXs.

During the first day of platoon LFX lanes, we did not have the final clearance to operate our MRR on the range so the first company to complete the training did not receive a recording. In retrospect though, this company served as our control group for our game-tape trials. This company gradually progressed through the feedback of traditional observations delivered at the hotwash upon conclusion of each iteration. Those platoons took notes and made necessary adjustments through subsequent rehearsals before their next iteration. This represented the AAR model for an LFX lane that we were accustomed to.

The most successful teams and players are known to spend hours reviewing game tapes to build upon the team and individual performance. This inspired the idea of using our MRR to create "game tape" for each of our platoons as they progressed through each blank/live iteration of our platoon LFX lane.

The final two companies that conducted training on our platoon LFX lane were provided a game tape and demonstrated a shorter learning curve than the first company. The flow of each iteration, incorporating the video recording, looked like the following:

1) Before initiating the lane, MRR crew members launched the UAS and stationed themselves to observe the beginning of the lane.

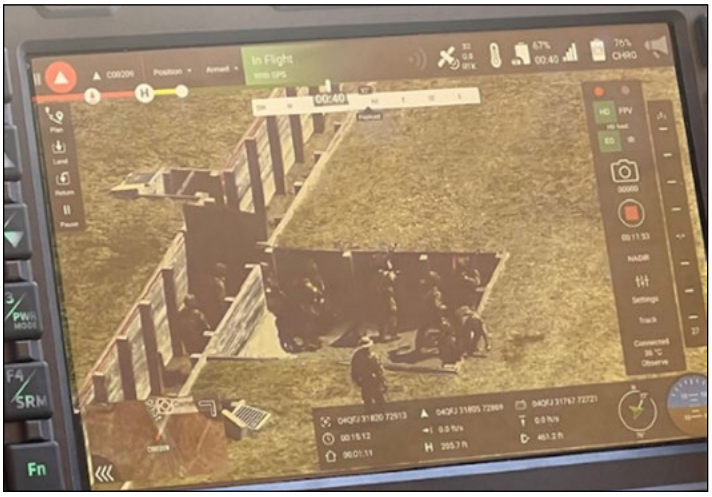
2) The platoon initiated the lane, moving through the limit of advance (LOA). We made no changes to our execution, using a team of safeties and observer coach/trainers. The MRR crew then quickly returned the UAS to a designated area and cycled the controllers with the recording to the AAR building.

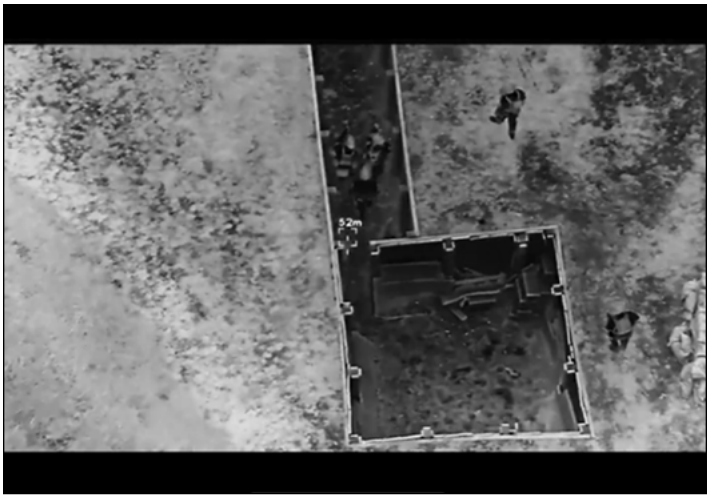
3) At the end of the lane, the platoon returned to the starting point, downloaded all unexpended ammunition, and received the hotwash from company and battalion leaders.

4) The platoon then moved into an adjacent AAR building to view the recording on a projector. The MRR crew used

Figures 1 and 2 — C-100 Footage from Platoon Live-Fire Exercise

The medium range reconnaissance system was utilized to record platoon iterations and played in the after action review (AAR) building following each iteration for immediate viewing/internal AAR.





our second controller to repeat the above steps, ready to present the footage to the next platoon.

The audience for the MRR-enabled game-tape AAR solely included the platoon that had just executed the lane, and the platoon leader/platoon sergeant led the session. This was intentional; we wanted to create an environment where every platoon member felt comfortable speaking. Following the review of the MRR footage, each platoon had roughly three to four hours of rehearsal time before their next iteration. The results were more than impressive.

A view from the sniper teams' firing position during 1-27 IN's live-fire training at Marine Corps Base Hawaii at Kaneohe Bay. (Photo by 1LT Bradley King)

After subsequent iterations, the hotwash comments evolved. We were no longer harping on basic critiques such as spacing and tempo. The platoons saw this in the recording, made adjustments, and cemented the lessons on the game tape into their rehearsals and planning — creating lessons learned. Platoon leadership benefited greatly as well; platoon leaders and platoon sergeants could now see issues with sequencing, timing, and triggers.

After reflecting on this training event with the 1-27 IN team, we are confident that the Eight-Step Training Model provides trainers with everything they need to be successful. But, as we transform in contact as an Army, we also need to ask ourselves how can we use our new equipment to transform the way we train — not just how we operate? Hotwashes remain a must in the AAR process. This is the opportunity for leaders to provide instant critiques and corrections, but safeties and leaders only have two eyes and cannot be at every point or observe every micro-decision made. The game tapes provided another way platoons could see themselves.

This AAR technique was one idea that we developed, and we encourage others to continue sharing ways to transform how we train. To conclude, here are some anecdotes from three platoon sergeants who executed our platoon LFX.

SFC Christopher Marshall, Borzoi 1-7: "I believe it was a good tool for senior leaders to have and be able to coach and mentor the junior Soldiers. It would be helpful to have been able to talk to operators beforehand so the leaders conducting the MRR-enabled AAR could pinpoint the biggest friction points from previous iterations and ensure that we have footage of those friction points, or a more concerted effort on those friction points, going forward. The junior Soldiers really enjoyed being able to see what they messed up on, and it did help me lighten the mood on mistakes that were made while still being able to coach, teach, and mentor."

SFC Edward Didonato, Death 2-7: "The MRR was an unrivaled asset to conducting platoon-level AARs. Providing 'game-day' footage covering the entire battlespace allowed our platoon to find friction points and tailor our rehearsals in areas we were less proficient. Additionally, it enables confidence in the leaders down to the Soldier level by visually capturing the areas we did extremely well. In war, there are no rewinds or pause button. With this system, it creates real-time feedback that can only help us improve and enhance our capabilities at any echelon. Not only does it allow us to rehearse until we get it right but rehearse until we can't get it wrong."

Soldiers with Headquarters and Headquarters Company, 1st Battalion, 27th Infantry Regiment, fire 60mm mortars at Marine Corps Base Hawaii during a platoon live-fire exercise. (Photo by SFC Ryan Leboeuf)

SFC John Woods, Coldsteel 3-7: "Very excited for this capability moving forward. The game tape will remove perception and be able to clearly highlight our weaknesses. By having these blind spots identified without a shadow of a doubt, we can continue to raise our ceiling."

Notes

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LTC Teddy Borawski commands 1st Battalion, 27th Infantry Regiment, 2nd Mobile Brigade Combat Team, 25th Infantry Division, Schofield Barracks, HI.

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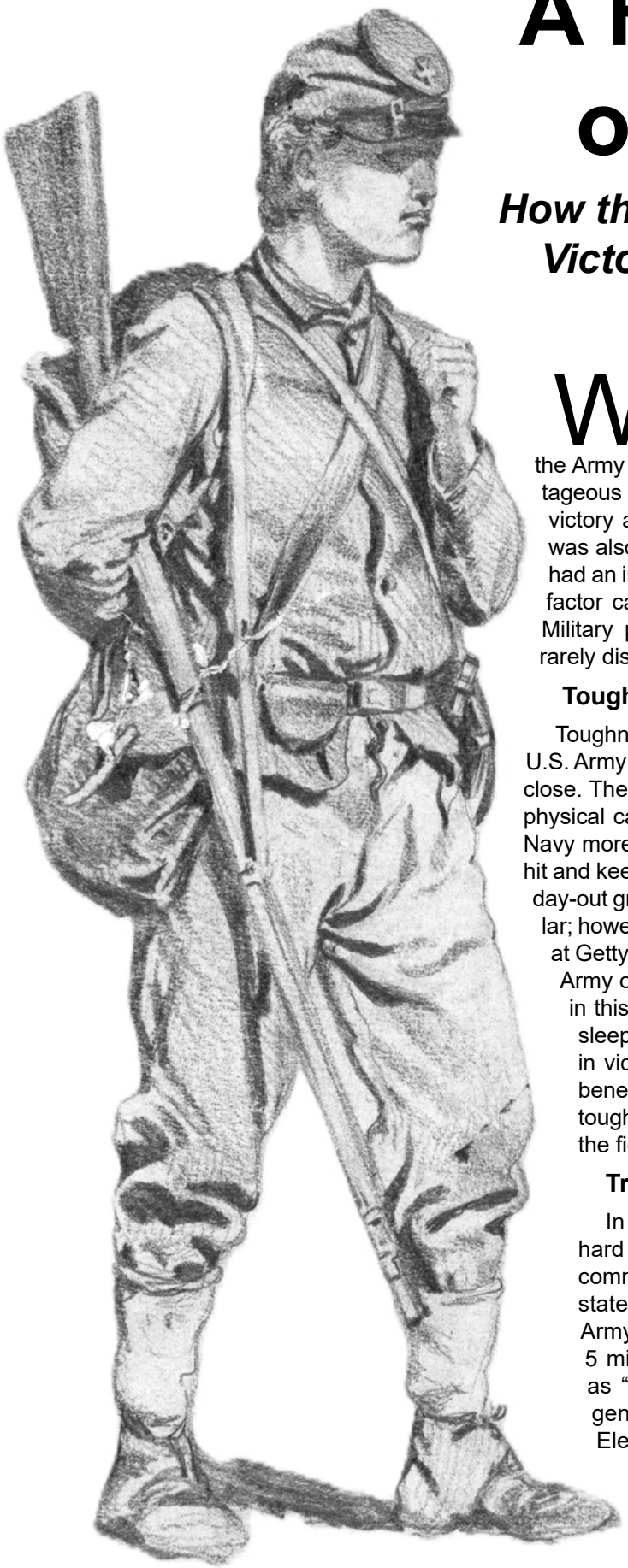
A Hidden Lesson of Gettysburg:

How the Toughness of Soldiers Secured Victory for the Army of the Potomac

LTC DAVID CHICHETTI



While many historians have written about the tactics and strategy employed during the 1863 Battle of Gettysburg, they generally overlook the mental and physical demands of the Soldier. For the Army of the Potomac, the battle began as a foot race to secure advantageous ground and ended as a desperate fight to retain that ground. The victory at Gettysburg was not only a result of tactics and strategy, but it was also a triumph of the individual Soldier's toughness. Their toughness had an impact before, during, and after the fight. Understanding this critical factor can further military leaders' appreciation of decisions and tactics. Military professionals would do well to understand this well-known but rarely discussed factor of the Union victory.

Toughness Defined

Toughness involves physical, mental, and spiritual components. Current U.S. Army doctrine does not singularly define toughness. "Resilience" comes close. The Army defines resilience as "demonstrating the psychological and physical capacity to overcome failures, setbacks, and hardship."[1] The U.S. Navy more directly defines toughness in three ways: "1) the ability to take a hit and keep going, 2) perform under pressure, and 3) excel in the day-in and day-out grind."[2] The Army's "resilience" and the Navy's "toughness" are similar; however, neither adequately addresses the character of infantry combat at Gettysburg. A definition of toughness that describes what Soldiers in the Army of the Potomac had to endure is required. Accordingly, toughness, in this sense, is moving dozens of miles, fast, on foot with little food or sleep, and upon arriving at the battlefield, being prepared to engage in vicious close combat. Their actions were all conducted without the benefit of modern equipment and medicine. Simply put, these men were tough. Nowhere was this more evident than in the troop movements to the fight.

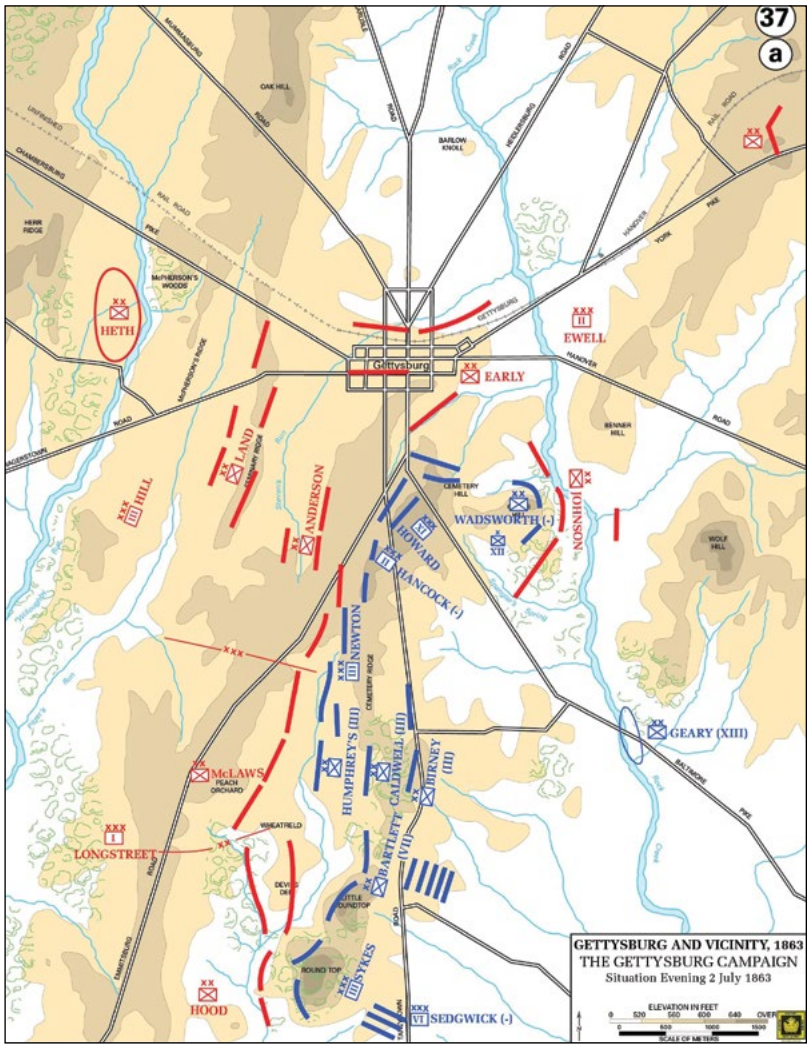
Tremendous Marches

In the days preceding the battle, the Army of the Potomac marched hard to give Major General George Meade tactical flexibility. "Our new commander is determined not to let the grass grow beneath our feet," stated one officer.[3] Starting on 29 June, the left wing of the Union Army marched more than 30 miles to reach Emmitsburg, MD, some 5 miles from Gettysburg.[4] One Soldier described these movements as "tremendous marches."[5] On 1 July, after hearing reports that a general engagement was occurring at Gettysburg, the First and Eleventh Corps commanders, Major General John Reynolds and

A sketch titled "On the March" by renowned Civil War artist Edwin Forbes depicts a Union Soldier traveling to the next battle. (Graphic courtesy of the Library of Congress)

Major General Oliver O. Howard, made haste toward the front. Upon arrival, they ascertained that whoever could marshal troops more quickly and efficiently would have the advantage in the coming fight.[6] With no major railroads to utilize, Soldiers of the Army of the Potomac would now have to move quickly over dozens of miles through the rough terrain of Maryland and southern Pennsylvania. Consequently, the battle's outcome now depended on the physical toughness of individual Soldiers enduring forced marches in the summer heat.

The left wing of the Union Army held the Confederates for most of the day on 1 July, but Meade's decision to commit the remainder of the Army to Gettysburg came later that evening. As a result, massing forces quickly became imperative for the Union. The Third Corps was close, but the remainder of the Army was further away. The Fifth Corps marched 23 miles on 30 June and stopped at Hanover, PA. At around 1800 on the 1st, they began a forced march of about 12 miles to Gettysburg, where they arrived the following day.[7] By noon on 2 July, most of the Army of the Potomac had arrived at Gettysburg except for the Sixth Corps.[8] The Sixth Corps, the most robust corps in terms of numbers for the Army, began 1 July some 35 miles from Gettysburg.[9] It was imperative that they arrive to influence the battle's outcome. Accordingly, Major General John Sedgwick put his Soldiers on the road. For the next 19 hours, the Sixth Corps marched 35 miles in the hot July sun and reached the battlefield around 1700 on the 2nd.[10] By that evening, the Army of the Potomac had successfully massed enough combat power to counter the Confederate assault. If the Army had not been able to mass quickly on 1 and 2 July, the Confederate Army could have rapidly taken the commanding terrain surrounding the town. The Federals' ability to mass was due to the toughness of Soldiers.



Gettysburg and Vicinity, Situation the Evening of 2 July 1863
(Map courtesy of the U.S. Military Academy's Department of History)

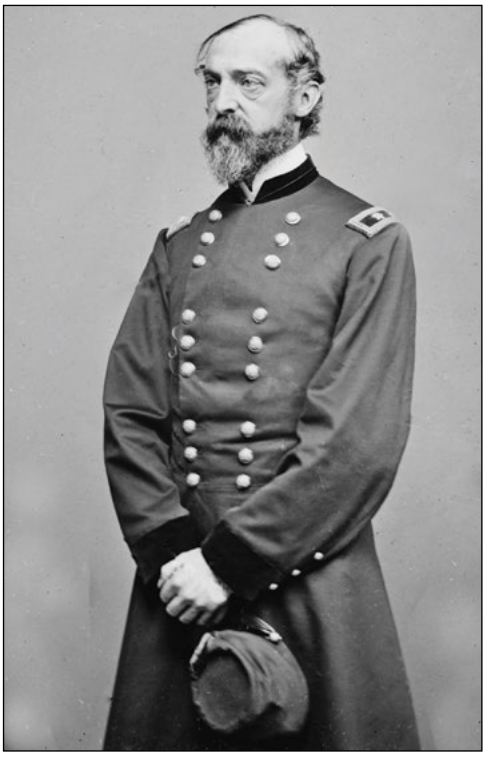
It is essential to understand these marches in the context of the equipment of the time. Compared with today's Army, a Soldier's kit during this period was primitive and not designed for maximum comfort. There were no Danner boots, Jet Boil stoves, or Camelbaks. Union Soldiers wore wool uniforms and carried blankets and bivouac kits, even in the summer. Kits would weigh around 50 pounds with weapons, ammunition, and everything they needed for a march.[11] There were no carbo-loaded Meals, Ready-to-Eat (MREs). Soldiers on the march ate hard tack, foraged for food, and occasionally had a hot meal. The "Brogan" was the typical footwear issued to Union Soldiers. These were crudely designed and made left and right by breaking them in on the march.[12] If you were a Confederate Soldier, matters were even worse, as many marched barefoot due to supply shortages. In short, marching to Gettysburg with this equipment took a physical toll on the body, and these men had to fight immediately upon arrival. The summer heat made conditions more miserable.

The hot, humid weather around Gettysburg exacerbated Soldiers' discomfort. Temperatures hovered around the 80s, with a high of 87 degrees Fahrenheit on the final day of the battle.[13] As a result, water was imperative for Soldiers to continue fighting. But collecting drinking water was no easy task. Union Soldiers typically carried one canteen and filled water from streams or springs. Heat stroke became a factor. There were an estimated 7,000 cases of heat stroke during the Civil War.[14] Additionally, the dust created by long lines of marching Soldiers created another discomfort.[15] As one Soldier described it: "To see men fall from exhaustion, clothes wet, faces and teeth black with dust, lips parched, eyes sunken, feet blistered, then driven on at the point of the bayonet."[16] Despite the heat, dust, and limited water, the Army of the Potomac pressed on to the fight. Their physical toughness gave the Union a decisive edge, but merely getting to the fight did not secure victory.

Close Combat

After all-night marches with little rest, Soldiers had to summon the mental toughness and fortitude to fight the enemy in close quarters using 19th-century tactics. During

that period, discipline was paramount, and with good reason. In 1863, the maximum effective range of a rifle with the new Minnie ball ammunition was around 400 yards, with a rate of fire of about three shots per minute.[17] While the Minnie ball had a better range than earlier ordnance, Soldiers still marched shoulder to shoulder within shooting range of their enemy to concentrate fire. A Soldier breaking ranks could disrupt the line and lead to chaos. As a result, Soldiers generally used Napoleonic tactics with more modern weapons. Naturally, this led to more casualties. In today's Army, a medical evacuation within 60 minutes (the Golden Hour) of serious injury is the standard, but in 1863, there was no such thing. Medicine was still crude, and amputation was the accepted practice. To keep order, officers and NCOs used swords, revolvers, bayonets, or the threat of firing squads to enforce compliance. Consequently, even after pushing themselves beyond their physical capacities, these Soldiers had to face the hell of fighting a determined enemy using crude tactics. Adding to the ferocity of the fight were the motivations of each side.



Major General George G. Meade
(Photo courtesy of the Library of Congress)

Each army had a deep sense of purpose leading up to the battle. According to modern U.S. Army doctrine, "purpose" is the reason for Soldiers to achieve desired outcomes.[18] Confederate forces entered Pennsylvania confident of their fighting abilities. The Confederate Army was motivated to take the war to their enemy's home territory and inflict the suffering they had felt in previous years. The Army of the Potomac was determined to defend its home territory and wanted to avenge recent losses. Additionally, each side sensed that the next fight would be decisive. As a result, fighting took on a more intense and personal character.

The combination of the weapons, tactics, physical conditions, and motivations made infantry fighting at Gettysburg a brutal and visceral experience. Hand-to-hand combat, urban sniping, multiple bayonet charges, and the largest artillery barrage of the war highlight the ferocity of this battle. Some of the most intense small-unit actions in American history occurred at Gettysburg including Chamberlain's defense of Little Round Top, the Wheatfield, Devil's Den, the First Minnesota charge, and finally the defense of "The Angle" which repulsed the famous Pickett's Charge on the final day of the battle. The Army of the Potomac could not have carried the day if it's Soldiers had not possessed the toughness required to secure the victory under the aforementioned conditions. Indeed, their determination and sacrifice must be noted as a decisive factor in the battle's outcome.

Modern Applications

For the Infantry, Gettysburg is a reminder that toughness matters. Tactics, strategy, and leadership are useless unless Soldiers can endure the demands of combat. Merely being in shape is not enough. Infantry Soldiers must be able to tolerate conditions that routinely push or exceed their physical and mental limitations. These men marched distances we now use for special operations selection courses with little rest and nutrition. Gettysburg demonstrates that routinely living and working on limited food and sleep is the norm and not the exception. The Russo-Ukrainian War provides a modern example. In a sensor-saturated environment, dispersion tactics increase the demands on the fitness levels of individual Soldiers, creating operating conditions reminiscent of World War I.[19] Accordingly, U.S. Army infantry leaders should focus their training programs on the reality of operating under the toughest conditions. This takes demanding, combat-focused leadership at all echelons.

Additionally, Gettysburg's physical and mental demands remind us that, sometimes, a military leader must push his people beyond their physical and mental limits to achieve the mission. At Gettysburg, Meade did not vigorously pursue Lee immediately after the battle, which, to President Lincoln, prolonged the conflict. A number of historians agree with Lincoln's assessment. However, this kind of decision is easier said than executed. At Gettysburg, Meade knew his Army and understood that pressing his forces further meant more sacrifice and could potentially expose his army to attack.[20] No one can blame Meade for having these concerns. However, military leaders must know when to keep pushing despite the objections of staff or subordinates. The art of leadership is understanding the capabilities of one's organization and judiciously applying them. Accordingly, leaders must be able to steward the mission, even in the face of physical and mental exhaustion.

Conclusion

Soldiers in the Army of the Potomac pushed beyond their limitations and won the war's most decisive battle. Arguably, their raw toughness preserved the Union. From a historical perspective, toughness, as described above, is not unique in war, but at Gettysburg it resulted in a strategic outcome. It is a compelling illustration of why the Infantry must train and build Soldiers who can endure in the most challenging circumstances. The Army of the Potomac marched hard leading up to the fight, quickly secured the key terrain, and fought off repeated attempts by the enemy to dislodge

them. Only mentally and physically tough Soldiers, fortified with a strong ethos, could withstand such conditions and carry the day. As Meade put it in his General Order on 4 July 1863: "The privations and fatigue the army has endured, and the heroic courage and gallantry it has displayed, will be matters of history, to be ever remembered." Despite the changing character of war, the nature of combat will remain human, and human fighting involves the Infantry. Thus, future studies by military leaders must discuss how physical and mental toughness impacted Gettysburg's outcome and influenced Meade's decisions. Even after these Soldiers gave all they physically could, they gave some more. To prepare Soldiers for future conflict, the U.S. Army should look to the toughness of the Army of the Potomac at Gettysburg for inspiration.

Notes

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The First Minnesota, a National Guard Heritage Painting by Don Troiani
(Image courtesy of the National Guard Bureau)

Stryker Infantry Needs Tanks:

Mutually Supporting, Mobile Combat Power in Restricted Terrain

LTC JONATHAN BATE
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A recent *Armor* article titled "Tanks Need the Infantry to Lead the Way" highlighted the significant advantage that infantry provides armored formations.[1] A recent Joint Readiness Training Center (JRTC) rotation in which that same armor company was attached to a Stryker battalion in 1st Stryker Brigade Combat Team (SBCT), 4th Infantry Division proved that tanks provide a decisive edge in restrictive terrain.

The tank company's support was an overall net gain for our brigade's lethality, and we recommend continued armor support to future JRTC rotations. We found great success in early integration of the armor company, centralized logistics, decentralized employment of tanks, and leveraging complementary capabilities.

Brave Company and Assault Company leaders plan a combined arms mission during Joint Readiness Training Center Rotation 25-02 at Fort Polk, LA. (Photo by 1LT Justin Evenson)

Overview

In October 2024 during JRTC Rotation 25-02, 1st Battalion, 8th Cavalry Regiment "Mustangs" from the 2nd Brigade Combat Team, 1st Cavalry Division (CD) provided one armor company (A/1-8, "Assault Company") under operational control (OPCON) to 2nd Battalion, 23rd Infantry Regiment for the first JRTC rotation to combine Strykers and tanks. Fourteen M1A2 SEPv3 Abrams tanks integrated into 2-23 IN to form Task Force (TF) Tomahawk. 2-23 IN in turn provided one Stryker company OPCON to 2/1 CD's 1st Squadron, 5th Cavalry Regiment for its NTC rotation, producing a task organization of two Stryker companies and one armor company.

Integrating Abrams tanks with Stryker infantry highlighted the power of a mutually supporting relationship in restrictive terrain. When paired properly, it proved to be a more formidable opponent to the opposing force (OPFOR) than pure infantry. Tanks and Strykers are excellent complements, achieving synergy due to the armored firepower and shock effects secured by dismounted infantry. They are symmetrical in both speed and sustainment requirements. While Stryker battalions have far fewer fuel capabilities, with augmentation they can sustain tanks while keeping pace.

In the offense, tanks helped maintain the battalion's tempo and shock effect. They offered a decisive advantage to a Stryker battalion, enabling a more rapid sustained tempo and the capability to both penetrate enemy defenses and exploit enemy vulnerabilities. In the defense, tanks increased the flexibility of our defense with a mobile strike force and were invaluable for achieving penetration and defeating armored threats. While they were vulnerable to red air (and frequently hunted), tanks provided an additional air defense capability, successfully engaging several drones and enemy aircraft. Despite the advantages, tanks were limited to improved roads, but this limitation did not outweigh the advantages they provided.

While our operating concept decentralized allocation of combat power down to the infantry platoon level, we centralized sustainment at the battalion level. Doing so allowed TF Tomahawk to keep its tanks in the fight throughout the rotation by effectively prioritizing and sequencing Class III resupplies. Planning and synchronizing our Class III distribution with ongoing operations not only safeguarded our fuel

assets but ensured our tanks were always sustained and ready to fight.

We tested our framework during the JRTC force-on-force phase. The enemy we faced was a mechanized infantry brigade with guerrilla augmentees. They generally fought a delaying action via succeeding area defense in depth. We began with a ground forcible entry (GFE) into the area of operations (AO), the JRTC Fullerton box. From there we conducted a movement to contact, deliberate defense, and deliberate attack, moving from east to west.

Early Integration

TF Tomahawk initiated dialogue and integrated Assault Company into the task force months before deploying to JRTC. Sustainment working groups, in-person capability briefs, and in-person tactical decision exercises all contributed to hitting the ground and moving out as a cohesive team at JRTC. During an in-person visit two months before the rotation, the team came together to develop an Abrams-Stryker framework for operating together in restricted terrain. The task organization we developed was not new — company teams with attached tank sections throughout the rotation. Before JRTC, we developed two frameworks: one for tactical employment and one for sustainment.

We created a doctrinal template for moving with tanks along roads and trails. Dismounted infantry led the way in defile, with tanks ready to rapidly attack in any direction. Strykers then followed behind to sustain and provide local support by fire.

Centralized and Deliberate Battalion Sustainment

TF Tomahawk's experience underscored the importance of deliberate and adaptive sustainment when integrating a tank company into a Stryker battalion. Recognizing that the fuel consumption and maintenance demands of Abrams tanks far exceeded those of Strykers, the task force developed a comprehensive sustainment plan addressing Class III, V, and IX resupply. This plan was firmly rooted in doctrinal principles, applying service station, tailgate, and refuel-on-the-move (ROM) concepts but adapted to the severely restricted terrain and threat environment. A key consideration was the inherent difference in sustainment needs: Abrams tanks require logistics packages (LOGPACs) roughly twice daily compared to the 72-hour sustainment window for Strykers.

To meet the sustainment demands inherent to employing their tank company, 1-8 CAV attached additional assets for the rotation. These included a 2,500-gallon fueler, a 2,500-gallon modular fuel system (MFS), and two M88 recovery vehicles to supplement Assault Company's organic field maintenance teams. The sustainment package augmented TF Tomahawk's organic capabilities with three additional overhead lift assets (2x M88 and Forward Repair System [FRS]) as well as 5,000 gallons of Class III. The Raider Brigade aligned Assault Company to 2-23 IN to consolidate logistics support at the battalion level while enabling the option for distributed tank combat power to maneuver companies within the task force. This task organization allowed for more efficient LOGPACs to ensure the sustainment nodes for tanks could meet the operational demand and tempo required in an SBCT, where mobility and speed are paramount.

Overall, our fuel assets remained distributed, and we utilized both tailgate and supply point distribution to minimize the signature of both the Abrams and our fuel assets as the mission dictated. We assessed that the enemy would prioritize destroying fuel assets to defeat friendly force's ability to project armored combat power to the forward line of own troops (FLOT). As a result, Assault Company trains prioritized survivability above all else.

Beyond fuel, TF Tomahawk carefully tailored its approach to Class V resupply, balancing main gun ammunition allocations based on the anticipated enemy situation. Understanding that the restricted terrain would amplify the effectiveness of enemy obstacles and infantry ambushes, the task force prioritized a larger allocation of canister rounds to enhance the tanks' ability to breach obstacles and neutralize dismounted threats. This balanced load, combining canister with multi-purpose anti-tank (MPAT) and sabot rounds, ensured that the tanks could effectively engage a wide range of targets. For Class IX (maintenance), the task force dispersed M88 recovery vehicles and an FRS for redundancy to quickly repair and replace parts on tanks. Furthermore, they worked with maintenance professionals within the SBCT for expertise and support and utilized a "Red Ball Express" for rapid delivery of critical parts when needed in addition to the JRTC Supply Support Activities (SSA).

A Soldier with Assault Company, 1st Squadron, 8th Cavalry Regiment, conducts a refuel on the move during JRTC 25-02. (Photo courtesy of the Joint Readiness Training Center)

Finally, recognizing the challenging terrain and potential for vehicle breakdowns, TF Tomahawk implemented innovative recovery tactics. By prepositioning tow cables on the front and rear of each tank, we significantly reduced preparation time for tank-on-tank recovery operations. This simple but effective measure minimized exposure time for immobilized assets. The task force also leveraged the superior recovery capabilities of M88 recovery vehicles in the most difficult terrain, using them to recover even Strykers when necessary. This approach demonstrates how to successfully project armored combat power in a modern operational environment.

LTC Jonathan Bate, CPT Mitch Nelson, and MAJ Adam Timms conduct a backbrief prior to an operation. (Photo by MAJ Fidencio Mendez)

Decentralized Tank Employment

Throughout the rotation, TF Tomahawk's companies used a company team task organization to ensure infantry dismounts and tanks were in position to mutually support one another. At minimum, a Stryker company had the support of a tank section, and a tank company had the support of a Stryker platoon. It was necessary to adjust task organization throughout the force-on-force phase, but Assault Company tanks ***always*** operated with infantry support. Building company teams by integrating tank platoons into Stryker companies, infantry platoons into the armor company, or even tank sections into infantry platoons achieved maximum flexibility and rapid decision-making.

The TF Tomahawk commander and S-3 enabled company success through simple, detailed plans to maintain shared understanding. In turn, the Assault Company commander and first sergeant clearly explained their capabilities to ensure proper employment.

Throughout the rotation, TF Tomahawk generally employed tanks with two offensive tactical mission tasks: follow and support and attack by fire. During the initial movement to contact, the task force's two Stryker companies cleared restricted terrain and seized battalion objectives while Assault Company assumed a follow and support role.

In the defense, Assault Company prepared engagement areas through engagement area development to destroy the enemy while providing a brigade mobile strike force (MSF), which successfully defeated an enemy penetration. During the deliberate attack, TF Tomahawk conducted a penetration and distributed tank platoons to each maneuver company.

Movement to Contact/Follow and Support. During the initial movement to contact, Assault Company maneuvered behind two infantry companies in a follow-and-support role. When given this tactical mission task, Assault Company was task organized with two tank platoons (Task: Follow and support, Purpose: Enable freedom of maneuver for infantry companies to seize terrain) and one infantry platoon (Task: Clear, Purpose: Enable freedom of maneuver for tank platoons). The infantry platoon proved essential to providing local flank security for stationary tanks in hides. The third tank platoon was used as a battalion reserve during this task organization. When Assault Company was tasked with follow and support, two infantry companies fought 3-5 kilometers forward, clearing along tank trafficable avenues of approach while maneuvering to seize objectives. The trigger to commit Assault Company from their hides was identification of a BMP platoon or greater on the objective. This framework proved successful during movement to contact, when time was available, or when obstacles were expected along avenues of approach. **AAR lesson learned:** Company commanders must coordinate to ensure Strykers are off tank avenues of approach to ensure rapid movement to the FLOT and avoid congestion that risks desynchronizing an attack. When operating behind friendly units, tanks are limited to Common Remotely Operated Weapon Station (CROWS) and coaxial engagements until they reach the FLOT, and friendly elements are behind main gun surface danger zones (SDZs).

Area Defense. Assault Company tanks fought distributed with two tank platoons in prepared engagement areas with tasks to destroy. The brigade planned to turn the enemy into Assault Company's engagement area. Their tanks coordinated with attached engineers from the brigade engineer battalion to emplace obstacles and conduct engagement area development. A third tank platoon operated as the brigade's MSF with a trigger to deploy if a seam was penetrated by three T90s or greater. This platoon, led by 1LT Justin Evenson, successfully destroyed an enemy mechanized infantry company minus with T90 support while taking no friendly casualties. **AAR lesson learned:** Allocating additional sustainment nodes and dedicated LOGPAC assets from the brigade to the MSF reduced the time required to sustain distributed tank platoons.

Counterattack/Attack by Fire. Following the defense, TF Tomahawk prepared to conduct a penetration through sequential tank-led attacks by fire with infantry support.

When ordered to conduct an attack by fire, Assault Company tanks operated distributed with tank platoons attached to each maneuver company. Under this task organization, tanks generally led the order of march in their respective companies to enable use of the main gun and mitigate SDZs and achieve penetration. This task organization proved most effective when rapid tempo was necessary and templated enemy obstacles were limited to simple concertina wire, or when enemy armor was assessed at the probable line of contact. Distributing tank platoons generated more options for the commanders. As tanks engaged in direct fire contact, Strykers deployed dismounts to provide flank security, establish support-by-fire positions, and reduce obstacles. Leading with tanks provided rapid attack-by-fire establishment and reduced risk of infantry becoming fixed by armor and light armor assets. **AAR lesson learned:** When tanks lead formations, Strykers best support when they are 50-100 meters behind the tanks to deploy dismounts against simple enemy obstacles and anti-tank ambushes.

Leveraging Complementary Capabilities: Mutual Support, Mobility, Multiple Dilemmas

The mutually reinforcing and mobile attributes of Abrams and Strykers enabled a wide array of options that consistently offered marked advantages. Additionally, the increased speed and firepower of TF Tomahawk posed multiple dilemmas to the enemy, impacting his decision cycle.

Mutual Support. Both the Abrams and the Stryker (platforms/formations) have strengths and weaknesses that support each other, and when combined, make a more lethal force. For example, Abrams have armored protection and an overwhelming amount of firepower, while Strykers have limited armor and lack substantial firepower but do transport a considerable volume of infantry (substantially more than a Bradley). When paired together, these weaknesses/strengths balance out and work positively — possibly better than an Abrams/Bradley combination because the Stryker consumes considerably less fuel. Stryker Infantry Carrier Vehicle Variants (ICVVs) and Abrams tanks are naturally symbiotic in JRTC's severely restricted terrain. The Stryker's capacity to deliver squads of dismounted Infantrymen at speed, combined with the tank's ability to provide overmatch on the enemy, is a lethal combination if sequencing the two assets is done correctly. The tankers were surprised at the relative stealth of Strykers compared to the Bradleys organic to an armored unit; they not only operated more quietly but were also easily concealed.

Mobility. Both platforms/formations are highly mobile and can move rapidly around the battlefield. While one is wheeled and the other tracked, they had similar movement rates and maintained tempo in restrictive terrain. We assess that a light infantry unit would struggle to keep pace with tanks or be able to rapidly maneuver while mutually supporting with infantry. A mechanized infantry unit would consume a considerably larger volume of fuel, creating other challenges. Additionally, because an SBCT is a mobile formation, its sustainment enterprise is also better suited and prepared to support resupplying the Abrams, given its Class III consumption rate. Clearing up to urban terrain and then launching tanks provides shock effect to seize. It took the OPFOR by surprise.

Multiple Dilemmas. The OPFOR knew TF Tomahawk had Abrams tanks, which consistently posed another dilemma. The task force had the ability to weigh the volume of Abrams it committed to the fight because it also had motorized infantry that could maneuver and pose a dismounted threat to the enemy's armor assets. The speed and mobility of the Abrams allowed TF Tomahawk to keep the tanks in hide and commit only when required. During the defense, an augmented platoon of Abrams served as the brigade's MSF. Given the enemy situation and the Abrams' speed and mobility, the MSF was rapidly committed to a penetration in the southern sector of the brigade defense, which defeated the enemy's attack.

Key Lessons

Three key lessons stand out from testing our Abrams-Stryker framework in the restricted terrain of the western Louisiana woods. First, the tank company enabled an expanded set of employment options to include enhanced deception plans in the offense. The brigade massed the tank company in the north, allowing a Stryker battalion to shift unnoticed from one axis of advance to another and surprise the enemy.

Second, the tank company led to a net-zero gain against the enemy air threat. Although enemy aviation prioritized them as targets, tanks provided additional air defense capabilities, accounting for half of the brigade's red air kills. Protecting tanks against red air was a challenge, and we lost one in the defense, even in a hide site. More air defense artillery (ADA) assets are needed. Tanks can engage tanks (and did kill two OPFOR Hinds), but this unmasks them, putting the formation at risk. It is necessary to deliberately protect tanks, especially against attack aviation. Keep them concealed in hide sites and protected with ADA.

Lastly, the company placed an increased demand on the brigade's Class III requirements, as expected. In addition to the company's organic fueler, 2-23 IN had to commit an additional two fuelers and four MFS, consistently allocating at least 15,000 gallons of fuel to the company. That allocation was sustainable for the SBCT throughout the rotation but required a battalion headquarters to continuously manage that requirement, which is why the tank company remained under the same battalion headquarters throughout.

Way Ahead: Optimizing Abrams-Stryker Capabilities

Stryker infantry and armor units are naturally synergistic, as both rapidly deploy combat power while mitigating risk for each other's weaknesses. As demonstrated by TF Tomahawk at JRTC 25-02, infantry forces excel at clearing severely restricted terrain and seizing objectives, whereas

tanks deliver shock effects through rapid combat overmatch while conducting penetrations and isolating objectives. Several changes could maximize the synergy.

With additional Class III assets, dedicated systems to move 120mm main gun ammunition, and an established Class IX parts flow, attaching a tank company to an SBCT under an OPCON command support relationship or experimental modified table of organization and equipment (MTOE) has the potential to be an unstoppable force on the modern battlefield.

An M1A2 Abrams tank engages enemy armor from the opposing force during JRTC Rotation 25-02. (Photo courtesy of Joint Readiness Training Center)

One friction point is that established Stryker and Abrams communications systems work in a minimally effective capacity, as they are not optimized for simultaneous lethality and responsiveness demanded in combat. In a Stryker, Joint Battle Command - Platform (JBC-P) operation is a dedicated responsibility independent of simultaneous combat operations within the platform. M1A2 Abrams SEPv3 JBC-P capability is enabled from the Commander's Display Unit (CDU) rather than the traditional stand-alone kit present in a Stryker or Joint Light Tactical Vehicle. The CDU also controls the CROWS, the vehicle systems screen, and the JBC-P. However, the tank commander can only monitor one of these three critical functions at a time. In severely restricted terrain, frequency modulation (FM) is often intermittent, and JBC-P quickly becomes the primary and sometimes only viable method of communication. To solve this effectiveness triad dilemma, perhaps a software update can be implemented to enable tank commanders to configure their CDUs based on "shooter preference" to simultaneously view the CROWS, systems information, and JBC-P.

Alternatively, Android Tactical Assault Kit (ATAK) systems issued to tank commanders could help to solve communications friction as these systems would allow tank commanders to communicate and battle track while using the CROWS simultaneously or maneuvering the tank from outside the turret. This allows tank commanders to retain situational awareness and communicate with dismounts. Additionally, high frequency (HF) capability, such as an AN/PRC-158 or AN/PRC-160, would enable each tank to operate further dispersed within its own formation, maximizing the main gun's planning range and increasing protection from enemy air. This would also ensure armor leaders could communicate with the battalion and brigade, maximizing their role as a reserve or mobile strike force.

Regardless of any future MTOE alignments between ABCT and SBCT assets, a "playbook" for sustainment detached personnel and an equipment package could serve as an efficient blueprint to ensure critical classes of supply reach the warfighter at the point of friction. TF Tomahawk's centralized sustainment operations concept — supplemented by the parent armor unit — can serve as a blueprint.

Notes

[1] 1LT Brandon Akuszewski and CPT Larry D. Tran, "Tanks Need Infantry to Lead the Way," *Armor*, Fall 2023, https://www.lineofdeparture.army.mil/Journals/Armor/Fall-2023-Edition/Tanks-Need-the-Infantry-to-Lead-the-Way/.

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MAJ Wade Redenius currently serves as the executive officer (XO) for 1/4 SBCT. His previous assignments include serving as the executive officer for 2-23 IN; commander of A Company, 2nd Battalion, 75th Ranger Regiment; and commander of B Company, 2nd Battalion, 1st Infantry Regiment, 2-2 SBCT. MAJ Redenius is a graduate of the Command and General Staff College and the U.S. Military Academy.

MAJ Adam Timms currently serves as the XO for 2-23 IN, 1/4 SBCT. His previous assignments include serving as operations officer for 2-23 IN; armor advisor for the U.S. Military Training Mission to the Kingdom of Saudi Arabia; operations officer for 3rd Battalion, 362nd Infantry Regiment, Fort Bliss, TX; commander of C Troop, 1st Squadron, 1st Cavalry Regiment, Fort Bliss; XO of D Troop, 5th Squadron, 1st Cavalry Regiment, Fort Wainwright, AK; and scout platoon leader in B Troop, 5-1 CAV. MAJ Timms earned a bachelor's degree in political science from Wright State University.

CPT Mitchell J. Nelson currently serves as a small group leader for the Maneuver Captains Career Course, Fort Benning, GA. His previous assignments include serving as commander of Assault Company, 1st Squadron, 8th Cavalry Regiment, 2nd Armored Brigade Combat Team, 1st Cavalry Division (CD); squadron operations officer for 4th Squadron, 9th Cavalry Regiment, 2/1 CD; battalion maintenance officer for 1st Battalion, 4th Infantry Regiment (Opposing Force), Hohenfels, Germany; and tank company platoon leader and XO in 1-4 IN. CPT Nelson earned a bachelor's degree in criminal justice/homeland security from the University of Mississippi (Ole Miss) and a master's degree in organizational leadership from Columbus State University.

Leading Through the Lens:

Strategic Communication in the Social Media Age

CPT STEPHANIE SNYDER

The modern battlefield extends beyond physical terrain; it encompasses the information environment. For Infantry and Armor leaders, a nuanced understanding of social media and its impact is no longer a supplementary skill, but a critical component of effective leadership. It's a dynamic landscape where perceptions are shaped, narratives unfold, and trust is either cultivated or eroded. This article explores the importance of strategic communication, both formal and informal, in the social media age, focusing on how leaders can leverage these platforms to effectively communicate their unit's story, maintain public trust, and reinforce the core tenets of lethality, readiness, warfighting, and the warrior ethos — the very qualities that make the "tip of the spear" so effective and drive recruiting success as we continue to celebrate the Army's 250th birthday.

As a Soldier, you are a direct representative of the U.S. Army and your branch. Your actions and words, especially in the public eye, contribute to the broader perception of the Army. Effective media engagement, both traditional and social, allows you to shape the narrative, proactively telling your unit's story. This includes highlighting training exercises that hone our lethality and readiness, deployments that demonstrate our warfighting capabilities, community engagement that strengthens the bond with the American people, and even glimpses into the daily lives of your Soldiers, showcasing the warrior ethos in action. Don't let others define your narrative, especially when it comes to the crucial role Infantry and Armor play in our nation's defense. This is particularly important as we commemorate the Army's 250th anniversary, a testament to our enduring commitment to defending the nation. Open and honest communication fosters trust with the public and strengthens the bond between the Army and the communities it serves, including the families of your Soldiers. Furthermore, effective media engagement helps mitigate misinformation, rapidly addressing inaccurate or misleading information that can spread quickly through social media and traditional news outlets, potentially impacting morale and operational security. Finally, your media interactions should always align with the command's communication strategy and reinforce the overall message, supporting the chain of command and ensuring unity of effort.

COL Jacob White, commander of the 198th Infantry Brigade, speaks with a local Columbus news outlet about 2024 Holiday Block Leave on 17 December 2024 at Fort Benning, GA. (Photo by CPT Stephanie Snyder)

While social media interactions are common, formal media engagements require a different approach and careful preparation. When dealing with traditional media, it's crucial to know your audience. Think about the specific outlet and who they're trying to reach. For instance, explaining how a new armored vehicle enhances our lethality will likely sound very different in a defense industry publication compared to your local news. Above all, stick to the facts. Accuracy is paramount, so ensure every piece of information you share is verifiable; speculation has no place here. In the dynamic world of infantry and armor operations, rumors and misinformation can spread like wildfire, making your clear and accurate communication essential.

To keep things focused, prepare key talking points about your unit's mission and training, and stick to them. It's perfectly fine to say, "I'm not the right person to answer that, but I can connect you with someone who is," if a question falls outside your expertise. And always maintain a professional and respectful demeanor, even in challenging situations. Avoid military jargon and explain complex concepts in plain language. For example, describe the role of a tank platoon in a combined arms maneuver without assuming the reporter has a detailed understanding of tactical operations. Finally, and this is critical, coordinate with Public Affairs. If you anticipate or receive a media inquiry, notify your chain of command and your installation's Public Affairs Office (PAO) immediately. They're your best resource for guidance and support.

COL Jerel D. Evans, garrison commander of Fort Benning, GA, speaks with local Columbus media on 26 July 2024. (Photo by CPT Stephanie Snyder)

Social media presents its own set of unique challenges and opportunities. When engaging informally on these platforms, remember to think before you post. Consider the potential impact of your words. Even on personal accounts, your posts can be seen as reflecting on the Army and your branch. Make sure you're familiar with Army regulations regarding social media use, paying close attention to those concerning operational security and the release of sensitive information. Avoid posting images or videos that might compromise ongoing operations, reveal sensitive equipment details, or give away unit locations. Strive to be authentic but always maintain a professional tone. Avoid controversial or inflammatory posts that could reflect poorly on the Army or your unit. And if you choose to participate in online discussions, do so respectfully. Steer clear of arguments and personal attacks. Remember, your installation PAO is a valuable resource. They can provide guidance on social media best practices and help you navigate difficult situations, especially when balancing your personal expression with the Army's needs.

Every interaction — large or small, online or off — shapes public perception of the Army, especially its Infantry and Armor branches. As a leader, you are a key storyteller, and your ability to engage effectively with the media is crucial for accurately conveying our history, present capabilities, and future readiness. This accurate portrayal is essential for maintaining the public trust that underpins our all-volunteer force as we celebrate 250 years of service. Remember, you carry the legacy of your branches forward. Your communication matters. Use it wisely, not only for the success of your current command but also to ensure continued respect and support for future generations of Infantry Soldiers. In today's social media age, understanding the power of strategic communication allows you to build trust, shape public perception, and lead effectively in the digital domain. Your digital footprint, like your actions in the physical world, reflects your leadership and the time-honored values that have sustained the Army for generations, ensuring our story of lethality, readiness, warfighting, and the warrior ethos resonates for the next 250 years and beyond.

CPT Stephanie Snyder currently serves as a public affairs officer in the Maneuver Center of Excellence Public Affairs Office at Fort Benning, GA. She enlisted in the Army in 2010 and served as a combat medic, team leader, personal security detail senior medic, and 44th Medical Brigade Command Suite NCOIC. After commissioning, CPT Snyder served as a fire support officer (FSO) attached to B Troop, 2nd Squadron, 14th Cavalry Regiment; brigade assistant FSO for 2nd Brigade, 25th Infantry Division; commander of A Company, 2nd Battalion, 58th Infantry Regiment; and operations officer in charge for 2-58 IN. She earned a bachelor's degree in biology from the University of South Carolina and a master's degree in higher education administration from the University of Louisville.

Doctrine Update: New ATP 3-21.9 Available Online

ATP 3-21.9, *Stryker Infantry Rifle Platoon and Squad*

ATP 3-21.9 provides doctrine for the Stryker infantry rifle platoon and squad of the Stryker brigade combat team infantry rifle company against a peer threat. This publication describes relationships, organizational roles and functions, capabilities and limitations, and responsibilities within the infantry rifle platoon and squad.

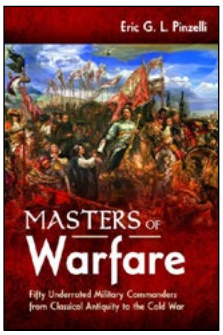
https://armypubs.army.mil/epubs/DR_pubs/DR_a/ARN44078-ATP_3-21.9-000-WEB-2.pdf

Book Reviews

Masters of Warfare: Fifty Underrated Military Commanders from Classical Antiquity to the Cold War

By Eric G. L. Pinzelli

Yorkshire, England: Pen & Sword Books, Ltd, 176 pages, 2022



Reviewed by
LTC (Retired) Rick Baillergeon

As a society, we are enamored with creating lists. Seemingly, for every category imagined there is surplus of lists associated with it. Some name the greatest or the best in a category, while others focus on the opposite direction and single out futility or the worst in a particular group. Once a list is developed and shared, it is time for the second part of the process to begin — the debate.

Military history is certainly not devoid of its own share of lists. Numerous books and articles have been crafted highlighting someone's opinion on the best or worst in a certain category. In the past, that has included greatest or worst commanders, most decisive or important battles, most effective use of deception, best units, etc. One of the more recent publications added to this genre is Eric Pinzelli's outstanding volume *Masters of Warfare: Fifty Underrated Military Commanders from Classical Antiquity to the Cold War*.

Before delving into the list and the merits of the book, it is prudent to learn about the author who is responsible for both. Pinzelli spent time with the French Marines in the 1990s before pursuing academic interests. This included receiving the French Defense Ministry's Military History Award for best military research work in 1998 and obtaining his PhD in 2003. He focuses on 17th and 18th century military history and is particularly interested in naval and siege warfare and the clashes the Ottoman Empire had versus Venice, Austria, the Papacy, Poland, and Russia. This expertise led him to crafting his first book, *Venise Et L'empire Ottoman: Les Guerres de Moree (1684-1718),* before releasing *Masters of Warfare*.

As the title strongly suggests, Pinzelli utilizes the volume to offer his selections of 50 commanders he believes are clearly underrated in their careers and performance. He narrows the playing field by focusing on the period from "Classical Antiquity to the Cold War" — basically from the sixth century BC to the Vietnam War. In the book's introduction, the author shares the criteria he used to make his selections. He states, "Fundamentally, this selection follows the criterion of legacy: their geopolitical impact on local or continental affairs, their distinctive contribution(s), their long-term influence on warfare and human history as a whole."

Employing the above measures, Pinzelli has clearly selected an eclectic group. The list includes a mix of army and navy commanders and is a very balanced group in terms of cultural and country origins and time periods. Thus, readers will find many commanders with Asian origins vice a heavy dose of European or North American World War II commanders.

To introduce his group to readers, Pinzelli has crafted short biographies of each commander (placed in chronological order). Within his introduction, the author concludes that more detailed analysis would have expanded the book at least tenfold. Within these profiles, he provides a concise synopsis of the commander's career, several quotes by or about them, and a final section where the author addresses their achievements (essentially why they made the list). As an added benefit to readers, he includes a select biography at the end of the volume where you can read more about the commander if interested.

I found these bios to be incredibly informative. Pinzelli writes in a highly conversant style which readers will find refreshing. While they can be read in any sequence, the author recommends reading the book in order. He feels it affords readers the opportunity to gain an appreciation of how warfare changed during the book's focused time frame.

To be honest, I consider myself well-versed in military history, but only in certain periods and genres. Thus, there were several (okay, many names) early in the book which I was not familiar with. As I continued through the volume, the names became more familiar, and I could increasingly question a selection based on my own knowledge. I was a little surprised at seeing the names T.E. Lawrence, Manstein, Zhukov, and Ridgway. In my opinion, in some cases, they may have been overshadowed but not underrated by their peers, foes, or historians. As with any list, there will undoubtedly be disagreements and those were some of mine.

With that said, as I completed the book, I surmised that although it was enjoyable to question selections, that was clearly not the author's intent. I believe he wanted to achieve two key things. First, as highlighted earlier, he wanted to instill an understanding of how warfare evolved during his selected period. Second, he could expose readers (certainly myself) to many commanders that they had never heard of and if so inclined seek out further scholarship. In both cases, Pinzelli has clearly succeeded.

In summary, readers will debate the author's selections within *Masters of Warfare*, but there should be little debate on the quality of his volume. Pinzelli has clearly crafted an outstanding volume. It is a book superbly written and organized. I believe any reader will benefit from his ability to provide outstanding, concise biographies on these 50 commanders. These in turn will surely entice readers to do further research.

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