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Infantry

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Adapting to Greater Challenges

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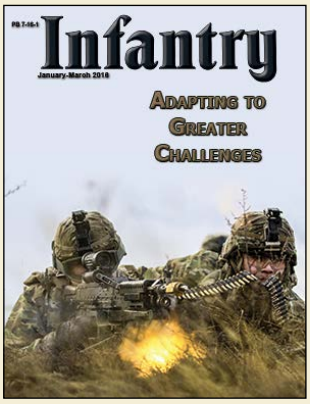


ON THE COVER:

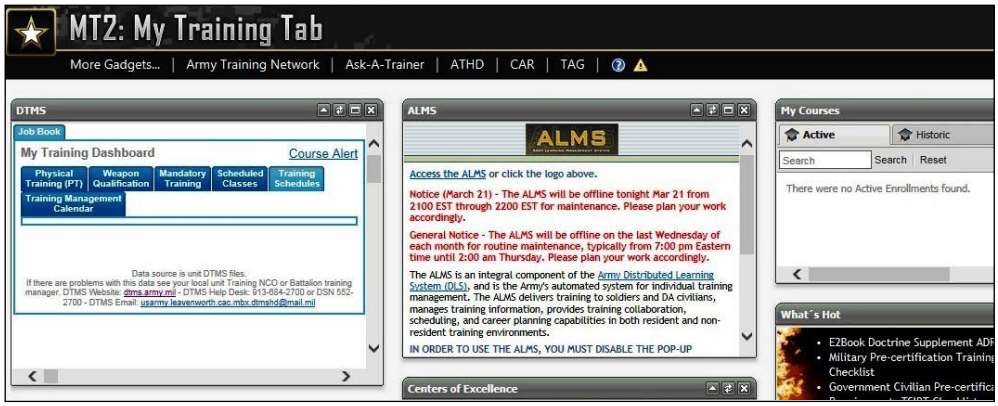
Soldiers with the 3rd Squadron, 2nd Cavalry Regiment engage targets during team live-fire training at Pabrade Training Area in Lithuania on 2 February 2016. (Photo by SSG Michael Behlin)

BACK COVER:

Paratroopers with the 2nd Brigade Combat Team, 82nd Airborne Division conduct a joint forcible entry operation during the brigade's Mungadai event on 5 April 2016 at Fort Bragg, N.C. The event familiarized its officers and senior NCOs with the legacy of airborne forces, sharpened their warrior tasks and battle drills, and strengthened unit esprit de corps through a series of tasks designed to challenge the participants mentally and physically (Photo by SSG Jason Hull)

Army Debuts New Digital Job Book

MIKE CASEY



The Army's new Digital Job Book that makes it easier for Soldiers and small unit leaders to track training is available on the Army Training Network (ATN) (https://atn.army.mil).

The new job book records physical training, weapons qualification, mandatory training, scheduled classes, and unit training schedules. It uses data from the Digital Training Management System (DTMS) to replace information recorded on paper job books for active duty, Reserve, and National Guard units. To access the job book, go to the ATN page (https://atn.army.mil) and click on the myTraining tab at the top of the page. Then you will see the Digital Job Book under the DTMS heading. You also can access the Digital Job Book from Army Knowledge Online. Click on the Self Service tab and then the My Training tab.

Data from the job book allows leaders to easily monitor unit training and quickly add training tasks to units and individual Soldiers. Small unit leaders can follow their Soldiers' training status on the Digital Leader Readiness Tool dashboard. The Digital Leader Readiness Tool is also accessed at the ATN My Training Tab and the DTMS portlet.

The Digital Leader Readiness Tool is available for small units and designated leaders once built by the unit in DTMS. The Digital Leader Readiness Tool provides an electronic dashboard summarizing small unit training information using gauge-type displays.

Leaders can select any of the gauges to get to by-name reports about their Soldiers meeting training standards and needing to complete training requirements.

The Training Management Directorate (TMD) at Fort Leavenworth, Kan., led the digital job book project. TMD is a subordinate organization of the Combined Arms Center-Training (CAC-T), which develops training requirements, fields training systems, delivers leader training, and sustains training capabilities.

Questions about the Digital Job Book or the Digital Leader Readiness Tool can be e-mailed to: usarmy.leavenworth.cac.mbx.dtmshd@mail.mil. For more information, call (913) 684-2700 or (877) 241-0347.

(*Mike Casey works for the Combined Arms Center-Training Public Affairs Office.*)

Tactical Combatives

SGT Kevin Robertson and SSG Guido Cozzarelli subdue an armed enemy using nonlethal tactics during the Tactical Combatives Trainer Course March 24 at the Army National Guard Warrior Training Center at Fort Benning, Ga. The Warrior Training Center offers 12 courses that provide training in critical and functional skills. These include the Ranger, Abrams, and Bradley training assessment courses, Air Assault, Pathfinder, vehicle crew evaluator, basic and tactical combatives courses, master fitness, and senior gunner courses.
For more information on the WTC, visit www.benning.army.mil/tenant/wtc.

Photo by CPT Ken Woods

‘All Army’ Identifies Elite Marksmen

BRENDA ROLIN

More than 250 Soldiers competed in the 2016 U.S. Army Small Arms “All Army” Championship, which was held 15-19 March at Fort Benning, Ga.

SGT Demetrios Iannios of the California Army National Guard was the overall individual champion of the All Army Championship. The All Army overall team champion was the Illinois Army National Guard. Team members included SFC David Perdew, SFC John Stockton, SSG Brandon Hornung, and SSG Jacob Blount. Their coach was CW2 Kyle Gleason.

All winners’ names and scores can be viewed at https://ct.thecmp.org/app/v1/index.

The All Army, hosted by the U.S. Army Marksmanship Unit (USAMU) in conjunction with the Maneuver Center of Excellence, develops combat firing skills at the entry and intermediate levels and recognizes superior skill at the highest level. Soldiers compete in separate classes - consisting of cadet, novice, open and professional - based on previous competition experience.

SSG Jeffrey Taylor, marksmanship master trainer and small arms master gunner, 2nd Brigade Combat Team, 82nd Airborne Division, said competitors experienced diverse levels of marksmanship during the All Army.

“I think it’s exceptional the way they use the different types of events in the All Army, from the combat rifle matches to the national matches, because it shows the differences in marksmanship — how accurate you have to be in the standing position or how your team has to assemble and how they have to fill their magazines,” said Taylor, who is a 19-year Army veteran from Pittsburgh and the coach of the 82nd Airborne Division teams.

Soldiers competed as individuals and on four-person teams in events such as: pistol and rifle excellence-in-competition matches, combat rifle and pistol courses of fire, multi-gun courses of fire, and an Infantry team match, among others.

Taylor said he attended a Marksmanship Master Trainer Course at Fort Drum, N.Y., last year and at the conclusion of training, instructors talked about the 2016 All Army. He said they suggested all the MMTC graduates develop marksmanship teams at their units to compete against the rest of the Army. Taylor said that’s exactly what he did. The 82nd Airborne Division teams were culled from 30 Soldiers who answered the call for marksmen throughout the division.

Information about the next All Army will be available in September 2017 on the USAMU website at http://www.usaac.army.mil/amu/ under “Match Info.”

Soldiers interested in attending the Marksmanship Master Trainer Course can go to the Army Training Requirements and Resources System website at https://www.atrrs.army.mil/atrrscc.

(Brenda Rolin serves as the chief of the USAMU Public Affairs Office.)

The Small Arms Championship (All Army) is conducted to develop combat firing skills at the entry and intermediate levels and recognizes superior skill at the highest level. During the event, Soldiers will compete in separate classes — consisting of cadet, novice, open and professional — based on previous competition experience.

U.S. Army photo

The Life of a Warrior Leader

LTC MATTHEW T. ARCHAMBAULT

In case you have not heard, there is a message coming. As an Army leader, if you want to see the cutting edge, look to Europe. U.S. Army Europe's (USAREUR's) "Strong Europe" campaign priorities of leader development, readiness, and enabling the alliance aim at making the 30,000 Soldiers assigned in Europe today look like the 300,000 Soldiers of yesteryear. The Soldiers of the 1st Battalion, 4th Infantry Regiment (Warrior Battalion) are USAREUR's opposing force (OPFOR) at the Hohenfels Training Area, Germany, and count themselves part of that 30,000. The Warriors, like everyone, are incredibly busy. They are getting the mission done with competent small unit leaders. Leaders don't grow on trees, and there aren't millions of dollars available for off-season free agency negotiations. Therefore, the Warrior Battalion pursues the only option available: develop their own leaders through the "farm system" approach. There is arguably no better place for a lieutenant or captain than in USAREUR's leadership laboratory, where 1-4 IN is the premier leadership factory. The Warrior Battalion is sending the message to the Army and its allies that the opportunity for developing competent and capable leaders of character is at Hohenfels, Germany.

ADP 6-22, *Army Leadership*, states, "The fastest learning occurs when there are challenging and interesting opportunities to practice leadership with meaningful and honest feedback and multiple practice opportunities." Most units spend more than a year preparing for a single rotation at a Combat Training Center (CTC). A trip to Fort Irwin (Calif.), Fort Polk (La.), or Hohenfels may be the only opportunity a lieutenant or company commander will have during his key developmental assignment to fight a breathing, free-thinking OPFOR. Warrior Battalion officers execute between five to six decisive action training environment (DATE) rotations per year. Within these rotations, the Warrior Battalion's missions vary across the range of military operations. For the battalion to provide a world-class OPFOR, 1-4 IN's formations must be trained and lethal prior to the rotation beginning, but to fully leverage the precious few weeks of "white space" between rotations, the formation must capitalize upon the opportunity the rotation provides to build training readiness and develop its leaders.

The standard model for a DATE rotation consists of situational training exercise (STX) lanes focused at the company level for the rotational training unit (RTU). The Warrior Battalion provides OPFOR mostly at platoon level and below. The OPFOR companies receive the intent for each STX lane, which may vary from a platoon defense of a village, to a platoon movement to contact, to a platoon deliberate attack. In each instance, the OPFOR platoon leader executes troop leading procedures (TLPs), develops hasty graphics, issues an operation order (OPORD), and fights his platoon. A platoon may execute between four to five STX lanes per rotation, which translates to a platoon leader having as many as four opportunities per rotation to defend, conduct movement to

Photos courtesy of author

Soldiers with 1-4 IN help a Romanian soldier zero his MILES (Multiple Integrated Laser Engagement System) prior to the start of a Joint Multinational Readiness Center rotation.

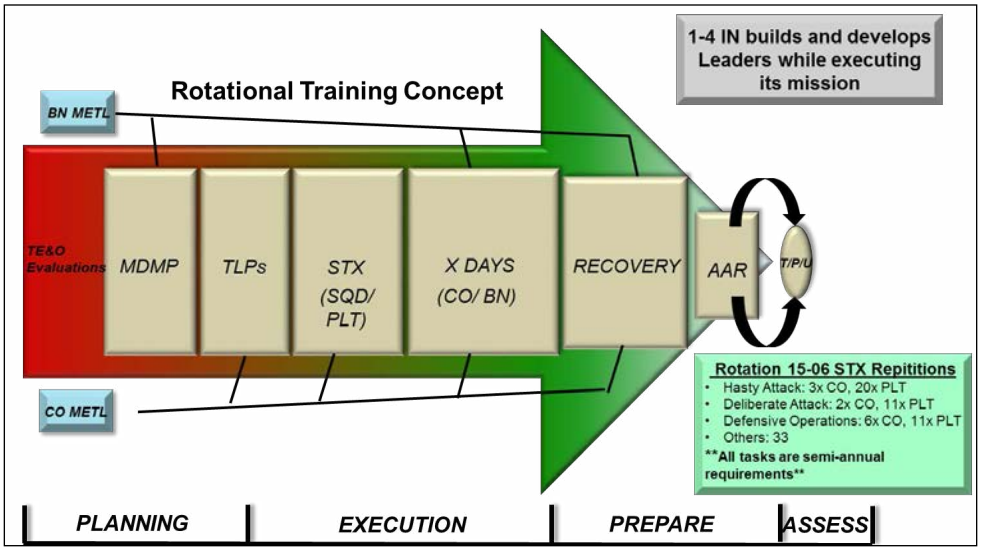


Figure 1 — 1-4 IN Leverages Each Rotation to Develop Leaders and Build Readiness

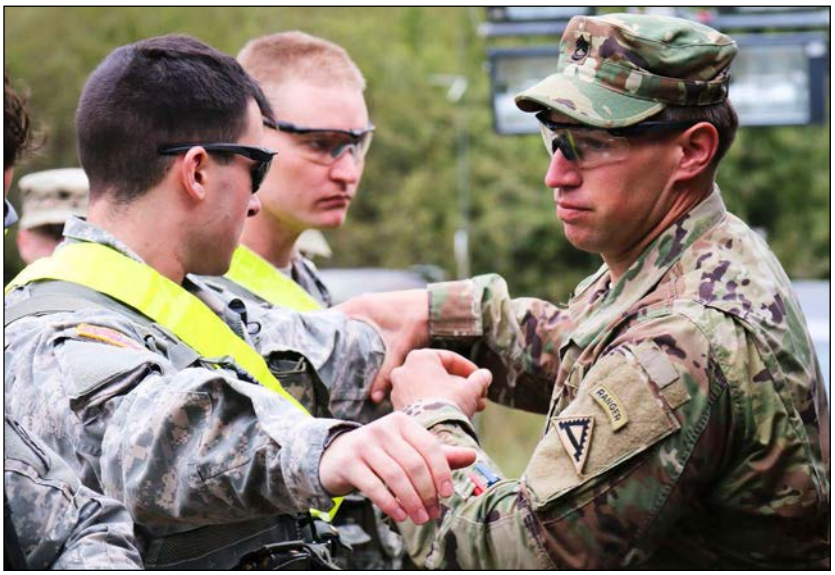
contact, attack hastily, or attack deliberately. With just four rotations per year, that's 16 deliberate opportunities in STX scenarios for a leader to get repetitions! That's eight times the required number according to the Combined Arms Training Strategy (CATS) website (https://atn.army.mil/). In the instances when the OPFOR requirement is less than a platoon, squad leaders or sections leaders have a similar opportunity, and the platoon leader operates in a supervisory capacity. The battalion utilizes staff officers armed with training evaluation outlines (TEOs) to evaluate platoons and ensure feedback is available so these opportunities are not thrown away. This system has secondary and tertiary effects with the feedback helping companies and platoons see themselves while at the same time helping the battalion leadership identify and evaluate companies' key collective tasks and the battalion's overall training readiness.

During actual exercise days (X-days), the battalion and its companies operate in a free-play environment whereby the battalion conducts the military decision-making process (MDMP), issues an order to the companies, conducts a combined arms rehearsal, and executes its operations against the RTU. The battalion lives in the field, conducting reconnaissance and counter-reconnaissance, attacking and defending, and completing combat service support (CSS) requirements to include maintenance and logistics package (LOGPAC). Battalion leadership moves around the battlefield visiting companies and platoons, spot-checking fighting positions, and monitoring maintenance and Soldier morale. Just like with the RTU, the X-days provide the next level of realism above the STX lanes.

During the few weeks between rotations, the battalion focuses not only on recovery but also setting the conditions for junior leaders to succeed. These conditions include the incremental training model of moving from individual training to collective training. Throughout these off-cycle weeks, Warrior leaders are doing the routine things routinely, namely command maintenance, training management, counseling, and physical training to name a few. Readiness systems are an essential condition for the Warrior Battalion to empower junior leaders. One of the most critical readiness systems is the refinement process of current standard operating procedures (SOPs) to ensure they are viable. Another system is the U.S. Army Training and Doctrine Command (TRADOC)-accredited OPFOR Academy, which ensures junior leaders and Soldiers understand the intricacies of the battalion's specialized mission. Finally, each Warrior leader receives a handbook designed specifically to provide the tools necessary to help the new lieutenant on the ground. Spanning the gamut of topics from the Ranger Creed, Army Values, and Warrior Redlines, to functional aspects such as TLPs, weapon and vehicle characteristics, 9-line medical evacuation (MEDEVAC) request, offensive and defensive considerations, and range card templates, the Leader Book provides small unit leader's a quick reference guide to the essentials for success not only in the "Box" but on any battlefield.

Figure 2 depicts quarterly events spanning training, leader development, and routine systems, which contribute to the overall development of the Warrior leader in accordance with ADP 6-22.

Warrior leaders are also messengers for the battalion throughout Europe. They have carried the message about what a Warrior leader can do to Lithuania where they led a squad



A Soldier with the 1-4 IN inspects Expert Infantrymen Badge (EIB) candidates during land navigation training.

through a multi-national squad competition, to Bulgaria where they provided OPFOR at the NATO partner's training center, and distinguished themselves in USAREUR's Best Warrior Competition. Wherever the Warrior Battalion sends its Soldiers, it's also sending leaders who deliver the message that the Warrior Battalion gets the mission done. At the same time these leaders, captains, lieutenants, and NCOs, are having incredible experiences from which to draw insights for the battalion as well as themselves as leaders.

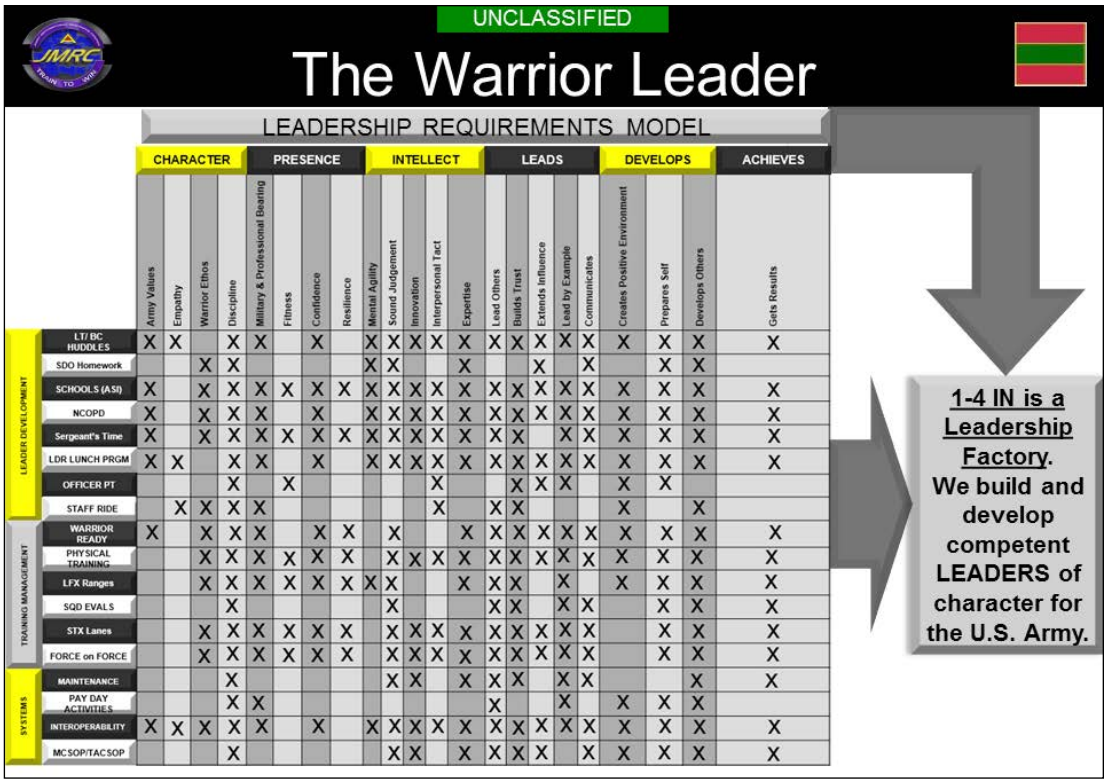


Figure 2 — 1-4 IN Leadership Requirements Model

Often the message recipients come to the battalion as well. The Warrior Battalion builds a composite team every single rotation of U.S. Army Reserve component and allied/partnered nation units. From the U.S. side, the battalion receives a National Guard infantry company and National Guard/U.S. Army Reserve engineer assets that it task organizes into the formation during rotations. The battalion typically utilizes that National Guard infantry company as a company team by task organizing it with 1-4 IN armored/mechanized platoons during the rotation. From the multinational side, the battalion integrates two to five multinational partners into the formation during a rotation. What this means for the organic Warrior leaders is that they're on the cutting edge of multinational interoperability — learning about other cultures and perspectives; creating successful tactics, techniques, and procedures (TTPs) for interoperability; and identifying risk and ways to mitigate to accomplish the mission and successfully do "business."

The battalion's goal is to make those multinational partners full members of the Warrior team. They receive translated leader handbooks and SOPs. They execute warm-up training scenarios under Warrior leader supervision so that risk and training deficiencies are identified and their capabilities can be implemented to their maximum effectiveness while maintaining safety. Often a proven TTP is to embed a Warrior leader in the partner-nation formation to ensure effective communication. The opportunity for the Warrior leader is obviously profound. These steps enable the Warrior Battalion to achieve the goal of helping individuals and teams realize their potential and accomplishing the mission.

Yes, the message is coming. If you as an Army leader want maximum repetitions at doing what you joined the Army to do (fight in a challenging environment against a tenacious and capable enemy), then you need to join 1-4 IN — USAREUR's OPFOR and leadership factory.

Photo by SGT Matthew Hulett

Soldiers from the 1-4 IN — role-playing as enemy combatants — return fire while during exercise Allied Spirit IV at the Joint Multinational Readiness Center on 2 February 2016.

LTC Matthew T. Archambault currently commands the 1st Battalion, 4th Infantry Regiment in Hohenfels, Germany. His previous assignments include serving as a planner with I Corps at Joint Base Lewis-McChord, Wash.; a battalion and brigade S3 at Joint Base Lewis-McChord; planner at HQ ISAF in Kabul, Afghanistan; and company commander with the 1st Infantry Division in Schweinfurt, Germany.

Behavorial Health:
A Primer for Company-Level Leadership

CPT ROBERT KLEIN
CPT JOSI HALL

The purpose of this article is to educate company-level leadership on behavioral health resources available within a brigade combat team (BCT) and to provide guidance in effectively employing all available assets. There are currently insufficient programs of instruction or publications available to develop a leader's knowledge prior to assuming command or responsibility. This article will provide an overview of behavioral health assets and recommendations for working with these assets.

Behavioral Health Assets

The BCT has an Army psychologist and a social worker organic to the unit and an embedded behavioral health (EBH) clinic that is an extension of the hospital's behavioral health department which is situated within the BCT footprint. Despite being organic to the BCT, both the psychologist and the social worker, per an Office of the Surgeon General (OTSG) memo, are required to commit a minimum of 20 hours per week to the EBH clinic, which significantly diminishes their ability to be flexible and responsive to leaders. The EBH clinic is composed of civilian psychologists, social workers, and a medication prescriber (typically a nurse practitioner) with a rigid 40-hour work week. While civilian providers are often not compensated for overtime and therefore rarely available after hours or on the weekends, Army organic providers are an around-the-clock asset — available day or night.

It is important to be aware of the significant difference in experience when dealing with EBH staff. They are working from a perspective of patient care within the confines of a hospital environment, which leaves little, if any, experience interacting with military leaders. This lack of experience extends to the civilian providers and is even more apparent because they additionally may lack any formal military training or understanding of Army regulations and policies to help guide their clinical work. For example, EBH providers are generally unfamiliar with required processes to conduct an evaluation for a sniper school candidate or the procedures to separate a Soldier for behavioral health reasons.

The different perspective that EBH providers bring to the table often favors Soldier care at the detriment of Army needs. This more often than not leads to EBH providing partial or limited information related to a Soldier's behavioral health history to assist you in deciding how to manage the health, welfare, and morale of your affected Soldier. This can be seen when a Soldier is put on an indefinite treatment plan and given a profile as opposed to being properly discharged from the military or when an NCO is cleared for the rigors of drill sergeant duty without being mentally stable enough for such an environment. This overall lack of communication and understanding between leaders and providers has greatly increased the potential for misunderstanding one another's roles and responsibilities when working to improve the health and welfare of Soldiers. In both of our experience, it is not uncommon for providers to not tell you if your Soldier has a history of or is currently experiencing self-harm thoughts. Limited information sharing such as this is contributed to a lack of mutual understanding on how the commander's need-to-know supersedes HIPPA (Health Insurance Portability and Accountability Act) restrictions. Bridging this gap to enable providers to assist leaders begins with company-level leadership being proactive in the relationship and effectively communicating needs.

Providers will first and foremost protect and treat the patient; in order to glean the information you need as a leader to make sound decisions, you have to be proactive. This means understanding the roles of all EBH players and your role as a leader, and most importantly, setting up rehabilitation team meetings (RTM) to discuss the bottom line up front (BLUF) of your Soldier's situation (i.e. any suicidal thoughts or gestures) and the way ahead (can this Soldier return to duty, what is being treated, how many sessions, how many times per week, prognosis, a set date to reassess). The key element in interacting with the EBH staff is a proactive leader at the company level.

Brigade Psychologist

Having a psychologist at the brigade level is an artifact of the war as psychologists were previously found only at the division level. This position is unique because it is only found in U.S. Army Forces Command (FORSCOM) units, and this officer is only rated by FORSCOM commanders — not by hospital personnel. The significance of this is insight to mission readiness versus solely Soldier care which provides military leadership with a direct behavioral health consultant. Unfortunately, the previously mentioned OTSG memo dictates that this officer will work in the EBH clinic 20 hours per week, significantly impacting the psychologist's ability to have a schedule that is flexible and responsive to commanders.

The primary function of the psychologist is to be a consultant to command on behavioral health topics (e.g. suicide). The irony here is that the prototypical psychologist is direct-commissioned and has spent two years in the Army prior to becoming a brigade psychologist, with those years being in a hospital. This begs the question: what does the psychologist know about the Army, let alone FORSCOM, that would make him or her an effective consultant? A cautionary

statement about psychologists is that many do not have specialized training and/or experience in topics that are politically important to senior Army leaders (e.g. suicide, sexual assault, post-traumatic stress disorder [PTSD]). Research has demonstrated that behavioral health providers are likely not adequately trained in the assessment, management, and treatment of suicidality.[1] This is important to know because commanders typically have to take the psychologist's word at face value because this is not their area of specialty and it was not covered at the school house.

In speaking with a psychologist, a commander will likely notice that he or she may be long winded in providing feedback and fail to answer concerns about a Soldier in a brief and succinct manner; if at all. This is where your ability to provide immediate and direct feedback will help the psychologist develop the capacity to provide effective feedback in the future. For example, you can teach this person about the acronym BLUF and the phrase "the way forward" to improve the feedback that you receive.

EBH Clinic Versus Brigade Psychologist

Each maneuver BCT is supposed to have an EBH clinic inside their footprint by 2016. This clinic is filled with civilian behavioral health providers (social worker, psychologist, nurse practitioner), and one of these providers is assigned to each battalion in the brigade. This is done so that the providers can provide leaders with information on Soldiers who are receiving treatment, typically during the battalion health-of-the-force meeting. There is a good chance that the provider assigned to your battalion will not be treating the Soldiers whom you need information on and will likely present limited, secondhand information. Another limitation is that EBH providers are given minimal training on Army culture and regulations by the hospital prior to starting work at the clinic. This is important to know because you may have a Soldier who needs to be separated from the Army and the provider does not know that he/she can initiate the separation.

The ideal brigade psychologist is able to balance the needs of the Army and the Soldier without sacrificing the greater Army mission. You will find the brigade psychologist in either the EBH clinic or in the troop medical clinic (TMC). Whether they work in the EBH clinic or TMC depends on the chief of Behavioral Health. It should be known that the brigade commander can influence that situation. Being in the TMC versus the EBH clinic is much more conducive to treatment as it promotes a multi-disciplinary approach. This is beneficial because most behavioral health cases also present with physical issues. Many behavioral health problems (e.g. suicidality) are monitored and/or caught by physician's assistants (PAs), who can then do a drive-by consult with the brigade psychologist. The prototypical psychologist is likely not aware that information is time sensitive, and the brigade psychologist working in the TMC is more conducive for information flow.

The brigade psychologist and EBH clinic provide the following services: command-directed mental health evaluations (CDMHEs), administrative separations for behavioral health issues (Army Regulation [AR] 40-501, *Standards of Medical Fitness*, Chapter 5-13/17), drill sergeant and recruiter evaluations, sniper school evaluations, mental health evaluations as part of the chapter process for Uniformed Code of Military Justice (UCMJ) (Form 3822), psychological testing to determine symptom validity (i.e. is the Soldier exaggerating their symptoms), security clearance evaluations (request comes from Special Security Office via central clearance), determining suitability for deployment from a behavioral health standpoint, and consults with inpatient psychiatry to get a Soldier admitted.

The ideal brigade psychologist is able to balance the needs of the Army and the Soldier ***without sacrificing the greater Army mission. You will either find the brigade psychologist in*** *either the EBH clinic or in the troop medical clinic* ***(TMC)... Being in the TMC versus the EBH clinic is much more conducive to treatment as it promotes a multi-disciplinary approach.***

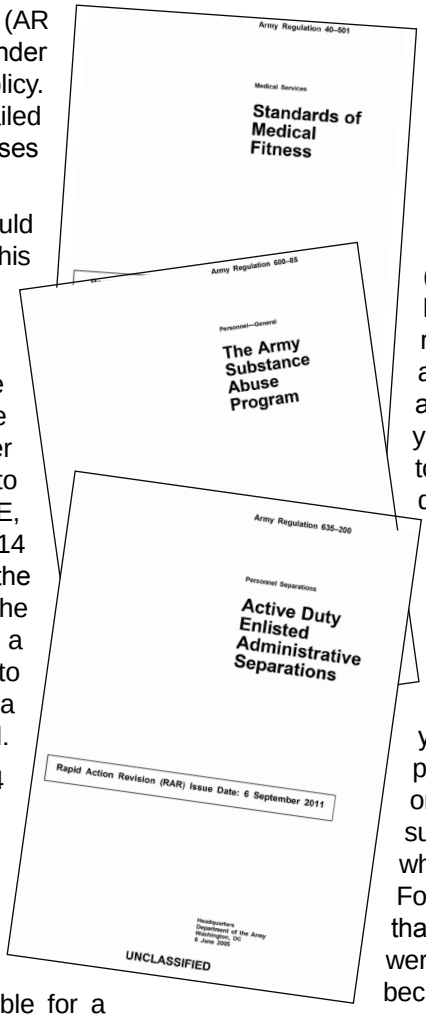
The difference between these two entities is that the brigade psychologist is 24/7 and should respond to your calls no matter the day or time. A second difference is that Army psychologists have gone through an Army internship and residency program and are trained on how to conduct school evaluations and other Army regulation-based evaluations. Civilian providers may receive minimal training, if any, in Army regulations related to behavioral health prior to taking their position and are expected to function at the level of the brigade psychologist. Third, the brigade psychologist will deploy with you while the EBH stays in place and continues to treat.

Recommendations

As a starting point, leaders need to be aware of the following health-related regulations in order to develop a baseline understanding: AR 40-501; AR 635-200, *Active Duty Enlisted Administrative Separations*; AR 600-85, *The Army Substance Abuse Program (ASAP)*; Department of Defense Instruction (DoDI) 6490.04, and DoDI 6490.07. Chapter 7 of AR 40-501 discusses the difference between temporary and permanent profiles and the medical readiness determination point (MRDP). Chapter 5 outlines what is required for a behavioral health separation. Knowing when a Soldier reaches MRDP will help you monitor when a Soldier will meet criteria for initiating a medical examination board (MEB) and will impact your report of troop strength/readiness to deploy. Chapters 13 and 14 of AR 635-200 discuss these administrative separation avenues which require a mental health evaluation in the separation packet. AR 600-85 (paragraph 10-11 and table 10-1) discusses the Army's limited use policy, and knowledge gained from this AR will help you determine whether information received from a behavioral health provider can or cannot be

used for an administrative separation (AR 635-300, Chapter 9) or simply falls under the commander's need-to-know policy. DoDI 6490.04 discusses what is entailed in a CDMHE, and DoDI 6490.07 discusses deployment-limiting medical conditions.

Prior to taking command, you should speak with the existing commander to get his or her take on the brigade psychologist and the EBH clinic. What you want to figure out is whether the psychologist and/or clinic is a force multiplier or a force detractor. If either or both entities are force detractors, how has the commander worked around this issue? You want to get the counseling forms for CDMHE, probable cause urinalysis, and Chapter 14 for a positive urinalysis. Second, have the psychologist brief you on his or her role, the roll of the EBH clinic, how or when to do a CDMHE, HIPPA and commander's need to know, and how to handle the return of a Soldier from the inpatient psychiatric ward.



In regards to CDMHEs, DoDI 6490.04 removed behavioral health providers as "gatekeepers" for approval of CDMHE. The change appears to be in line with how the Army has historically functioned with providers only being able to make recommendations to commanders, as leaders are ultimately held responsible for a Soldier's health, welfare, and morale. For example, hospital leadership does not make the ASAP counselor explain why a patient received a DUI while in treatment and they do not make the provider deal with the family or plan the memorial for a patient that completed suicide. Doing the chapter separation for a DUI and dealing with the fallout of a suicide falls squarely on your shoulders. DoDI 6490.04 also expanded those allowed to initiate CDMHEs to include those in supervisory positions over the Soldier. Prior to this policy, only commanders could initiate CDMHEs. There is a good chance that the brigade psychologist and/or EBH providers do not know this and having this directive at the ready will educate them. It is not your job to educate them, but educating providers will likely improve future interactions with them.

In speaking with the behavioral health provider that conducts your CMHDEs, you want to know the BLUF, the way forward, and what you can do reduce risk. The last step of the troop leading procedures is essential when dealing with a behavioral health provider following a CDMHE. You want to know the Soldier's initial treatment plan and when you will follow up to check on the Soldier's progress. At that second meeting, you want to get an estimate on whether the Soldier will likely be an MEB, a Chapter 5 separation, or be fully mission capable. During this meeting, you want to discuss how the Soldier's emotions/behavior have impacted his or her occupational functioning. Many providers fail to do collateral interviews and solely base their judgment on what the Soldier tells them. Sometimes the Soldier will paint a highly unfavorable picture of the chain of command and your input can clarify things. If you do not stay on top of the provider, there is a chance your Soldier will be treated indefinitely (missing a lot of work for treatment). Behavioral health profiles are tracked on the unit status report (USR) as non-available or medically non-available, and your commander will want to have a sense of the way forward for the Soldier when you scrub the non-availables roster. In regards to risk reduction, it is a team effort and you can do something to reduce risk. For example, if it is discovered during the CDMHE that a Soldier has debt, you can command-direct the Soldier to participate in financial planning or you can look into whether the Soldier is eligible for an AER loan/grant.

In regards to a commander's need to know, you should meet with the brigade legal officer prior to taking command to have them brief you on HIPPA and how/when your need-to-know supersedes HIPPA. This will be useful information when interacting with behavioral health providers. For example, a provider may not want to tell you that a Soldier had a positive urinalysis while they were admitted to the inpatient psychiatric ward because it is against HIPPA. This isn't true in most cases (Army's Limited Use Policy) as it likely falls within the commander's need to know. Behavioral health providers commonly fail to think about these type of issues from your perspective and are overly focused on protecting the patient. When they do this, they fail to protect the Army. These providers need to balance the needs of the Army and the needs of the Soldier.

Notes

[1] Ryan D. Graham, "Suicide Risk Assessment Accuracy Across Levels of Training, Experience and Confidence for Psychologists-in-Training" (Unpublished doctoral dissertation, Texas Tech University, 2014); David A. Jobes, Rene Lento, and Katherine Brazaitis, "An Evidenced-Based Clinical Approach to Suicide Prevention in the Department of Defense: The Collaborative Assessment and Management of Suicidality (CAMS)," *Military Psychology* 24 (2012): 604-623; David A. Jobes, M. David Rudd, James C. Overholser, and Thomas E. Joiner Jr., "Ethical and Competent Care of Suicidal Patients: Contemporary Challenges, New Developments, and Considerations for Clinical Practice," *Professional Psychology* 39 (2008): 405-413.

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Countering the Spread of Islamic Extremism

Through Culturally Sensitive, Religously Respectful Soldiers Who Possess Enhanced Language Skills

LTC RICHARD K. SNODGRASS

Reviewing the events of the decades preceding the devastating attacks on 9/11 reinforces the fact the world in general — the West and the United States in particular — has been subjected to the constant threat of terrorist attacks by groups and individuals espousing a twisted version of Islam through bombings, shooting sprees in public locations, and suicide attacks against mostly soft targets. The United States and its partner nations in the battle against Islamic extremist groups must discover new and improved courses of action to combat these extremists and their ability to recruit, brain-wash, and train continuing waves of future terrorists.

In the foreseeable future, the dominant challenge facing the United States is the asymmetrical threat of terrorism, especially in the form of Islamic extremism. From the original attack on the Twin Towers in 1993, to the African embassy attacks in 1998, to the devastating destruction of the Twin Towers on 9/11, and more recently the rise of the Islamic State of Iraq and al-Sham (ISIS) and overthrow of the Yemeni government, the U.S. military apparatus has proven incapable of adequately addressing this threat through the application of predominately conventional warfare. To combat this ever-worsening rise of extremism requires the focused dedication to the creation of hybrid joint forces that are culturally sensitive and religiously respectful and that possess enhanced language skills.

Many will most likely comment that we already have forces that have training in these three areas and that these forces reside in the Special Operations Command. It is true we do have our Special Forces (SF), Civil Affairs (CA), and Psychological Operations/Military Information Support Operations (MISO) forces who are exposed to this training during the process to earn their military occupational specialty (MOS). As a result of this training, they are extremely adept at working with host nation security forces and the local populace. However, there are not enough of them to conduct their own mission, much less work with the tens of thousands of Soldiers who will deploy to conduct overseas contingency operations. Therefore, it is vital that we greatly expand this capability so that every squad-sized element has at least one Soldier adequately trained

A platoon leader with the 4th Brigade Combat Team, 4th Infantry Division and his translator (right) walk with the local leader of a town south of Kandahar Airfield, Afghanistan, on 23 October 2014.

Photo by SFC Brock Jones

and educated to a specified level. Expanding the cultural awareness capacity of units engaged in missions that put them in constant contact with the local population will serve us well in our efforts to minimize the instances of Soldiers engaging in offensive actions, often accidentally, due to a lack of understanding local customs/traditions or a basic exposure to the values of respecting other cultures that are most likely very different from those they were exposed to growing up in the United States.

Expanding the cultural awareness capacity of the traditional units normally engaged in missions that put them in constant contact with the local population in foreign lands will serve us well in our efforts to minimize the instances of Soldiers engaging in offensive actions, often accidentally...

As recently as February 2015, the *Army Times* reported a huge push to recruit, train, and field 5,000 Special Operations Soldiers, including 3,000 SF, 950 CA Soldiers, and 800 MISO Soldiers. This will be an extremely time-consuming process as only a small percentage of recruits are ultimately successful in completing a pipeline taking 43 weeks for MISO, 46 weeks for CA, and 67 to 103 weeks for SF. Another indication of the demand for Soldiers in these critical specialties is the fact they are eligible for selective reenlistment bonuses.[1]

These are not the forces we have to worry about alienating Muslim populations in the areas of responsibility where U.S. forces conduct operations. It's those young Soldiers, NCOs, and commissioned officers who are conducting the day-to-day interactions, key-leader engagements, and presence patrols in the cities and villages of Iraq and Afghanistan, and whose actions — proper and improper — are being witnessed by the very populace we hope to influence in a positive way.

Culturally Sensitive and Religiously Respectful Joint Forces

On a positive note, our engagements in Iraq and Afghanistan have created recognition among the services of a need for education on culture. However, each service has approached cultural education based on an assessment of its particular needs instead of from a joint perspective. Some of the programs include but are not limited to the Defense Language Institute, U.S. Army Training and Doctrine Command (TRADOC) Culture Center, U.S. Air Force Culture and Language Center at the Air University, U. S. Navy Center for Language Regional Expertise and Culture, and the U.S. Marine Corps (USMC) Center for Advance Operational Culture Learning.[2]

Of all these initiatives, it is the Marines who have led the way through its Regional, Culture, and Language Familiarization (RCLF) concept. This is a web-based application that breaks down the globe into sub-regions, concentrating on the ethnic groups and languages to that region. The program's mission statement is "to ensure that Marine units are globally prepared and regionally focused so they are effective at navigating and influencing the culturally complex 21st century operating environment in support of the Marine Corps' missions and requirements. The program is based on 17 regions that may expand as required in the near future. Each region may contain many different cultures but due to some shared cultural traits and geographical proximity, they are bound by common economic, political, and historical or social issues."[3] This encapsulates the needed focus of all services and the joint community necessary to counter Islamic extremism the U.S. and the West will continue to face.

The RCLF module is the most appropriate approach within the Department of Defense as it not only provides distance learning capabilities in language and cultural immersion, but also ties this training into the professional military education (PME) requirements for officers and NCOs. This establishes "blocks" of requirements to be accomplished throughout their career path from lieutenant/warrant officer through lieutenant colonel/chief warrant officer 5 and sergeant through master sergeant.[4]

In the book *Black Hearts: One Platoon's Descent into Madness in Iraq's Triangle of Death*, Jim Frederick chronicles what can occur when Soldiers lack the ability to respect local culture and religion — viewing the local citizens as non-humans — which can lead to crimes against the very individuals we are there to help.[5]

These criminal actions can also impact the relationships with the security apparatus (military and police) our forces are working, training, and living with on a daily basis. Cultural insensitivity and a real or perceived lack of respect of Islam obviously creates friction points between our Soldiers and the host nation forces. This friction prevents a synergistic relationship, commitment from our partners, and in extreme instances is an instigator of insider attacks. In the Department of Defense December 2012 Report on Progress Toward Security and Stability in Afghanistan, there is significant discussion on the dramatic rise of insider attacks (commonly referred to as "green on blue") between 2007 and 2012. The number of incidents ranged from a low of three in 2008 to 29 in 2012.[6]

The report identifies four probable motives for the insider attacks as:

1. Infiltration (an insurgent is able to enlist in the Afghan National Security Forces [ANSF]);
2. Co-option (a current member of the ANSF is recruited by the insurgency to conduct the attack);
3. Impersonation (insurgent obtains an ANSF uniform and uses it to gain access to the forward operating base);
4. Personal motives (members of the ANSF act on their own without guidance from the insurgency).[7]

This represents a tremendous recruiting tool for the insurgency and further demonstrates a dire need for institutional education through pre-commissioning, initial entry training, NCO and Officer Education Systems, and PME. As David Kilcullen, the former senior counterinsurgency adviser to GEN David Petraeus, points out, the United States is much more likely to face irregular warfare in the future as opposed to conventional force-on-force conflicts.[8] Moreover, the common thread of our involvement in Iraq, Afghanistan, and the Horn of Africa has been battling opponents that base their existence on the tenets of Islamic extremism.

Language Capable Joint Force

In the overwhelming majority of school districts throughout the United States, there is a crippling lack of a requirement for our youth to learn a foreign language. This translates to potential military recruits and leaders who are devoid of this highly valuable skill when serving in a foreign nation and working with host nation officials, local leaders, military partners, and the general populace we want to leverage to dry up support to an insurgency. The ability to communicate, at any level of conversation, with people in their native language is usually considered the most basic sign of respect for their culture and their country. This does not necessarily imply the ability to conduct an entire key leader engagement without the services of a Department of Defense translator or a local interpreter, but at least the capability to converse in the pleasantries that are an important component of establishing relationships in the Muslim world. These include greetings, asking about your counterpart's family, eating and drinking, counting, the days of the week — phrases you can expect to use in virtually every key leader engagement. This shows an effort to learn about the locals and their customs/traditions and helps establish a lot of goodwill early in the relationship. Will these actions change the mind of the most virulent jihadist? Of course not. But for that part of the population which does not actively or passively support the insurgency, it can help counter any message that U.S. forces are there to disrespect the host nation customs, traditions, and religion.

During my 2005-2006 deployment to Iraq working with the Iraqi police forces in the Kurdish provinces of Kirkuk and Sulaymaniyah, I developed a several hundred word capability in Kurdish, instead of Arabic. This effort bought tremendous amounts of goodwill with Kurdish government and police leadership, especially with those older and very senior in rank. I was informed that when Saddam Hussein was still in power, it was illegal for the Kurds to speak their native language in public. So to see a U.S. Army captain greeting them in Kurdish instead of Arabic, they were simply astonished and incredibly receptive to any advice I presented, making my deployment an extremely productive and rewarding experience.

Fortunately, there are several tracks we can pursue to develop the language capability of our joint forces: traditional college and universities where our future leaders are participating in the Reserve Officer Training Corps (ROTC) program; the Defense Language Institute, Foreign Language Center (DLIFLC) in Monterey, Calif., where the majority of Army personnel are trained; the U.S. Army John F. Kennedy Special Warfare Center and School (SWCS) at Fort Bragg, N.C.; or command language programs operating within units utilizing commercially available systems such as Rosetta Stone software.[9]

Aside from the process of actually identifying future service members with the ability to learn a foreign language and successfully training them for this new skill set, one of the most difficult tasks for our strategic leadership is to correctly identify languages for future needs and contingencies. Chinese, Korean, Arabic, and Farsi will easily appear on most planners' radar. The last two administrations have focused a lot of attention on the continent of Africa, integrating all aspects of national power — DIME (diplomatic, information, military, and economic). Africa has more than 1,000 languages and dialects, and many strategic fault lines that may flare up may involve a populace that speaks Berber, Portuguese, or Swahili, so it is impossible to make perfect predictions.[10] But we can certainly focus on the most likely scenarios and start with our future leaders attending institutional learning at our nation's military academies and ROTC programs by implementing requirements for a minimum of basic and intermediate foreign language courses and advanced courses for those demonstrating a higher proficiency. We can also encourage and reward those students who wish to obtain their degree in foreign languages. If a standardized level of foreign language proficiency is established at the academies and ROTC programs, this will create tremendous inroads toward developing a multi-language capable joint force.

The initial process for helping to identify the ability to learn a foreign language is to administer the Defense Language Aptitude Battery (DLAB). This test needs to be administered to all incoming freshmen at the academies, first-year students in the ROTC programs, and new recruits who achieved a minimum score on their service's version of the Armed Forces Services Vocational Aptitude Battery (ASVAB). For efficiency, it would be advisable to develop a "pre-test" to the DLAB and then administer the full battery to those applicants achieving a certain score. The actual DLAB is a web-based test, comprising 126 multiple-choice questions and is scored out of a possible 176 points. Half of the test is audio and half is written. It does not test a current language proficiency but rather the ability to learn a foreign language.[11]

From a practicality standpoint, based on the limited number of training seats available and the protracted period of time it takes to send a service member through the Defense Language Institute (over one year for many languages), training via this method alone is not practical and will require other training approaches. The Special Warfare Center and School already provides language training for CA, MISO, and SF operators at their Fort Bragg schoolhouse. This is another source to be leveraged, although it would certainly require an increase of civilian and military instructors, web-based training material, support staff, and classroom facilities. However, expanding the capacity of a current capability is always more advantageous, less expensive, and time-

consuming than the initial creation of the capability.

Another resource that was previously available to service members, as well as their families, was the Rosetta Stone web-based language training program. This was provided to service members free of charge by simply accessing this software via the Army Knowledge Online (AKO) website where there was a direct link to the Rosetta Stone website. The Army elected not to renew the user contract with Rosetta Stone when the contract ended in September 2011.[12] As someone who effectively used this software, I can attest to its value as a language resource tool. It would need to be reinstated for this proposal to be viable and would certainly be more cost efficient than traditional methods of language learning in a classroom setting.

Additional Skill Identifier (ASI)

Although they may go by different names, the overall concept is basically the same within the various services: identify a need for specialized capability, training, and education, then create an alpha-numeric combination to capture this ability for future assignments. Within the Army's personnel structure, it is known as an ASI.[13] The Navy uses the term additional qualification designator for officers, and the Air Force goes by special experience identifier to match uniquely qualified personnel to specific critical missions.[14] Regardless of the name, the philosophy must be adapted within the construct of establishing a manner in which to identify those who have accomplished this valuable level of learning and ensuring they are assigned to those leadership positions requiring this education for mission accomplishment.

Recommendations

As our military leaders look to the future in an effort to forecast where we will be required to conduct operations and against whom those operations will be conducted, it can be anticipated our civilian leaders will continue to seek out partner nations with which to work to create a coalition, especially in the Middle East with Muslim countries. This was the case with Desert Storm, and efforts are in place to achieve the same with the current fight against ISIS. In the 2012 strategic guidance "Sustaining U.S. Global Leadership: Priorities for 21st Century Defense," it specifies the following challenge for the military leadership: "U.S. forces will plan to operate whenever possible with allied and coalition forces."[15] Accordingly, U.S. commanders will be required to not only be aware of the culture, norms, and thoughts of the enemy, but will be required to also understand the same when working with partner militaries and government leaders. Failure to establish positive working relationships with senior leadership from different cultures and religious backgrounds at the strategic level will create potentially more difficulties than at the operational or tactical level. To achieve this, the Department of Defense must do the following:

Photo by SSgt Corey Hook, USAF

A U.S. Army Soldier assigned to the 10th Mountain Division talks with an Afghan village elder during a key leader engagement outside of Camp Fenty, Afghanistan, on 18 February 2016.

1. Codify this concept in all of our strategic documents: National Security Strategy, National Defense Strategy, National Military Strategy, Quadrennial Defense Review, and the Quadrennial Development and Diplomacy Review. Fully integrate the value of cultural capabilities into the framework of the various war colleges and create a curriculum of study designed to offer a master's level degree to students, both those in residence and distance learning. Senior level buy-in is key for the rest of the force to fully realize the importance of attainment of this skill set on our future conflicts with religious extremism.

2. Designate cultural training as one of the most basic concepts of all initial entry level training for officers and enlisted service members. This includes the military academies and all ROTC programs. Develop a curriculum of learning that will enable students to earn a minor in cultural awareness, which can be applied to the process of earning their ASI once they are commissioned and achieve other milestones in their culture educational pathway. For our enlisted service members, develop cultural training to become a part of basic training and advanced individual training (AIT) for every MOS.

3. Make cultural training an integral component of all levels of PME for both the officer and NCO Corps. Make provisions to prevent "grandfathering" for those who have already progressed to higher levels of their military education. These are the leaders who will soon be in elevated positions of leadership and must be more prepared for working in a multinational/multicultural area of operations.

4. Another component of the cultural education process is language training. Language capability potential must be identified early in a Soldier's career by the development of an abbreviated version of the DLAB that will be administered to those achieving a minimum score on the Armed Services Vocational Aptitude Battery (ASVAB). Those earning an acceptable score will be administered the full DLAB once they arrive at their basic training station. Students of the academies and ROTC programs will go through the same process during their first year. All students will be required to take a minimum of two semesters of a foreign language and those who pass the DLAB will be "strongly encouraged" to earn a minor in a foreign language and be given preferential opportunities to attend further language training upon completion of their BOLC (Basic Office Leader Course). These opportunities must be extended to the Reserve component Soldiers as well.

5. Soldiers who have already completed their initial entry training will conduct similar language ability testing. Those passing the DLAB will be selected for attendance at an institutional language training facility such as DLIFLC or SWCS. Until such time as the capacity is sufficiently increased to accommodate this influx of students, a commercial language program such as Rosetta Stone will be made available in their selected language. In addition, they will be assigned to a distance learning cohort with an instructor from DLIFLC/SWCS to monitor their progress and further prepare them for attendance at an actual school.

The attainment of the cultural awareness ASI must be viewed by the force as a career enhancer. For enlisted service members, it must be worth a significant number of promotion points and place them ahead of their peers for attendance in their NCO professional development courses. For the officer corps, it should be required to serve in various leadership positions during overseas contingency operations that place the leader in positions of frequent interaction with the host nation populace and foreign military advisor roles. Promotion boards must be instructed to view leaders with this particular ASI in a very favorable light, much as was the case in 2006 when there was a concerted effort to get more officers to volunteer to serve as members of a military transition team (MiTT).

No matter what name they go by: al Qaeda, Islamic State of Iraq and the Levant, Al-Qa'ida in the Arabian Peninsula, al-Shabaab, Boko Haram, Ansar al-Shari'a, or most recently, ISIS — all of these terrorist organizations present an existential threat to United States' interests and allies around the world, the American homeland, and our way of life. The United States is losing the battle with radical Islam in general and ISIS in particular. Defeating this threat will require U.S. military intervention. This intervention means more than air combat missions and "boots on the ground." It means those boots need to be filled with U.S. Soldiers, Marines, Sailors, and Airmen who are culturally aware, religiously respectful, and language capable.

Notes

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[3] USMC Center for Advanced Operational Culture Learning, 2013, accessed 14 May 2015, https://www.tecom.usmc.mil/caocl/SitePagesHome.aspx.

[4] Ibid.

[5] Jim Frederick, *Black Hearts — One Platoon's Descent into Madness in Iraq's Triangle of Death* (NY: Broadway Paperbacks, 2010).

[6] "Report on Progress Toward Security and Stability in Afghanistan" (Department of Defense, Report to Congress, December 2012), 36-38.

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The Best Classroom:

Reflections from the MCCC Field Exercise Pilot

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The outcomes of the Maneuver Captains Career Course (MCCC) state that graduates will master troop leading procedures (TLPs), utilize critical thinking to understand and apply mission command, and be precise and lethal in the synchronization of combined arms maneuver. Above all, the course expects that graduates are ready to successfully serve as either a company commander or staff officer on a battalion or brigade staff. Historically, these outcomes were accomplished during MCCC's company and battalion phases, primarily through classroom-based instruction, TLP operation order (OPORD) writing and presentation exercises, and the use of simulations. Understanding that the course must provide graduates who can thrive in a complex environment to win, the staff and a select number of MCCC student captains piloted an initiative that added a five-day field training exercise (FTX) to the course's syllabus to exercise and evaluate students in a live training environment where they plan and execute company-level operations.

The FTX was the result of much leader dialogue at the Maneuver Center of Excellence in collaboration with operational units and the Combat Training Centers (CTCs), which have found that MCCC graduates need "hands-on" practical application of the fundamentals the course is instructing in a field environment in order to set them up for success in their post-graduation unit of assignment.

As a result, this FTX grades students in their ability to meet the company phase course outcomes in a time-constrained, austere field environment. Throughout the five-day FTX, students are required to plan tactically sound, synchronized company-level operations that accomplish the mission. During planning and execution, they must be flexible and adaptive in their approach to solving problems while effectively communicating their vision and orders in a way that is thoroughly understood and inspires confidence in their subordinates (peer MCCC students). Additionally, the FTX provides a venue for students to demonstrate proficiency in the art and science of tactical planning and mission command at the company level.

MCCC students maneuver during an FTX at Fort Benning, Ga., on 18 November 2015.
Photos by Markeith Horace

The initial FTX pilot was conducted by Active Component Class 02-15 in May 2015. Twenty-two student captains from various backgrounds formed a reduced force light Infantry company. Graded company leadership positions assigned during execution included the company commander, first sergeant, executive officer, and fire support officer. Additionally, all remaining students not assigned to company positions served in platoon leader, platoon sergeant, fire support specialist, and squad leader roles, which were observed but not graded positions. Leadership positions were rotated after every change of mission, and all students were assigned a position within the company headquarters at least once. To maximize training value, all students were issued AN-PRC-119 VHF radios and were able to monitor the company command net throughout the operation. This allowed all participants to monitor the progress of the mission, maintain situational awareness of commander decisions, and ensure students were able to take away lessons learned during all phases of the operation.

For exercise design, a select group of small group leaders (SGLs) received guidance from the chief of tactics to construct a field exercise that would meet both his intent and the course outcomes to produce practiced MCCC students in planning and executing company-level operations in an austere field environment. During exercise execution, a battalion command post was employed to oversee range control requirements and, more importantly, serve as the reporting higher headquarters for the company and the white cell for the exercise. SGLs served as the observer/controllers for the exercise, teaching, coaching and grading MCCC students throughout the FTX.

This five-day field problem took place on the challenging terrain of Fort Benning's western training area. On the Friday prior to the FTX, all participants received the battalion OPORD that laid out the overall situation and unit's mission within the context of the established decisive action training environment (DATE) scenario. Early on the first morning, students occupied the tactical assembly area and conducted priorities of work that included the development of a company defensive sector sketch and fires plan. The company command team received a fragmentary order (FRAGORD) and had 24 hours to conduct TLPs. Throughout the week, students would receive multiple FRAGORDs that required the unit to conduct a raid, two attacks, one movement to contact, and one company defense. Applying a "crawl, walk, run" methodology for the event, planning timelines were continually compressed from 24 hours to only one hour as the exercise progressed. This methodology gave students the opportunity to demonstrate proficiency in the science of tactical planning at the company level.

Students utilized parallel planning with the command team working in concert with platoon leadership to develop a tactically sound and synchronized company-level OPORD. Student company commanders used terrain models to brief their plan in a way that was thoroughly understood by their subordinates. Prior to execution, commanders received confirmation and back briefs to ensure their intent would be met by their platoon leaders. Additionally, reduced force rehearsals and combined arms rehearsals on a terrain model ensured all elements understood the scheme of maneuver, were ready to execute the mission, and were prepared to respond to contingencies. Throughout this entire process, SGLs provided the requisite teaching and coaching to reinforce learning objectives.

During execution, dismounted movement typically ranged from four to seven kilometers over restricted terrain. Throughout the movement and during actions on the objective, students received scenario injects from SGLs that included observing enemy movement via mock unmanned aerial system (UAS) feeds, reacting to unexpected enemy contact, and receiving casualties. This forced company leadership to evaluate the situations, report, and make decisions to adjust their plans appropriately to exercise adaptive and flexible problem solving on-the-move. During the execution of each mission, MCCC students faced a reduced force opposing force (composed of Infantry Basic Officer Leadership Course snowbirds). The command team needed to demonstrate proficiency in the art of mission command by issuing mission orders to platoon leaders, accurately battle-tracking their subordinate units, and synchronizing numerous supporting assets including simulated fires and UAS. At the conclusion of each iteration, the student command team led a formal after action review (AAR). Guided by the senior SGL, the AAR highlighted lessons learned, ways to improve group performance during follow-on operations, and most importantly, the implications for their future assignments post-graduation.

Feedback from students who participated in the event was overwhelmingly positive. Participants noted much of the value in this experience could not have been learned in the classroom. An in-depth AAR identified several key takeaways that will guide future iterations of the event. The reduced timeline and austere environment forced students to rethink the TLP process from the method they had used previously in the classroom. The importance of warning orders became apparent as the compressed timeline forced students to rely on parallel planning. While previous orders in the classroom were completed by a single student, the collaborative planning (including the XO, 1SG, and FSO in the planning process) in the field highlighted the value of parallel planning with both the battalion and platoons. Students noted its use established valuable shared situational understanding among their subordinates. The value of clearly articulated tasks and purposes to subordinate leaders — as well as a clearly defined commander's intent — became clear as company commanders were forced to delegate greater portions of the planning process to their command teams and platoon leadership. Especially in a time-compressed environment, students found that subordinates with a clear task and purpose were able to execute within their commander's intent.

During mission analysis, students quickly learned to focus on the enemy's essential tasks during their evaluation of the threat as part of their intelligence preparation of the battlefield. A focus on friendly essential tasks during mission

analysis expedited the identification of the initial decisive point. The importance of rehearsals — particularly reduced force rehearsals for movement to contact and raids — also became apparent as the company progressed through the exercise. These rehearsals promoted shared understanding throughout the operation. Using these techniques, students learned to produce quality company orders that were tactically sound and synchronized in the field environment.

Students found previous systems and products that had worked well in the classroom would not stand up to the field environment. As students struggled to use traditional map boards and binders that had become common in a temperature-controlled classroom environment, the value of pocket-sized OPORD shells and battle-tracking products became clear. The students also developed techniques for briefing in the field, which included having subordinates brief their portion of the scheme of maneuver, fires, and sustainment paragraphs of orders. The field environment also reinforced the importance of leader's physical reconnaissance during execution. Students were reminded that direct fire-control measures and phase lines need to be tied to terrain to ensure the successful execution of movement and actions on the objective. Students also realized the need to identify decision points and a phased casualty evacuation plan after casualties were taken during a long dismounted movement and company leadership had trouble deciding which ambulance exchange point to move the casualties to for evacuation.

During execution, students were forced to become adaptive and flexible in their approach to solving problems through injects and constraints from the environment. In one specific operation, planned target reference points that were reconnoitered using imagery were unable to be confirmed on the ground. This forced the company commander to be flexible and adjust his plan to ensure that the support-by-fire element had visual contact with the assault element. Lessons like these cannot be learned in the classroom!

Throughout the FTX, students were able to "dust off" field craft that may have been lost in the months or even years prior to attending the course. As the FTX progressed, basic skills such as noise and light discipline, proper rucksack packing, basic small unit tactics, and battle drills were refreshed. Students also witnessed firsthand the effect extended field training has on the cognitive process. These skills, the grasp of which is unique to the austere field environment, will prove invaluable as these officers go on to take command of companies throughout the Army.

Overall, the FTX pilot conducted by MCCC 02-15 added great value to the course while utilizing minimal resources. This initiative will enrich the course and allows officers a valuable opportunity to put into practical application the requisite skills they have learned in the classroom that need to be mastered to be successful company commanders. All future students coming to the course can expect continual refinement to the FTX that will support the course's outcomes and better prepare them for service in the operational Army. In due time, the FTX may expand beyond the current five days to include mounted maneuver, but that will be sorted out in the future as improvements occur in time and space. Brigade and battalion commanders can expect that MCCC graduates will arrive to their units better prepared to serve as combat leaders who can win in a complex world.

During the FTX, students were forced to become adaptive and flexible in their approach to solving problems.

At the time this article was written, **LTC Chris Budihas** was serving as the chief of tactics at the Maneuver Captains Career Course, Fort Benning, Ga. In his 27 years of military service, he has served in all forms of Army Infantry and Armor formations, to include service in the Marine Corps as an Infantryman and officer. Most recently, he commanded a Stryker battalion in the 2nd Cavalry Regiment in Germany and Afghanistan.

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FIGHTING FOR INFORMATION

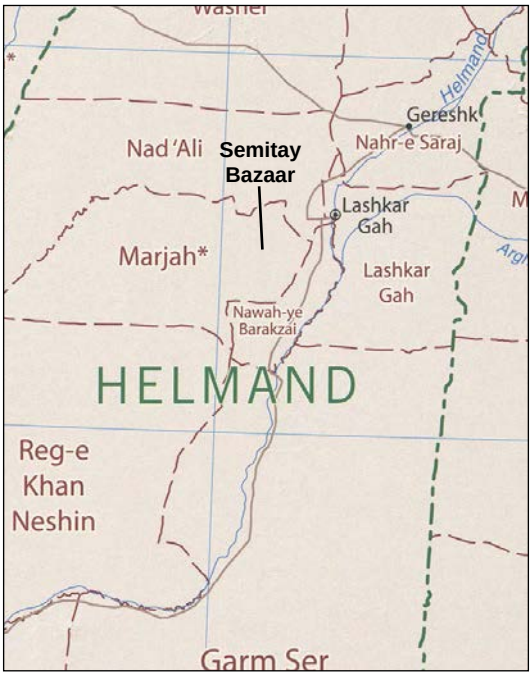
DISMOUNTED RECONNAISSANCE TROOPS AND RECONNAISSANCE IN FORCE

MAJ ANDREW BREACH, BRITISH ARMY

"In the world of intelligence, information was power..."
— GEN (Retired) Stanley A. McChrystal
My Share of the Task, A Memoir

In the predawn darkness of 19 August 1942, British Commandos, Canadian Infantry, and American Rangers stormed ashore at the French port of Dieppe in a reconnaissance in force. Their objective was to destroy the port, study German coastal defenses, and determine the best way to overcome them. The result was a bloody defeat, but the information obtained prepared the way for the successful landings at North Africa, Sicily, and Normandy. Sixty-seven years later, British, Canadian, American, and Afghan forces pushed forward in Helmand Province, Afghanistan, in a reconnaissance in force which set the way for the success of Operation Moshtarak. It was not a doctrinal fast-moving, armor-heavy advance. Rather, it was a deliberate foot advance — and a model for a successful reconnaissance in force during future conflicts. Reconnaissance in force can be used by dismounted troops in modern warfare to gain information about the enemy such as his strength, locations, dispositions, and tactics. A good example is a vignette from the British 11 Brigade Reconnaissance Force (11 BRF) in Helmand Province during Operation Moshtarak.

British reconnaissance doctrine is fundamentally about stealth and finding as much information about the enemy without him being aware that you are there. Reconnaissance in force is the polar opposite; the basic premise is drawing the enemy into a fight in such a way that he reveals the information about himself without him realizing that you are doing so and is a much quicker way of gaining information. In both the British and U.S. armies, this has long been the preserve of armored units, which are mobile, protected, and have significant firepower.[1] While not incorporated into doctrine, British infantry reconnaissance platoons have adopted reconnaissance in force as a tactic and it is taught at the British Reconnaissance School. The BRFs, which are based on a cavalry squadron, are a combined arms grouping augmented with an infantry reconnaissance platoon, an antitank-guided weapon (ATGW) squad, a mortar squad, mortar fire controllers (MFCs), a fire support team (FST), and a squad of combat engineers, for a total strength of 125.[2] BRF doctrine is extrapolated from infantry reconnaissance doctrine, and BRFs have proven to be leaders in adapting that doctrine to the new challenges of warfare.



Map of Central Helmand Province, Afghanistan

During its tour in Afghanistan, 11 BRF established reconnaissance in force as a tactic against the insurgents and it was a proven success. With the rise in prominence of irregular forces — ranging from the Afghan insurgents, the Da'ash (ISIS/ISIL), or irregular forces in Eastern Europe — this tactic is extremely relevant, but its effectiveness against an enemy that is equally well trained and equipped remains to be proven. Reconnaissance in force is scalable, from a platoon through a company to a battalion, and will usually be conducted by a force smaller than the one being reconnoitered. It carries a high level of risk, which can be mitigated through training with other arms, particularly with the Air Force and electronic warfare. The basic premise of reconnaissance in force is deception, which can range from forcing the enemy to unmask command and control nodes and crew-served weapons by pretending you are weaker than you are or conversely attacking him with overwhelming force for limited periods of time so that he is forced to reveal his headquarters and reserve locations. In both examples, the key risk is that the enemy takes the initiative and is able to overwhelm the reconnaissance force. The outcome is usually tactically indecisive but through use of drones, electronic warfare assets, and mortars, it allows the reconnaissance force to gather significant amounts of information.

Operation Moshtarak was an Afghan-led operation to capture the Marjah District of Helmand Province from insurgents and involved a total force of 15,000, which included five brigades of Afghan forces from the Afghan National Army, Afghan National Police, Afghan Border Police, and Afghan Gendarmerie as well as forces from the U.S., U.K., Denmark, Estonia, and Canada.[3] Marjah and the surrounding district had only seen brief visits from coalition forces since the U.S.-led invasion in 2001 and was used as a base for the insurgents

to rest, train, and store weapons. The district center is only 20 kilometers from the provincial capital of Lashkar Gah, and it was long suspected that insurgents commuted from Marjah throughout the rest of Helmand where they would fight.

Reconnaissance operations in and around Marjah began in September 2009 with D-Day planned for February 2010. The 11 BRF was involved throughout the operation, and the vignette that follows comes from one of the reconnaissance operations it conducted named Operation Kapcha Zarda.[4]

Operation Kapcha Zarda took place between 22-24 December 2010 in the area of Semitay Bazaar, commonly known as Five Ways Junction. Five Ways Junction had been the site of a British patrol base, which had been occupied by a platoon until the summer of 2010. The purpose of the base was to take advantage of the proximity to Marjah, deterring the insurgents from moving up through the rest of Helmand to fight. However, its relatively small size made it an opportune target for the insurgents to attack, and since it was isolated from the rest of the British forces, reinforcement, resupply, and casualty evacuation were difficult and led to the withdrawal of the platoon. This gave the insurgents free rein to move up from Marjah and attack with impunity, which they did.

The BRF's mission during Kapcha Zarda was simple: move by helicopter to Semitay Bazaar and allow the enemy to attack it, revealing insurgent locations in Marjah. The mission was supported by Predator unmanned aerial vehicle (UAV), a smaller Desert Hawk UAV, a moving target radar, and an electronic warfare team. Less the moving target radar, these resources supported the BRF 24 hours a day for the whole operation. How the action was planned was equally as simple: land under the cover of darkness, occupy a compound before the enemy can work out how many troops have landed, conduct a small patrol to act as bait for the insurgent to attack, and then allow him to think he has the upper hand while tracking fighters' movements.

The first troops landed at 0400 on 22 December on the southeast side of the canal and immediately occupied a compound which would be their base for the next two days. The noise of helicopters had broadcast the BRF's presence to everyone in the local area, but there was still uncertainty about how many troops had landed and where they were. Almost immediately, the electronic warfare team began to pick up insurgent commander's communications directing their fighters to find where the soldiers had landed. To give the insurgents something to find, a small 16-man patrol left the compound and began checking vehicles in the vicinity of the bridge. Following the insurgents' build-up, they attacked the patrol at the bridge. As with the majority of insurgent attacks, they were conducting their own reconnaissance in force, waiting for the BRF to reveal all its locations. This tit-for-tat pattern continued for two days where the BRF steadily unmasked its strength, moving nearly all its troops along the east bank of the canal and forcing the insurgents to commit more and more fighters from Marjah. This pattern was repeated for the remainder of the mission and included a probe to the western side of the bank and attacks by Apache helicopters and the Predator.

*The key difference in the approach by the insurgents and the BRF is perspective. The **insurgents wanted to find the positions of the** BRF and attack them there and then, whereas the BRF wanted to locate the commanders and **where the fighters moved from to attack them** later on.*

The key difference in the approach by the insurgents and the BRF is perspective. The insurgents wanted to find the positions of the BRF and attack them there and then, whereas the BRF wanted to locate the commanders and where the fighters moved from to attack them later on. Putting the BRF in this position was high risk, which was mitigated by using the canal as a physical barrier and having the ability to track the insurgents using UAVs and radars. Despite coming under attack for two days, there were no British casualties. After two days of fighting and having located numerous insurgent commanders and enemy rest locations — and having killed or wounded the majority of the fighters attacking them — the BRF returned to Camp Bastion.

Operation Kapcha Zardar provided a treasure trove of information about the insurgents in Marjah that was indispensable to the U.S. Marine Corps during its operation to liberate Marjah.

As stated by GEN McChrystal in the introduction, information is power and reconnaissance in force is an effective tactic in getting this information. As such, the tactic deserves to be developed and should be another method available to a commander. It has a proven utility against insurgent or lightly armed forces, but its utility by dismounted reconnaissance platoons in a conflict against a conventional enemy requires further investigation.

Notes

[1] ATP 3-20.98, 2-6.

[2] In the British Army, a squadron is a sub-unit.

[3] ISAF Press Release dated 1 February 2013, http://www.rs.nato.int/images/stories/File/2010-02-CA-059-Backgrounder-Operation%20Moshtarak.pdf.

[4] Dari for "dark night."

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Putin's Army and the Complex Application of Russian Strategic Landpower

COL DOUGLAS MASTRIANO AND THE U.S. ARMY WAR COLLEGE PROJECT 1721 TEAM

We live in uncertain times, facing adversaries willing to wage war in complex and unconventional ways. Many of you experienced the impact of facing an adaptive and innovative foe firsthand in Iraq and Afghanistan. Such a challenge is now rising in Europe; Russia is adapting its approach to war in both a multifaceted and innovative manner. As rising leaders in the U.S. Army, it is imperative that you understand the nature of the strategic environment so that should you confront such an adaptive foe in the future, you will be able to innovate faster, retain the initiative, and thereby accomplish your mission.

Recent events demonstrate the complex and adaptive approach being employed by Russia to exercise its influence over areas of Europe. The changing face of Russia's operational approach began in 2007 when it launched a crippling cyber attack on Estonia. The cyber attack was in retaliation for the decision to move a Soviet-era Red Army monument, a move that Moscow opposed. This was followed by a large Russian conventional attack against the country of Georgia in 2008, occupying two large areas of the nation (Abkhazia and South Ossetia). In 2014, the world witnessed the Russian annexation of Crimea using soldiers in unmarked uniforms. In only one week, Russia seized control of Crimea "without firing a shot." The annexation of Crimea was rapidly followed by a Russian inspired/led subversive war in eastern Ukraine. The common thread among these diverse Russian operations is its use of ambiguity to confound and confuse decision makers in the West. The "so what" question is that should you deploy to Europe, what is the nature of the threat and what form will it take?

Russian Landpower

The 2008 invasion of Georgia and the ongoing intervention in Ukraine demonstrates Russia's reliance on the military and security services as instruments of its grand strategy. The application of the Russian military instrument of power has taken various forms over recent history. For instance, the Russian operation in Georgia was largely conventional. The 2014 Russian operation in Crimea diverged from the conventional approach by manipulating a sympathetic population and using a robust security infrastructure built up for the Sochi Olympics. Finally, Moscow inspired and is leading a separatist movement in eastern Ukraine hidden behind a cloak of ambiguity and backed by the powerful capabilities of its army.

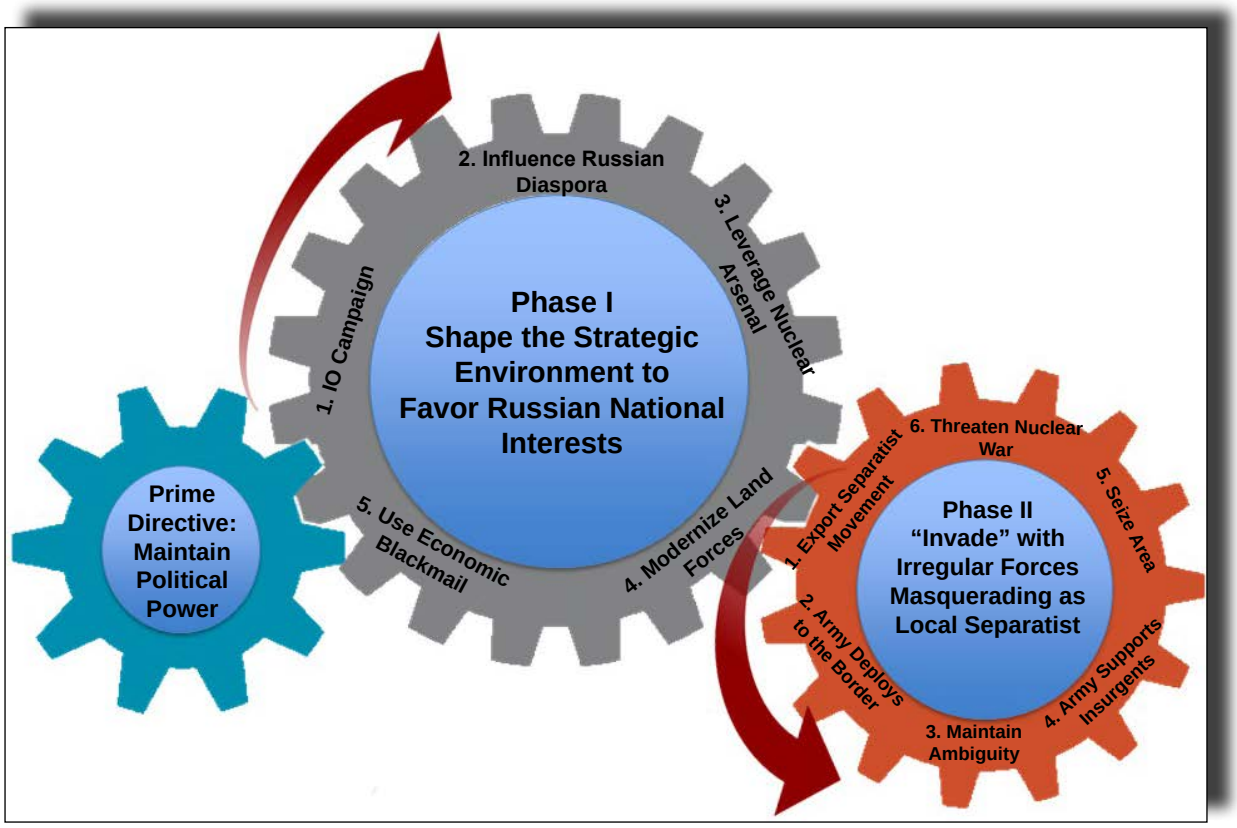
Despite the differences, these operations exhibit common features of Russia's use of military force. First, Russia depends on landpower to achieve its strategic military objectives in the region. This landpower-centric approach has been part of a broader Russian strategy to roll back the expansion of Western influence (especially NATO and the European Union [EU]) in the former Soviet republics. Second, Russia has adjusted the use of its army to conduct hybrid, irregular warfare as the primary means of warfare against its neighbors so as not to provoke a decisive response from either the United States or other European nations. Finally, it has shifted to a less centralized military structure, relying on special operations forces and other unconventional units to achieve its strategic ends. With this in mind, information operations (IO) and cyber capabilities have emerged as key components of Russian military operations.

The importance of modernization is an ongoing concern for Moscow and its armed forces. These reforms are directed to developing a capability that can intervene quickly and decisively in the region that is able to conduct anything from small special purpose forces missions to large scale conventional operations. It is this ability to tailor forces across the range of operations that makes it uniquely adaptive and capable. To do this, Russia is concentrating resources on a small number of elite units, primarily airborne and special operations forces that make up the core of its emerging rapid reaction force.

The Emerging Russian Operational Approach

Moscow uses deception and disinformation to prevent a quick response from the West. Such was the case in Crimea, where, despite evidence to the contrary, Putin denied that the "little green men" were his soldiers until after he had completed annexation of the region. By doing this, Putin operated inside the decision-making cycle of NATO and thus retained the strategic initiative. Additionally, this approach exploits fissures in NATO and the EU. When Putin believes that employing conventional forces is too risky, he resorts to using unconventional forces, scaled and adapted to the strategic environment to confound American and European decision makers. This "strategy of ambiguity" was used to great effect in Crimea and continues to succeed in eastern Ukraine.

Putin's adaptable and long-term approach encompasses two phases comprised of 11 factors. Phase 1 of this emerging operational approach is to create or shape an environment favorable to Russian strategic interests. Phase 2 exploits divergences in the NATO alliance created during Phase 1 and seeks to alter the strategic environment through an ambiguous/hybrid landpower intervention in Eastern Europe. The following discusses this adaptive, multi-faceted approach being employed by Russia:



Graphic courtesy of author

Figure — Putin's Strategy of Ambiguity

Phase I — Shaping a Strategic Environment Favorable to Russian Interests:

1. Consolidate political power and use nationalism to maintain domestic support. At the core of the strategy of ambiguity is the maintenance of Putin's power base and his need for popular support. Putin secures his base by casting the West as the enemy of Russia and thus fuels the engine of nationalism. Staying in power is at the root of Putin's "strategy of ambiguity" and is the driving force behind it.

2. Modernize and leverage Russia's nuclear arsenal to bully neighbors. The recently announced modernization of Russia's already massive nuclear arsenal is a threat to regional stability. Yet, a greater concern is the rhetoric coming out of the Kremlin threatening to use nuclear weapons against any European nation that it views as a challenge to its national interests. Such was demonstrated when Moscow threatened Denmark with nuclear targeting should it join NATO's missile defense shield in March 2015. The use and threat of nuclear strikes is clearly a part of Russia's emerging strategic/operational approach to bully and intimidate nations stepping outside its view of the region.

3. Modernization of Russian conventional land forces. The May Victory Parade in Moscow witnessed the unveiling of Russia's intent to replace its fleet of armored vehicles with significantly modern systems. Although facing economic challenges, it seems that at least the Western Military District will benefit from this incredible boost to conventional land force capability and capacity. When completed, this will alter the strategic dynamics of the continent.

4. Apply economic incentives and blackmail to pressure neighboring countries' economic well-being. Although this tactic has been successfully waged against Ukraine, the dynamics of doing this against other European nations is a bit more complex. However, it is unlikely that Germany and other NATO members, who rely on Russian energy, are willing to have their economic well-being put at long-term risk and thus are less willing to take a hard stand against Russian expansionist activities in the east.

5. Capitalize on long-term IO campaign. The tools of the IO campaign include high-quality Russian television, radio programming, hockey clubs, youth camps, and the Internet. They are designed to export Moscow's strategic messaging across Europe, specifically targeting the Russian Diaspora. This brilliant campaign barrages the viewers/listeners with an unrelenting one-sided view of the world (a pro-Moscow view).

Phase II — "Invade" an Eastern European nation through a hybrid mix of irregular forces, augmented by Russian intelligence and special forces personnel, supported by a gradual introduction of conventional forces (only when the conditions are right).

6. Use subversive activity to create instability in ethnic Russian areas. With a continuous IO campaign brewing in the background, the groundwork is laid to manipulate disgruntled ethnic Russians in any region Putin chooses. As in Crimea and eastern Ukraine, these movements start as peaceful protests but ultimately lead to taking over government buildings and inciting armed insurrections. Once engaged

in low-level combat, the Russian rebels proclaim their right to self-determination and eventually appeal to Moscow for aid. However convenient it is to have local support in an uprising, the Kremlin does not need popular support in the Russian Diaspora to achieve its strategic ends. Should the local populace in a contested region not support an uprising, Moscow can simply export a separatist movement from Russia to provide the pretext for an intervention, as in evidence in eastern Ukraine.

7. Move a large conventional force along the borders to dissuade action against the subversives. As in eastern Ukraine, Moscow responded to the instability by deploying a large conventional force along the border under the guise of aiding refugees and containing unrest. The real reason, however, was to intimidate Ukraine, which hesitated out of fear of provoking a response from Moscow.

8. Leverage ambiguity to maintain strategic flexibility. Deception and disinformation are the key ingredients of the Russian approach, and Putin uses these tools to sow ambiguity and thus obscure his strategy. As a result, Putin remains a step ahead of NATO's decision-making process and quickly adapts his actions to keep the alliance off balance.

9. Violate international borders and support the pro-Russian insurgents. As the Ukrainian army launched its offensive to subdue the rebels in eastern Ukraine, the Russian army was poised to provide support to their comrades. These "volunteer" soldiers provided armor, artillery, and air defense assets that blunted Ukrainian offensive action. Meanwhile, the Kremlin equivocated about its intentions and denied involvement in the conflict. Had there been a determined international response against Moscow, Putin could have withdrawn support from the separatists, denied complicity in the violence, and waited for a more opportune time to try again.

10. Seize an area to achieve a limited strategic end. When the security of a targeted region collapses, the international response is mired in debate and a humanitarian crisis ensues. The conditions are set for Russian forces to intervene. Despite characterizing the intervention as a temporary salve to an unacceptable human crisis, Putin would deploy forces for as long as needed to achieve a security environment favorable to Moscow. With such an approach, Russia can attain limited strategic objectives with minimal risk. The ultimate goal of this methodology would be, in the long term, to discredit NATO and thereby undermine the security of any NATO member. In the short to midterm, such an approach could easily be used against Moldova or other area outside of NATO to expand Russian influence.

11. Use nuclear blackmail to blunt a coherent NATO response. As Russian forces move to bite off a piece of territory for humanitarian assistance or any other purpose, the Kremlin will threaten to use nuclear weapons against any nation acting against its interests.

The two-phased, 11-part tactic demonstrates an adaptive strategic approach. Yet, despite the flexibility inherent in Putin's two-phase and multi-faceted approach, concerted action now can preserve European security. The only way to do this, however, is through decisive and comprehensive action as delineated above. The aggressive tone — its history of intervention bolstered by an antagonistic landpower and nuclear force modernization — is something that must be taken seriously. These have the real potential to alter the strategic environment in Europe and the world. The unpatrolled peace that most of Europe has enjoyed since the end of the World War II is an anomaly in the continent's history. This peace came at a high price. Moscow's emerging operational approach is a threat to this security, and if not countered could alter the way of life of people around the world, especially in the United States.

There are an array of advantages that Russian strategic landpower enjoys in the region. Foremost of these is geography. Although NATO expansion into Eastern Europe has deprived Moscow of buffer states, it now has "interior lines of communication," which means it now has the ability to rapidly shift or move forces along its western frontier. It is such a capability that makes the so called unannounced "snap exercises" that Russia conducts close to NATO's eastern borders such a concern.

Another factor working in favor of Russian strategic landpower is the traditional and at times extended presence it has had across broad areas of the region. For instance, Russian domination over Estonia began in 1704 with the defeat of the Swedish army in Narva at the hands of Czar Peter the Great. Russia completed its occupation of Estonia by 1710. It would not be until 1917 that Estonia shook free from the Russian occupation, but then had to contend with the German army and after the World War I the Red Army. Independence was finally secured in 1920. But this would end with another Soviet occupation in 1940 (interrupted by a brief Nazi occupation 1941-1944). During the Cold War, the region was a key location for the Soviet armed forces, with Russian troops remaining in the country until 1994. This extended and enduring presence of Russian troops and influence, spanning a greater portion of 200 years in Estonia, is something that should not be so easily ignored. This is why Putin, in part, is so belligerent toward Baltic integration into NATO and why Article V of the Washington Treaty (an attack on one NATO member is an attack on all) is integral to their security.

However, the greatest advantage that Russian strategic landpower retains is the application of a hybrid mix of forces to befuddle and confuse Western decision making. As the West prevaricates during a crisis, Russian troops move toward achieving their objective, which can be rapid in the case of Crimea or slower and messier as in the case of eastern Ukraine. Yet, the appearance of Russian intelligence and special forces in eastern Ukraine pretending to be a local independence movement would be laughable if it did not so brilliantly confuse and baffle Western politicians, who continue to lack unanimity and

resolve on how to contend with this threat to European security.

Yet, one should not be lulled into a false sense of security, even should NATO figure out a way to deter or mitigate the hybrid application of Russian forces. In the background remains the real threat of its conventional force, which is poised to support cross-border hybrid operations as experienced in the Ukraine. However, "supporting" a hybrid effort is just one course of action. Another, often viewed unthinkable but not out of the realm of the impossible, is the hybrid war morphing into a conventional effort should the strategic environment prove opportune. It may be just this that is really in the back of Putin's mind with his stunning announcement to modernize and expand Russian's nuclear arsenal and armored forces.

If and when the political and economic environment favors a more aggressive and expansionist approach, in just a few years Moscow will have both a modernized conventional and robust unconventional force, backed by a large nuclear arsenal. It is key to note that the most modern of Russia's military is the one closest to NATO, the Western Military District. When the Kremlin begins to outfit its forces with the most modern ground equipment in the world, it will be the Western Military District that is the first to receive this new equipment.

The Western Military District includes Kaliningrad, the Russian land mass wedged between NATO members Poland and Lithuania along the Baltic Sea. This "unsinkable Russian aircraft carrier" is a boon for Russian strategic landpower in many areas. Foremost, however, is the "forward" presence that is expanding it forces here behind two key NATO member states. Looking at any map, one can see that Kaliningrad looks almost like a wedge, thrust partially between Poland and Lithuania — in effect, between Eastern Europe and the Baltic region. Such geography makes the land bridge between Poland and Lithuania key terrain and something that must be jealously guarded as any Russian move would include quickly blocking NATO land access to the Baltic region (and air and sea access thanks to the unsinkable Kaliningrad isthmus). Thus, one can see how painfully obvious it is to maintain a robust permanent forward NATO presence in the Baltic States.

A key part of Russian strategic landpower against the Baltic, or anywhere else in Europe, will be its nuclear arsenal. The Kremlin will not hesitate to threaten its use against any nation acting against its interests. Russia has already threatened Denmark with a nuclear strike (to defend Crimea with nukes as well as fire nukes into the Baltics) should NATO activity there prove proactive to Putin. The threat and fear of a nuclear war will indeed have a chilling effect on the decision makers throughout NATO. It is such a gamble that may just be worth taking.

Russian landpower remains a potent force. The emerging hybrid cat-and-mouse application of its military force makes it rather complicated for the West to come up with a coherent response to any Moscow-inspired aggression. Yet, behind this hybrid pattern remains a robust and capable conventional force that enjoys interior lines of communication, the benefits of operating on familiar terrain, and the promise of being equipped with the most modern equipment that any army has ever enjoyed.

Then there is Russia's nuclear force. You can be sure that any future Kremlin-directed operations against Eastern European states will be backed by a real threat of a nuclear strike against any nation acting contrary to Moscow's interests. This is a consideration that completely changes the strategic calculus for NATO.

No matter what transpires, we should expect that Russian landpower will remain the center piece of any action it takes in the future to expand its influence across the region, and this is not something that can be easily ignored. This is an increasingly capable and adaptable force, which has come a long way since its invasion of Georgia. No longer should we expect clumsy or sloppy mistakes as occurred in 2008. The Russian army has come a long way in just a few years, and greater changes are on the horizon when its units receive a complete refitting of equipment that most analysts view as modern and revolutionary. The question remains, how will you respond when confronted by a sophisticated and adaptive foe? How can you train and adapt your unit to overcome the emerging hybrid application of warfare facing our Army?

For more information on Russian strategic landpower, the U.S. Army War College has published studies on the emerging threat to NATO security. These studies can be found online at: http://www.strategicstudiesinstitute.army.mil/pubs/. Search for "Project 1704" and "Project 1721."

COL Douglas V. Mastriano, Ph.D., began his career along the Iron Curtain in Germany. There, he witnessed the end of the Cold War, deployed to Desert Storm with the 2nd Armored Cavalry Regiment, and subsequently served in tactical, operational, and strategic assignments that included the 3rd Infantry Division (Mechanized), G2 of NATO Land Headquarters, and in the Pentagon. A veteran of Iraq and Afghanistan, COL Mastriano currently teaches strategy and operational art at the U.S. Army War College in Carlisle, Pa.

Properly Preparing for the Rigors of Ranger School

COL DAVID FIVECOAT
CPT RONNIE L. CUNNINGHAM JR.
CPT SAMANTHA RIEGER

> *"Without a doubt, Ranger School is the most physically and mentally demanding course in the U.S. Army."*
>
> **— MG Scott Miller**
> Former Commanding General,
> Maneuver Center of Excellence

The challenges that current leaders face on the contemporary battlefield are more demanding than those of our forefathers. Ranger-qualified Soldiers are physically and mentally tough, technically and tactically proficient in small unit tactics, and able to think, act, and react effectively in stressful environments. Producing Ranger-qualified leaders remains a top priority for the U.S. Army Maneuver Center of Excellence and the Infantry School located on Fort Benning, Ga.

Over the past three years, a consistent trend is that Ranger students struggle to successfully complete the Ranger Physical Assessment (RPA), the 12-mile foot march, and the land navigation test during the Ranger Assessment Phase (RAP). In fact, a Ranger Class will lose almost 50 percent of its students during RAP week — the first 96 hours of Ranger School. The following blueprint provides Soldiers and units assistance in shaping training plans to increase their success at Ranger School.

RANGER STANDARD

"Earn the right to be a Ranger. Show up in the best shape of your life, with an indomitable will, and perhaps you may join the ranks of this nation's elite."

— LTC Shawn Underwood
Commander, 4th Ranger Training Battalion

Ranger Physical Assessment

The RPA is the number one cause for Ranger students to be dropped from the course. Over the course of Fiscal Year (FY) 2015, 862 students (35 percent) of those who arrived at Camp Rogers failed one of the four events of the RPA, which consists of 49 push-ups in two minutes, 59 sit-ups in two minutes, a 5-mile run in 40 minutes, and six chin-ups. To be successful, Soldiers and units should focus their training to ensure all Ranger students can exceed the RPA standards.

The RPA starts at 0400 at the combatives pit next to Malvesti Field near Camp Rogers. All students — regardless of rank, gender, or unit — will be placed in one formation. Students will then randomly move to one of 25 Ranger Instructors (RIs) for push-up grading. On the command of "Go," students will begin executing correct push-ups. A correct push-up is described in Appendix A of Field Manual 7-22, *Army Physical Readiness Training* (see Figure 1). RIs will count aloud and provide feedback to students on their push-ups. If a student fails to complete the first 10 push-ups correctly, the RI will stop the student and explain why he/she is not performing correct push-ups and send the student to the re-test area where he/she is tested again by a different RI after 10 minutes. If the first 10 push-ups are completed correctly, the RI will not stop the student until the two minutes have expired. If the student fails to complete 49 push-ups in two minutes, he/she is sent to the retest area and has 10 minutes of rest before re-testing with a different RI. Once the student successfully completes 49 push-ups, the RI will tell him/her to stop, regardless of the amount of time remaining, and the student will proceed to a separate formation to prepare for sit-up testing.

The sit-up assessment and retest will proceed in the same fashion as the push-up event. Once the last student

U.S. Army photos

A Ranger Instructor grades a student's push-ups during the Ranger Physical Assessment.

"THE PUSH-UP EVENT MEASURES THE ENDURANCE OF THE CHEST, SHOULDER, AND TRICEPS MUSCLES. ON THE COMMAND, 'GET SET', ASSUME THE FRONT-LEANING REST POSITION BY PLACING YOUR HANDS WHERE THEY ARE COMFORTABLE FOR YOU. YOUR FEET MAY BE TOGETHER OR UP TO 12 INCHES APART (MEASURED BETWEEN THE FEET). WHEN VIEWED FROM THE SIDE, YOUR BODY SHOULD FORM A GENERALLY STRAIGHT LINE FROM YOUR SHOULDERS TO YOUR ANKLES. ON THE COMMAND 'GO', BEGIN THE PUSH-UP BY BENDING YOUR ELBOWS AND LOWERING YOUR ENTIRE BODY AS A SINGLE UNIT UNTIL YOUR UPPER ARMS ARE AT LEAST PARALLEL TO THE GROUND. THEN, RETURN TO THE STARTING POSITION BY RAISING YOUR ENTIRE BODY UNTIL YOUR ARMS ARE FULLY EXTENDED. YOUR BODY MUST REMAIN RIGID IN A GENERALLY STRAIGHT LINE AND MOVE AS A UNIT WHILE PERFORMING EACH REPETITION. AT THE END OF EACH REPETITION, THE SCORER WILL STATE THE NUMBER OF REPETITIONS YOU HAVE COMPLETED CORRECTLY. IF YOU FAIL TO KEEP YOUR BODY GENERALLY STRAIGHT, TO LOWER YOUR WHOLE BODY UNTIL YOUR UPPER ARMS ARE AT LEAST PARALLEL TO THE GROUND, OR TO EXTEND YOUR ARMS COMPLETELY, THAT REPETITION WILL NOT COUNT, AND THE SCORER WILL REPEAT THE NUMBER OF THE LAST CORRECTLY PERFORMED REPETITION."

Figure 1 — The Push-up Event, Appendix A, FM 7-22

has completed 59 sit-ups in two minutes, students will be given 10 minutes before the 5-mile run begins.

The 5-mile run is an individual run to assess the cardiovascular endurance of Ranger students. Students are allowed to wear a watch to pace themselves. Students can fail the 5-mile run test for three reasons:

* Failure to reach the 2.5-mile turnaround within 20 minutes,
* Failure to return to the finish line with the popsicle stick given at the halfway turnaround, and
* Failure to finish the entire 5-mile course within 40 minutes.

There is no retest for the 5-mile run.

Ten minutes after the 40 minutes expire for the 5-mile run, students are tested on performing six chin-ups. When instructed by the RI, students will mount the chin-up bar with palms facing in and arms fully extended. Students are not allowed to wear gloves, cross their legs, swing, rock, and must not touch the RI positioned approximately 12-18 inches in front of the student. When given the command "Up," students will pull themselves up until their chin is completely over the bar. Once his/her chin is over the bar, the RI will give the command "Down," and the student will lower himself/herself back to the start position with elbows locked and feet remaining off the ground. There is no time limit for the chin-up event. If a student fails to meet the standard, he/she will be given a re-test 10 minutes after the failed attempt. If a student is unsuccessful for a second time, he/she will be dropped from the course.

The events of the RPA and standards are not a secret. The Army push-up, as defined in FM 7-22, is the standard and the only standard RIs use to evaluate the push-up. The best way for units to increase success rates and properly prepare students is to hold every Soldier to the Army standard. The ARTB wants Ranger students and units to know what is expected of them so that they are successful.

Another tool to assist a Ranger student's physical preparation is a physical training program located on the ARTB website at http://www.benning.army.mil/infantry/RTB/.

12-Mile Foot March

The 12-mile foot march is the second highest cause of student attrition from the Ranger Course. In FY 2015, 415 or 16.8 percent of all Ranger Students failed to meet the standard of the 12-mile foot march. The 12-mile foot march is an individual event that assesses a Ranger student's ability to move rapidly along 12 miles of uneven terrain within three hours. For safety reasons, students must reach the 6-mile mark by 100 minutes and the 8-mile mark by 128 minutes or they are dropped from the course.

The 12-mile foot march course is six miles out and six miles back over hardball and trail roads. The students wear/carry ACUs/OCPs, boots, fighting load carrier (FLC), patrol cap, head lamp, an M4 rifle, and a Modular Lightweight Load-carrying Equipment (MOLLE) rucksack. The designated packing list is a 35-pound rucksack with an additional 12 pounds of water totaling 47 pounds.

Based on Ranger student feedback, there are two main causes for foot march failure. The first, and most prevalent, is a lack of preparation. Students are not completing the weekly scheduled 6, 8, 10, or 12-mile foot march with a 47-pound rucksack for at least eight weeks prior to their arrival at Fort Benning. Students must have time under the ruck to strengthen their back, legs, and shoulders and toughen their

The 12-mile foot march is the second highest cause of student attrition from Ranger School. Students must have time under ruck to strengthen their back, legs, and shoulders, and toughen their feet prior to attending the course.

feet. Recommended foot march training is part of the physical training plan which is available on the ARTB website.

The second reason is that unit training plans fail to replicate the cumulative effect of RAP week. The foot march is the last event after the RPA, the Combat Water Survival Assessment, the Malvesti Confidence Course, and land navigation — four days with little sleep. Soldiers who are not physically prepared struggle at completing the foot march. Units' pre-Ranger programs should try to mimic the cumulative nature of RAP week by replicating the back-to-back events to truly assess a Soldier's physical and mental endurance.

Land Navigation

In FY 2015, 382 or 15.5 percent of Ranger students did not pass the land navigation test and were dropped from the Ranger Course. The land navigation test assesses a Ranger student's ability to successfully locate four out of five points in five hours starting at night and transitioning to daylight. Students have two-and-a-half hours during limited visibility and two-and-a-half hours during daylight to complete the test utilizing only a pencil, map, compass, protractor, and red lens flashlight. It is a self-correcting course, and distances traveled between points are typically 1,000 to 1,500 meters. The total distance of the course averages 5 to 8 kilometers depending on the Soldier's navigation proficiency.

The first navigation test is on the morning of the second day of RAP week. Students who fail to meet the standard during this testing period will retest on the morning of the third day. The retest is on the same course, but students are given a different set of points. If the students fail this second evaluation, they will be dropped from the course. It is important to note that those students who meet the standard on the second land navigation test will have walked an extra 5-8 kilometers, which may impact their potential success during the 12-mile foot march the next day.

At Ranger School, students struggle to meet the standard for a variety of reasons. The first, and most prominent, is the Army's shift away from traditional land navigation skills and reliance on GPS technology. A second reason is students' lack of ability to terrain associate and develop attack points. Potential students should focus on training the basics of land navigation as outlined in TC 3-25.26, *Map Reading and Land Navigation*, and successfully complete at least three tests on land navigation courses prior to attending Ranger School.

If resources at the Soldier's home station are scarce, virtual training on land navigation using VBS2 is available on the ARTB website.

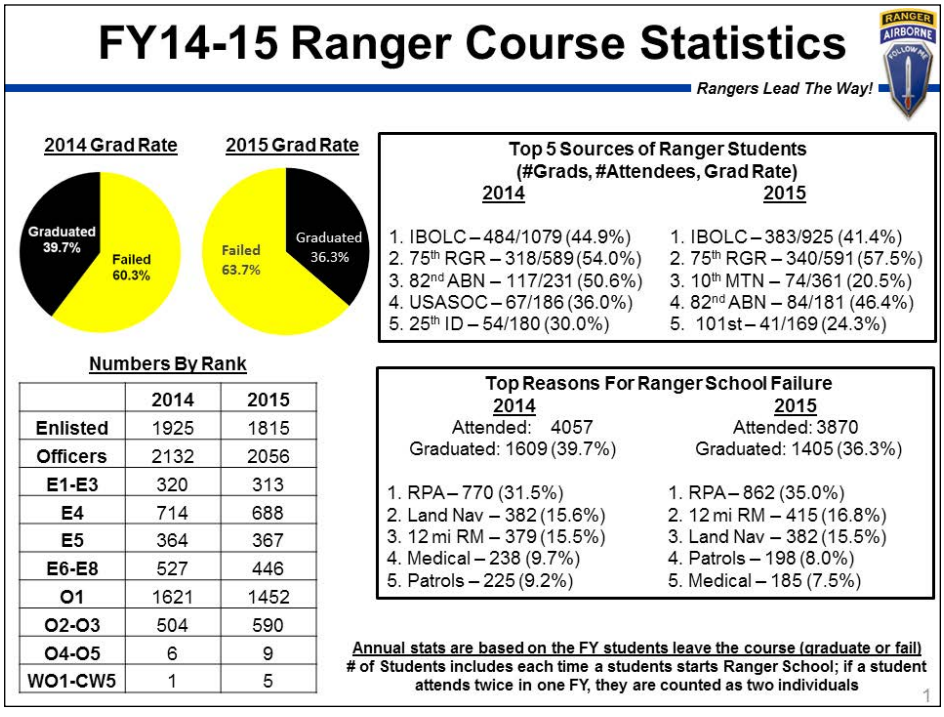
Additional Factors to Consider

During FY 2015, 175 Students or 7.8 percent of attendees failed patrols. Before attending the course, Ranger students should read and have a solid understanding of Chapter 2: Operations and Chapter 7: Patrols of the *Ranger Handbook*. Students can obtain the latest version of the *Ranger Handbook* on the ARTB website. If students can physically succeed at meeting the standards of RAP week, their chances at eventually graduating Ranger School substantially increase.

Outsourcing the Solution

Fortune 500 companies outsource to maximize efficacy of an organization when organic resources are inadequate. The same can be done for preparation for Ranger School. The

Figure 2 — FY 14-15 Ranger Course Statistics



Ranger Training Assessment Course (RTAC) is taught at the Army National Guard (ARNG) Warrior Training Center (WTC) located on Fort Benning. The course trains on similar terrain as Ranger School and affords students the opportunity to acclimatize to the Fort Benning weather. This provides an obvious advantage over other division-level pre-Ranger courses. Additionally, the close relationship maintained by the WTC and the ARTB historically affords their graduates with a 15 percent higher success rate at Ranger School over other division pre-Ranger programs. RTAC is a free resource for active-duty Soldiers and can be provided at minimal cost to National Guard units.

Ranger students wait for their turn to tackle an obstacle on the Darby Queen course.

RTAC is a two-week course that concentrates on the high-attrition events of RAP week. Students complete an RPA, five days of land navigation, multiple obstacle courses, combat water survival test, and a three-day field training exercise (FTX) with patrolling classes. During the course, the RTAC cadre focus on push-ups, the foot march, and preparation and execution of land navigation, events that historically and currently cause the most failures during Ranger School. In addition, the WTC's medical staff will review and correct as many deficiencies as possible in a student's medical records during this time. Upon successful completion of RTAC, students take a three-day pass prior to inprocessing into Ranger School. Additional information on RTAC can be found at http://www.benning.army.mil/tenant/wtc/pr.htm.

Improving Pre-Ranger Courses

Installation pre-Ranger courses can take advantage of several resources at the ARTB. Division-level pre-Ranger courses can visit ARTB, observe RAP week events, visit the Ranger Instructor Training and Education Program (RITEP) to get the latest classes taught at Ranger School, and maximize time with RIs to understand lessons learned. Division-level pre-Ranger courses can also request a visit from ARTB cadre to enhance and standardize their existing course structure. In this instance, if training and manning requirements allow, ARTB will send a cohort of senior RIs to visit a division's pre-Ranger program and provide feedback on current course standards to ensure students are well prepared to succeed. To coordinate a visit, contact the ARTB S3 at (706) 544-6602 or usarmy.benning.tradoc.mbx.artb-s3-operations@mail.mil.

FINISH STRONG!

"The Infantry School is dedicated to serving the needs of the force with highly trained leaders. We embrace this responsibility and we want units to use the course to make their leaders smart, fast, lethal and precise."

— BG Peter Jones
Commandant, U.S. Army Infantry School

Units and Soldiers can increase their success at Ranger School by focusing pre-training on being successful during RAP week. This includes strictly executing push-ups during the RPA, sustaining the mental and physical toughness to meet the three-hour standard on the 12-mile foot march, and honing the basic navigation skills required to pass the land navigation test on the first attempt. A proven method to increase success at Ranger School is to take advantage of the WTC's RTAC. Units can improve their home-station pre-Ranger course by reaching out to the ARTB and either visiting Fort Benning or requesting a visit. By utilizing these assets and focusing pre-training on the top three events students fail, Soldiers and units will increase their success at Ranger School.

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CPT Sam Rieger is an assistant operations officer at HHD, ARTB. Her previous assignments include serving as chief of optometry, U.S. Army Health Clinic-Katterbach, Germany; project manager with the U.S. Army Center for Health Promotion and Preventive Medicine-North, Fort Meade, Md.; and brigade environmental science officer, 3rd Brigade Combat Team, 82nd Airborne Division, Fort Bragg. CPT Rieger's military schooling includes Army Medical Department (AMEDD) Captains Career Course, AMEDD Basic Officer Leader's Course, and Air Assault and Airborne schools. CPT Rieger holds a bachelor's of science degree in biology from Wake Forest University and a doctorate of optometry from University of the Incarnate Word Rosenberg School of Optometry.

Training the Next Generation of Leaders on Fire Support:

Five Things Every Commander Should Know About Fires

LTC KEVIN L. JACKSON
MAJ JOHNNY R. FRY
CW2 JAMES M. VERSCHUEREN

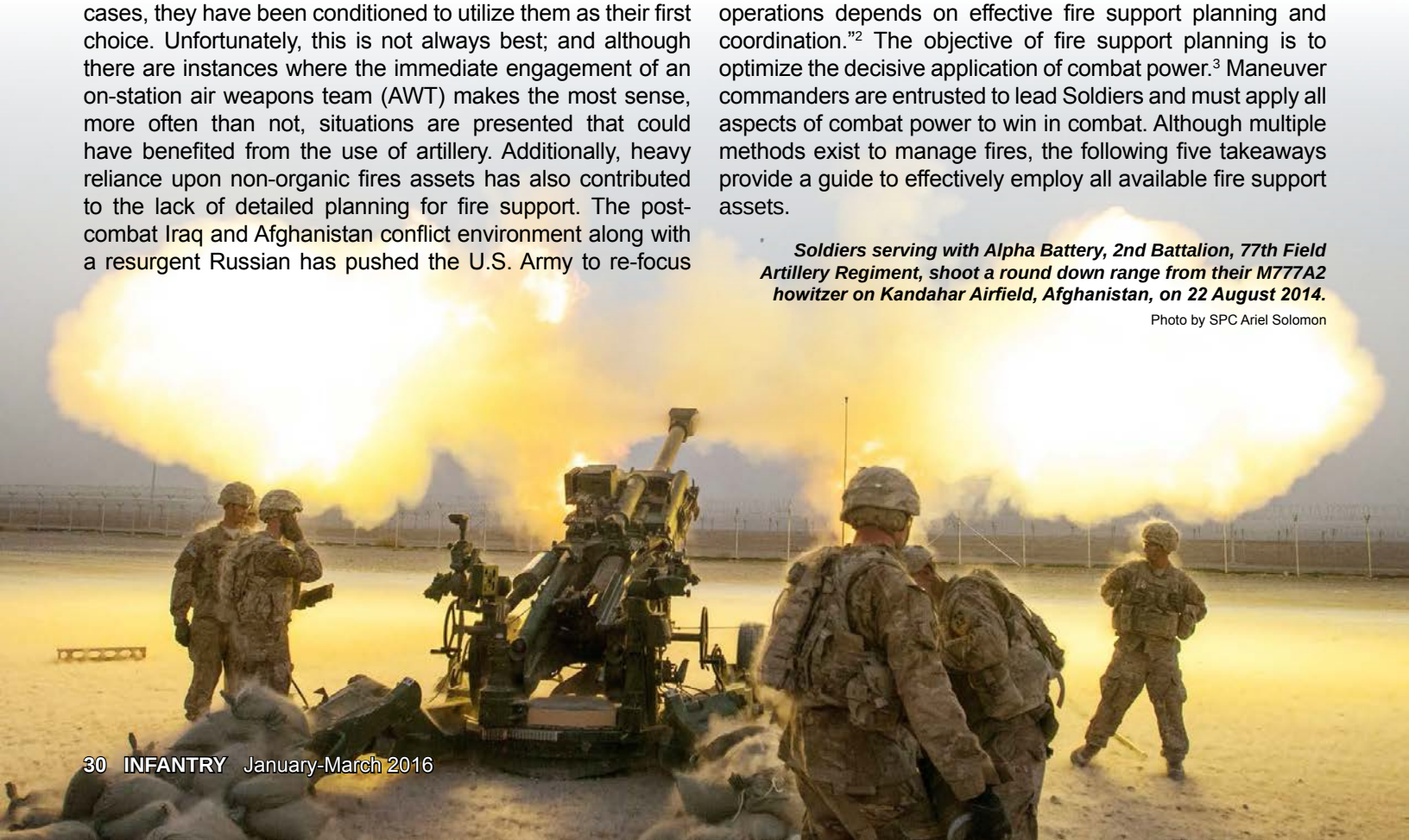
The last 13 years of persistent asymmetric conflict and a general lack of training on decisive action across the Army have hampered the ability of maneuver commanders and fire support officers (FSOs) to integrate lethal and non-lethal fires into large-scale combined arms operations. Additionally, the ready availability of aerial fires platforms to support even small unit operations in the Central Command (CENTCOM) area of responsibility (AOR) over the past 14 years has conditioned deployed Soldiers, and their commanders, to utilize aviation assets as the default source for lethal fires. Field Artillery leaders at every echelon must recognize these realities and seize the initiative to work with their supported maneuver commanders to restore basic fires planning and synchronization into their collective training to ensure responsive fires in support of operations.

In recent years, maneuver commanders have had increased access to non-organic fires assets; and in many cases, they have been conditioned to utilize them as their first choice. Unfortunately, this is not always best; and although there are instances where the immediate engagement of an on-station air weapons team (AWT) makes the most sense, more often than not, situations are presented that could have benefited from the use of artillery. Additionally, heavy reliance upon non-organic fires assets has also contributed to the lack of detailed planning for fire support. The post-combat Iraq and Afghanistan conflict environment along with a resurgent Russian has pushed the U.S. Army to re-focus on and reinvigorate decisive action training. With rejuvenated training and education for fire supporters, in conjunction with additional combined fires and maneuver exercises, a window of opportunity now exists for the restoration of confidence in the Field Artillery and the effective synchronization of organic fires platforms into combined arms operations.

It is imperative that fire supporters continue to conduct fire support certifications, fire support coordination exercises, and joint fires observer (JFO) re-certification (precision fires suite) semi-annually, as outlined in Training Circular 3-09.8, *Field Artillery Gunnery*, in order to reduce skill atrophy.[1] Trained fire supporters, in both planning and execution, will be capable of providing relevant advice to their supported maneuver commanders while simultaneously minimizing the operational risk to their Soldiers. "The commander's ability to orchestrate and employ all available fires-related resources as a system and to integrate and synchronize fires with his concept of operations depends on effective fire support planning and coordination."[2] The objective of fire support planning is to optimize the decisive application of combat power.[3] Maneuver commanders are entrusted to lead Soldiers and must apply all aspects of combat power to win in combat. Although multiple methods exist to manage fires, the following five takeaways provide a guide to effectively employ all available fire support assets.

Soldiers serving with Alpha Battery, 2nd Battalion, 77th Field Artillery Regiment, shoot a round down range from their M777A2 howitzer on Kandahar Airfield, Afghanistan, on 22 August 2014.

Photo by SPC Ariel Solomon



1. What Assets Are Allocated?

Maneuver commanders must know what assets are at their disposal and what the capabilities and limitations for each weapon system and platform are. Minimum safe distances in training and risk estimate distances in combat bring realism to training and devastating effects on the enemy in combat.[4] The FSO is a critical resource to free up the commander to command. The amount of ammunition for each weapon system and the associated battle calculus must be done to ensure effects are maximized throughout the duration of the operation.[5] For instance, have adequate munitions been allocated to provide suppression throughout the entire movement? Can the method of control (rate of fire) be adjusted in order to ensure continuous suppression of an objective?

Unclassified

Commander's Guidance for Fires

1. Priority of fires (POF) will go to 2-14 IN. O/O POF will shift to 4-31 IN as they secure OBJ Commando.
2. All religious compounds, cemeteries, schools and government buildings will be protected by a minimum of a 200m NFA.
3. Clearance of fires will be routed through 2/10 MTN's FECC.
4. There will be a minimum gun capability of one firing BTRY at any given time.
5. Controlled Supply Rate (CSR) will constrain us to:

TGT Description	Ammunition	Method of Fire (MOF)
Enemy Dismounts In The Open		
TM sized	HE/VT or TI	BTRY 1 RND
SQD sized	HE/VT or TI	BTRY 2 RNDs
PLT sized	HE/VT or TI	BTRY 3 RNDs
CO sized	HE/VT or TI	BTRY 4 RNDs
Fortification/Buildings	HE/Delay	BTRY 2 RNDs
Precision Missions	Excalibur	1 GUN, 1 RND
VICs/Technicals	HE/PD	BTRY 3 RNDs
Armor	DPICM	BTRY 2 RNDs
Points of Origin (POO)	HE/PD, WP/PD	BTRY 2 RNDs
Immediate Suppression	HE/PD	2 GUNS, 2 RNDs

Figure 1 — Example Commander's Guidance for Fires

2. Higher Guidance for Fires

In our experience, most maneuver commanders don't provide guidance for fires, and depending on the experience level of the FSO, this can cause issues during execution. The commander's guidance for fires provides the staff, fires personnel, and subordinate units with the general guidelines and restrictions for the employment of fires and their desired effects. The guidance emphasizes in broad terms when, where, and how the commander intends to synchronize the effects of fires with elements of combat power to accomplish the mission.[6] Commanders must describe the desired effect of fires or any other asset. The FSO can develop the "how" to ensure it is synchronized with the scheme of maneuver once the desired end state is established. The FSO can also advise commanders on whether the desired effects they want to achieve with fires are feasible given the capabilities of available fire support platforms.

3. Asset Period of Availability

Using battlefield calculus, the FSO can determine how many rounds are available to cover the movement to the objective based upon movement rate. Secondly, the FSO must also know how much station time fixed wing, ISR (intelligence, surveillance, and reconnaissance), or aviation platforms have for movement and engagements. In order to perform battlefield calculus, the true capabilities of munitions, rates of fire, and estimated movement rates must be clearly understood and explained to supported commanders. For example, when providing illumination for an element, it is imperative to know the difference between the burn times for 105mm illumination versus 155mm illumination. FM 6-30, *Tactics, Techniques, and Procedures for Observed Fire*, lists the burn time for 105mm illumination at 60 seconds and 155mm at 120 seconds; therefore, twice the amount of 105mm ammunition is needed to illuminate the same target area for the same amount of time.[7] True battlefield calculus leads to multiple initial volleys followed by continuous suppression as the unit moves to the objective with adequate ammunition remaining to conduct a counterattack. Commanders and FSOs must coordinate with each enabler to ascertain how much station time or coverage they have and ensure that is synchronized with their maneuver plan.

4. What Priority Targets Are Assigned Assets?

As a general rule, artillery and mortars should always be laid on priority targets. An established priority target will always increase the responsiveness of indirect fires. As part of the fire support atrophy and an overreliance on fixed wing and rotary wing fires, there has been a decrease in deliberate fire support planning for maneuver operations. During mounted and dismounted movements, the FSO must constantly establish priority targets to ensure that the delivery of optimized effects can be exercised quickly. As an element maneuvers through an established phasing construct, it is paramount that priority targets remain provisional for adequate support to continue. It is very frustrating for field artillerymen when a maneuver element has to delay execution in order to wait for its fire support. This wait time is reduced and responsive fires are achieved through deliberate fire planning and the establishment of priority targets for each weapon system. Commonly used products (like SOPs and execution checklists) that detail and track operations can help synchronize this process and provide fires in stride.

5. How Are Assets Deconflicted?

The two ways to primarily deconflict fires or any asset are through space and time. The overall objective of fires is to mass effects of all weapons systems at the correct place and time. In order to mass fires and effects, these assets must be deconflicted in order to utilize all available assets and provide a means in which to engage the target while maintaining minimal risk to the asset and friendly troops. Deconfliction of fires deals with the art of fire support, and there are numerous ways to maximize the assets that are available to commanders. In utilizing artillery or mortars, fires are typically deconflicted by space; however, the use of time

Individual (Day 1)	Collective (Day 2)	Fire Support (Day 3)	Executive (Day 4)
1) BCT/BN CDR Intro 2) JRTC VTC (Lessons Learned) 3) Gunnery's Skills Test 4) lay a Howitzer 5) Commando Phoenix 15 (Digital FS Exercise) 6) Big 3	1) Fires in the Offense 2) Fires Rehearsal 3) FA Tech Rehearsal	1) Fires in the Defense 2) Fires Rehearsal 3) FA Tech Rehearsal	1) Clearance of Fires and Airspace Deconfliction 2) Echelonment of Fires 3) Radar Utilization 4) Managing the 5 Requirements 5) M119A3/M777 Familiarization

Figure 2 — Example FSCX Pre-Training Schedule

as a deconfliction mechanism (using schedules of fire or a time-on-target mission and changing the method of control) is a viable course of action. Deconfliction by space is primarily done by echelonment of fires tied to maneuver movement. Essentially, this is the way in which the commanding element maintains constant fires on an objective while utilizing the optimum system of delivery. Proper echelonment of indirect fires allows control of all available indirect assets while simultaneously employing aviation and naval assets. The purpose of echeloning fires is to maintain constant fire on the enemy while utilizing the optimum delivery system.[8]

Joint Publication (JP) 3-09.3, *Close Air Support*, describes four ways to deconflict air: lateral separation, altitude separation, altitude and lateral separation, and time separation, which requires the most detailed coordination.[9] Lateral separation and altitude are the most commonly used methods when employing aviation and other assets. Lateral gives a cardinal direction, grid reference, or geographic feature to maintain the ability to employ multiple weapon systems simultaneously. Altitude separation gives an above or below altitude to integrate multiple air assets and indirect fires, allowing all elements to operate in the area cohesively. Field artillery units and mortars utilize tabular firing tables to get the maximum altitude for each round of their weapon systems in order to facilitate ease in altitude deconfliction. A combination of altitude and lateral separation is the most restrictive for air crews and is usually utilized when aircraft approach or cross the gun target line (GTL). Time separation is utilized when other restrictions may prevent utilization of air assets due to trajectory or other unavoidable elements in the operating environment. Time separation is best utilized while conducting planned deliberate operations but can be implemented into any operation. Utilizing these restrictive coordination measures affords commanders the ability to utilize assets efficiently in order to achieve mission success.

Photo by PFC Christopher Gerken

Soldiers assigned to 1st Platoon, Charlie Battery, 2nd Battalion, 15th Field Artillery Regiment, shoot a high-angle mission from their firing point at Kandahar Airfield during Operation Freedom Sentinel in 2016.

In combat, maneuver commanders rely on organic assets (mortars/artillery) before requesting other non-organic assets. Maintaining the mindset of "train as we fight" enables the next generation of leaders to create unique training opportunities designed to exercise the integration of fire and maneuver. There are many types of training exercises inside the brigade combat team (BCT) used to train fires and maneuver integration to include platoon and company live fires, mortar shoots, and fire support coordination exercises (FSCXs). In preparation for the 2nd Brigade Combat Team, 10th Mountain Division's February 2016 Joint Readiness Training Center (JRTC) rotation, the FSCX seemed to be the most effective venue to train maneuver commanders, joint terminal attack controllers (JTACs), and company FSOs on fire support integration.

The FSCX was broken into three phases for training which included pre-training (Commando Fires Academy), virtual battlefield simulation (VBS), and execution. Key to successful FSCX execution is having trained and certified fire supporters (13F) and howitzer crews in accordance with Training Circular (TC) 3-09.8, *Field Artillery Gunnery*. Certifying crews will take time, so leaders must build time in training plans to account for Tables I-VI (for howitzer and mortar crews) and brigade fire support team (FIST) certification for fire supporters prior to executing the FSCX.

Pre-training greatly aided the 2nd BCT's fire support leadership in preparing company-level maneuver commanders and fire supporters for the upcoming tasks within the FSCX. The Commando Fires Academy accomplished this training through a four-day model, which educated company and platoon leadership on

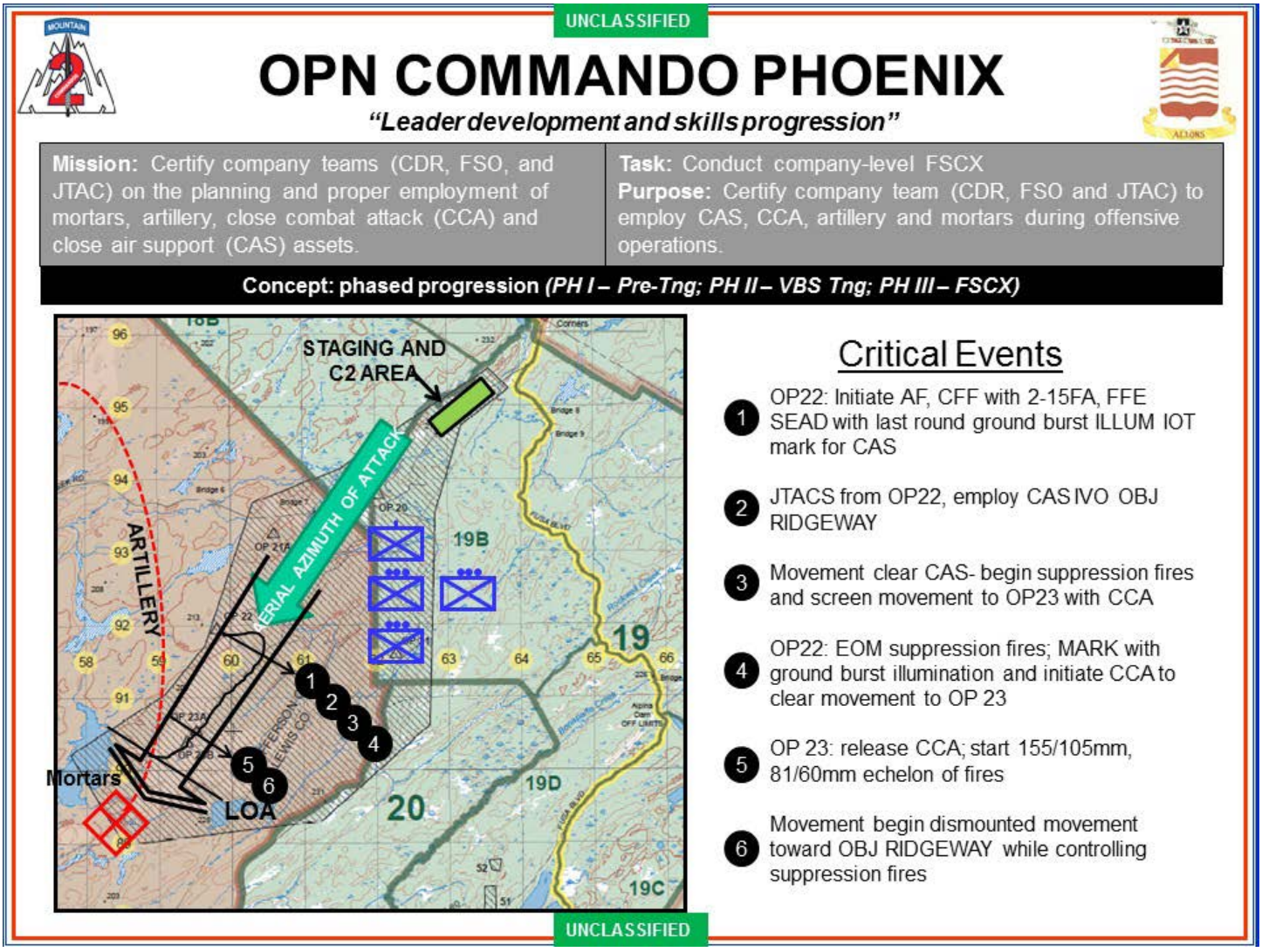
the integration of fire support assets. It started with a video teleconference (VTC) from JRTC focused on the discussion of trends and lessons learned from previous Combat Training Center (CTC) rotations. The first day ended with a digital fire support exercise to verify and troubleshoot mission command systems as well as develop the sensor-to-shooter link. The second and third days of the academy covered both offensive and defensive operations, respectively. After receiving a class on offensive and defensive fires planning, FSOs were given an operation order (OPORD) and told to develop a fire support plan. They then conducted a fires brief to a senior artillery officer. During these days, howitzers were set up while leaders executed big three certifications (safety test, Army Skills Proficiency Test, gunner's test, leader's hands-on certification) and non-artillery Soldiers received familiarization training on the weapon systems. On the fourth day, maneuver commanders discussed a myriad of topics ranging from clearance of fires, radar integration, air-to-ground integration, minimum safe distances (MSDs) vs. risk estimate distances (REDS), and utilization of an FSO.[10]

Overall, the Commando Fires Academy was a great training event that increased awareness of how to properly employ and integrate fires. The Allons of the 2nd Battalion, 15th Field Artillery Regiment will continue to utilize this model as part of a quarterly newcomer's orientation for all new officers and NCOs in order to reinforce those competencies learned in the Field Artillery Officer Basic Course (FAOBC), Senior Leaders Course (SLC), and Advanced Leaders Course (ALC).

Company commanders, FSOs, and JTACs utilized the VBS to conduct virtual rehearsals. VBS is a fully interactive, three-dimensional, computer-based synthetic environment suitable for training and experimentation.[11] The exercise commenced with an OPORD that allowed the company commanders to issue guidance for fires and develop a scheme of maneuver and fires plan. After briefing the BCT FSO, they had the opportunity to fight their plan on the same terrain as the live-fire portion with the same available assets during the simulation. This served as a perfect rehearsal and paid huge dividends during the execution of our FSCX.

The construct of this particular FSCX lane differed from the typical walk and shoot, which often becomes scripted to a fault and executed without variance from iteration to iteration. This specific scenario allowed commanders to strategically develop and execute their plans based on asset management and

Figure 3 — 2nd Brigade Combat Team, 10th Mountain Division's FSCX



ammunition allocation; furthermore, it showed how all available mortar (60mm and 81mm), howitzer (105mm and 155mm), rotary, and fixed wing assets would be utilized. For instance, an iteration could begin with the immediate suppression of the objective or with Air Defense Artillery (ADA) systems at the line of departure (LD) based upon rate of movement or until the first engagement. It was the commander's responsibility to decide when, where, and to what degree assets would be employed to ensure that as elements approached the objective, a reserve of adequate assets remained. Some company teams conducted doctrinal echelonment of fires while others utilized different techniques based on movement times and their level of proficiency. More importantly, the FSCX afforded the leadership the opportunity for a one-on-one assessment of the company FSO and his ability to plan and execute a company-level fires plan. The common point of friction was not in the FSO's ability to plan but rather in the technical execution of his individual fires skills. Many FSOs struggled with how to control and utilize modified table of organization and equipment (MTOE) assets (i.e. Lightweight Laser Designator Rangefinder [LLDR], binoculars, and communications equipment) and still be able to provide accurate fires to the maneuver commander.

Ensuring that these lessons were captured from the exercise, a comprehensive after actions review (AAR) occurred after each iteration of the FSCX. These AARs were led by the brigade FSO, brigade assistant FSO, and the brigade targeting warrant officer; rather than focus on the collective, it was decided that each team would receive instant feedback with the collective comments forming the formal post-exercise executive summary. In the individual team AAR, the evaluator focused on the techniques the team used to conduct the lane and placed emphasis on how that technique met the commander's intent for fires.

The FSCX allows senior leaders to observe and evaluate the varying degrees of experience and competence of the two primary training audiences; fire supporters and maneuver company commanders are the crucial foundational blocks upon which successful integrated fire and maneuver is built. The FSCX demonstrates the abilities of junior leaders to answer and use the five things every maneuver commander should know about fires: asset allocation, guidance for fires, asset availability, priority targets, and deconfliction. Incorporating these five elements into the overall scheme of fire and maneuver will allow junior leaders to efficiently utilize the assets available to them, increasing flexibility, adaptability, and lethality. The need for this type of training is increasing due to the emphasis on using brigade organic assets and the shift in operational environments from the counterinsurgency model to decisive action.

Notes

[1] TC 3-09.8, *Field Artillery Gunnery*.

[2] Army Doctrine Reference Publication (ADRP) 3-90, *Offense and Defense*, 3-4, Table 3-11.

[3] ADRP 3-09, *Fires*, 3-4.

[4] FM 3-21.8, *The Infantry Rifle Platoon and Squad*.

[5] TC 3-09.8, 3-81.

[6] JP 3-09, *Joint Fire Support*, II-8.

[7] FM 6-30, *Tactics, Techniques, and Procedures for Observed Fire*, 6-8, Table 6-3.

[8] FM 3-21.8.

[9] JP 3-09.3, *Close Air Support.*

[10] FM 3-21.8.

[11] Bohemia Interactive Simulations Website, http://www.army-technology.com/contractors/training/bohemia-interactive/.

Photo by 1LT Randy Mills

Soldiers assigned to 2nd Platoon, Charlie Battery, 2nd Battalion, 15th Field Artillery Regiment, prepare their M777A2 howitzer for fire missions in support of 1st Squadron, 89th Cavalry Regiment at Tactical Base Dwyer during Operation Freedom Sentinel in 2015.

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MAJ Johnny R. Fry is currently deployed to Afghanistan as the executive officer for 2-15 FA. He graduated from the Marine Corps Command and Staff College where he earned a master's degree in military science and has previously deployed in support of Operation Iraqi Freedom in 2007 and 2009.

CW2 James M. Verschueren is currently the brigade FSO for the 2nd BCT, 10th Mountain Division. His previous assignments include serving as the liaison to the Third Republic of Korea's Joint Counterfire Task Force, Camp Casey, Korea; and chief of operations, 525th Battlefield Surveillance Brigade, Fort Bragg, N.C. He earned a master's degree in diplomacy from Norwich University and a bachelor's degree in pre-law from American Military University.

A Disciplined Approach to Training Management

LTC RICHARD P. TAYLOR

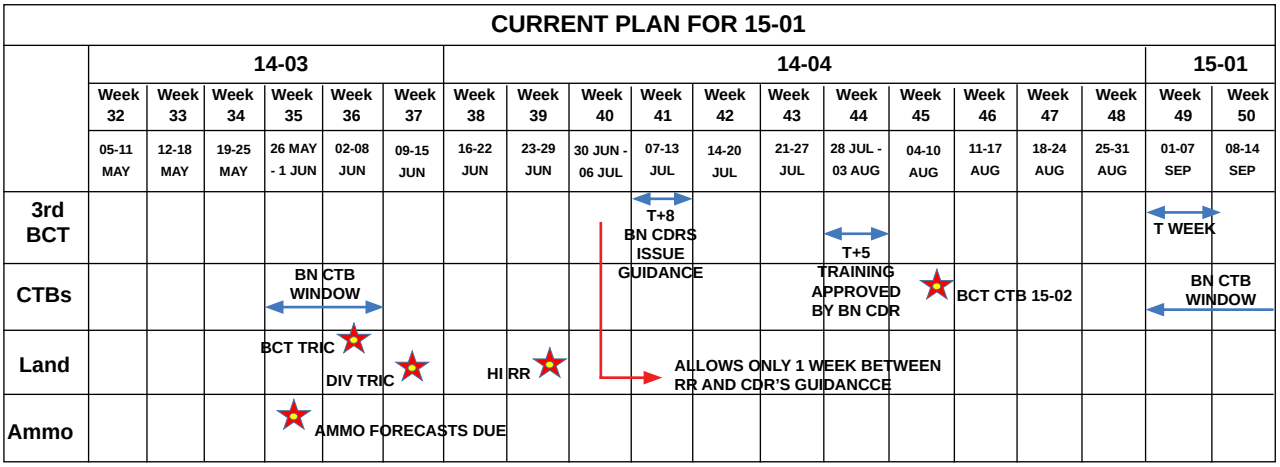
An increasingly interconnected world has forced our military forces to prepare for the unknown. Evolving and adaptive threats jeopardize the security of America, its allies, and its partners — forcing the Army to expect more of its forces, often with less resources and less time for preparation. As GEN (Retired) Raymond Odierno once stated, "I can't tell you if we're going to be fighting on the Korean peninsula... can't tell you if we're going to be in Iraq or Syria fighting a war... can't tell you if we're going to be in Eastern Europe deterring Russia... I don't know."[1] One means to help mitigate such unpredictability is training management. Reinvesting in doctrinally sound training management practices will help to ensure readiness despite rapidly changing demands and financial shortfalls.

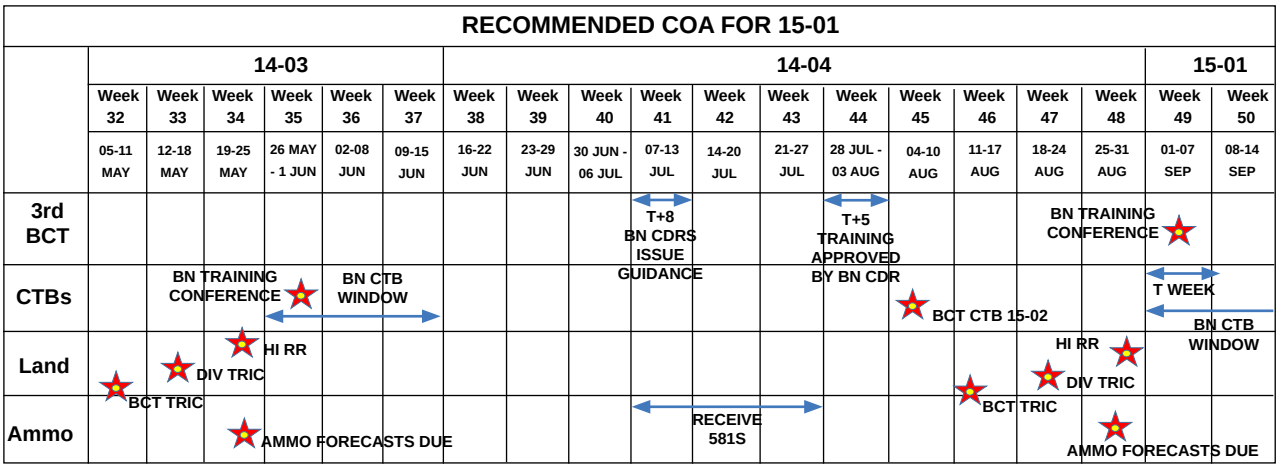
U.S. Army Chief of Staff GEN Mark Milley identified readiness as a key priority. He stated, "All three Army components must be ready to respond to 'the entire range of military operations' in an uncertain, volatile world… our number one task is readiness."[2] Given this context, the Army, as the nation's strategic land-power component and backbone of the joint force, must be disciplined and prepared. The cornerstone of this will be enabling field grade officers to train their formations to the highest standard in accordance with brigade combat team and division mission essential task lists (METL).

Unfortunately, it's not clear that junior field grade officers possess the requisite competencies and experience to train their units at lower costs with reduced resources and under curtailed planning horizons. In a recent *Military Review* article, MAJs Paul Lushenko and David Hammerschmidt stated that it's unclear "whether company and field grade officers, having served in regular deployments since 2001, can effectively plan, prepare, execute, and assess realistic training..."[3]

This article suggests that junior field grade officers and captains need to reinvest in doctrinally sound training

Figure 1 —Example Brigade Resource Calendar





Intent: Provide additional predictability to the company (CO)/battalion (BN) in regards to training management specific to cycle training briefs (CTBs) at the BN/BCT levels, ammunition forecasts, and land requests.
Concept of Operation:
-Land: currently the division training resources integration conference (TRIC) and the Hawaii Round Robin (HI RR) are 11 weeks from the next cycle beginning. The subsequent step would be to have the battalions brief their CTBs to the BCT for approval during the 2-3 weeks which would only give 8-9 weeks prior to execution. This is not optimal based of companies' briefing concept approval at T+5.
Recommended course of action (COA): Land conferences are conducted 13-15 weeks out or NLT 90 days prior to the upcoming cycle.
Ammunition: The current ammunition forecast timeline is too short and does not allow the BNs and companies to properly resource training events:
Recommended COA: The ammunition forecast should be conducted at the conclusion of the HI RR week; that is approximately 12 weeks prior to the next cycle beginning.
CTBs: BN CTBs should be executed at the beginning of the cycle for the upcoming cycle brief. The BCT should remain at least one cycle in front of the battalions.

management practices in order to better sequence and synchronize resources and units in time, space, and purpose. This can be done using three distinct methods — perfect discipline, long-range training, and short-range training. "Perfect" discipline is the means by which emerging field grade officers can enhance unit readiness with limited resources and time. A long-range training calendar helps to align intent visually and spatially. It is a doctrinally grounded framework that is refined through best practices garnered from all service components. Division and brigade-level leaders can demonstrate greater oversight and focus when determining what tasks subordinate units should train against. Finally, the incorporation of a short-range training calendar can help training managers at the battalion level determine how to conduct and resource training across a spectrum of operations.

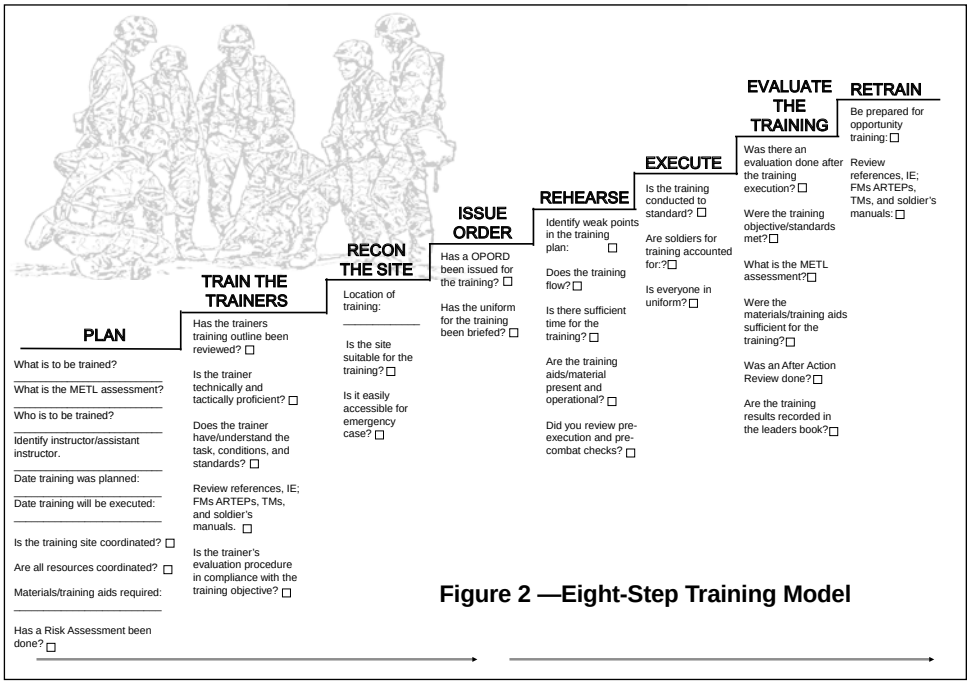


Figure 2 —Eight-Step Training Model

Perfect Discipline

Perfect discipline is understanding and maintaining the highest ethical and moral standard at all times — no matter the circumstances, no matter the environment, no matter who is (or who isn't) observing. Perfect discipline is fair, honest, just, and uncompromising. In this sense, perfect discipline is related to integrity and strength of character. These values or traits are integral to the U.S. Army ethic and are — or at least should be — as much a component of unit training management as mission-essential tasks.[4]

Leaders must employ discipline when developing their training path, regardless of whether it is preparing for an upcoming combat deployment or a Combat Training Center (CTC) rotation. Discipline is particularly important when following and understanding the company or battalion METL, developing key collective tasks (KCT), or adequately resourcing training events.[5] These three factors frame a doctrinally sound unit-training plan.

Procedurally, strict adherence to a long-range training calendar enables commanders to clearly articulate what critical tasks subordinate units should train against. It represents a necessary but all-too-often-relegated training management tool. It also helps set the conditions for a broader impact. According to Arthur S. Collins in his book *Common Sense Training*, "the senior commander sets the tone on training in an Army organization. The training atmosphere the commander creates prevails over all the efforts of his subordinates."[6]

Long-Range Training Management

Training management begins at the division level. Division commanders and staff must enable subordinates to prioritize competing training requirements in order for them to sufficiently meet the intent. It is also necessary to allocate adequate time for subordinate units to conduct critical tasks such as requesting materiel and resources (ammunition and land) and conducting training briefs (where the subordinate unit's training path is approved by the brigade and division commander). Figure 1 depicts a rubric for ensuring units submit information within the properly allocated time. This is tracked and monitored through a "T-Week" concept.

The T-Week concept is a temporal framework and planning tool that outlines necessary milestones for training events. It helps ensure all significant actions necessary to execute training events are "considered and completed in a timely manner."[7] Figure 1 is an example brigade resource calendar that displays key milestones throughout a training cycle (quarter). The top of the figure displays a method that provides limited planning and preparation time for battalions and companies.

On the bottom of Figure 1, the chart has the brigade and division land conference convening T-18 (seven weeks prior to battalion commanders providing guidance at T-11 to company/battery/troop commanders). This also displays ammunition forecasts due to the brigade and division T-18 (nine weeks prior to the T-9 window). These dates and specific milestones are published in *The Leader's Guide to Unit Training Management*. Company grade and field grade officers must be cognizant of these planning factors when developing company to brigade-level training events. The last important aspect on this chart is the command training brief window. Once ammunition and land are requested, the training plan must be approved by the brigade or division commander. This will enable troop leading procedures (TLPs) in accordance with the eight-step training model (Figure 2), and will provide subordinate units and leaders predictability.[8] As a result, leaders can properly and accurately develop a training path that is nested with their higher headquarters.

Enabling Predictability – The Long-Range Training Calendar

It is imperative that divisions and brigades plan 18-24 months in advance of current training. This will enable predictability to trickle down to the battalion and company levels — where predictability is needed most. This will allow battalions and companies to efficiently plan 12-18 months out. Similarly, a key to the planning process is obtaining and understanding the commander's intent. The commander needs to be at the center of the planning process and clearly enumerate guidance. Staff members must know the commander's key tasks and the desired end-state before they can effectively begin the planning process. The operations officer synchronizes this information on the long-range calendar. This calendar is subsequently shared with subordinate, adjacent, and higher units for additional planning considerations. A brigade long-range calendar displays higher headquarters (one and two levels up), adjacent units, land, schools, and subordinate battalions.

When planning 18-24 months out, what should a staff plan? First, the staff must be nested with its higher headquarters. The staff must identify division-level training events to include the organizational inspection program (OIP), warfighter exercises, red-cycle tasks, etc. Secondly, the staff must identify critical training events such as platoon and company live-fire exercises, Expert Infantryman Badge (EIB) training/testing, leader development programs, team-building events, medical proficiency training, etc. When building and identifying these events, the staff must clearly articulate and display how the subordinates will become proficient. For example, prior to conducting a company combined arms live-fire exercise (CALFEX), each platoon will have executed a day and night live-fire exercise (LFX); or prior to a battalion 25-mile foot movement, each week would reflect the progression of mileage for each company.

Bringing it Together — Commander's Conference

A method to resolve concerns is to conduct a commander's conference where leaders develop the long-range calendar — forecasting for the next 18-24 months. If this conference was conducted at the brigade level, all battalion command teams, battalion field grade officers, brigade primary staff, aviation brigade representation, sustainment brigade representation, and division staff representation would receive guidance from the brigade commander and then begin backwards planning to develop a detailed long-range calendar.

The key for this conference is to develop the plan and allow the staff to develop the plan and then gain approval from the brigade and battalion command teams (keeping the brigade commander updated on progress). The next step is to gain approval from the assistant division commander for operations or maneuver (ADC-O/M). The ADC-O/M is overall responsible for any aspect within the division related to operations, to include training. Once the ADC-O/M approves the concept, subordinate units can begin planning. Once this training plan is approved, it is codified. It would take the battalion commander (or the brigade commander depending the type of training event) to cancel or adjust the training event. Once a unit is within the six-week window, there are no changes to the battalion short-range training calendar; however, units and leaders must remain flexible in the event of changes at the higher echelons of the Army. However, subordinate units would have a minimum of four cycles to base their planning.

It is imperative that divisions and brigades plan 18-24 months in advance of current training. This will enable predictability to trickle down to the battalion and company levels — where predictability is needed most. This will allow ***battalions and companies to efficiently plan 12-18 months out.*** *Similarly, a key to the planning process is obtaining and understanding the commander's intent. The commander needs to be at the center of the planning process and clearly enumerate guidance.*

Short-Range Training Management

With limited resources, any training we conduct should be "tough, realistic, and intellectually and physically challenging."[9] This will ensure that units are adequately prepared for the rigors of combat. When establishing training events – whether field training exercises (FTXs), situational training exercises (STXs), or LFXs — they must be realistic, demanding, and challenging. If training events do not meet these criteria, our Soldiers and leaders will not develop and improve. Improvement is a constant goal — and the end state of any training should be to ensure that all leaders and Soldiers continue to enhance their skills, confidence, and capabilities.

Furthermore, when training is being executed, it is essential for leaders at all levels to be in attendance. "Commanders are responsible for training that occurs in their units. Commanders must be present, visible, engaged and fulfilling their role at training."[10] Disciplined leaders ensure the training is being executed to standard: "there is no activity at any level that does not require supervision and inspection."[11] This adds credibility to the leader with his or her Soldiers and enhances professional development.

Critical to training initiatives is a comprehensive long-range calendar that seamlessly transitions into the short-range calendar and training schedule. The short-range calendar and training schedule is essential for battalion and company leaders; this provides predictability and is a contract between company commander and the battalion commander. *The Leader's Guide to Unit Training Management* effectively lays out guidelines for company grade and field grade officers to follow:

Week T-8: Execute reconnaissance and lock in resources
Week T-7: Publish operation order (OPORD) for training event
Week T-6: Lock in training; publish training schedules
Week T-5: Complete tactical plan and supporting products

Week T-4: Conduct certifications and complete prerequisite training

Week T-3: Conduct rehearsals

Week T-2: Finalize administrative support requirements and conduct opposing force (OPFOR) rehearsal

Week T-1: Draw equipment and supplies and execute subordinate rehearsals and checks

T-Week: Execute training

Week T+1: Recover, conduct final after action reviews (AARs), and assess training[12]

Commanders must properly resource their training events. At the battalion and equivalent levels, along with the weekly battalion training meeting, they will run a weekly battalion training resource meeting chaired by the battalion executive officer (XO) and operations officer. This meeting ensures that training events are properly resourced in all classes of supply and reviews the logistics plan; it is also an excellent opportunity to develop junior officers. Figure 3 is an example slide from a battalion resource meeting. This meeting consists of the company XO, battalion land NCO, battalion ammunition NCO, S3 Air, battalion calendar officer, medical platoon leader, battalion maintenance officer (BMO), and distribution platoon leader. The key outputs of this meeting are identifying and synchronizing when vehicles are dropping off ammunition, fuel, or personnel; when is the range going live; what is the medical evacuation (MEDEVAC) plan; and so forth. These are all imperative when executing training management and all require discipline and stern leadership when planning.

Providing Balance — The P-Week Battle Rhythm

Integral to short and long-range training management is balance — ensuring that subordinate echelons are not training too much, not adequately preparing for training events, or are not recovering properly. A technique to help provide such balance is the P-Week Battle Rhythm. The P-Week Battle Rhythm allows commanders and subordinates to execute training requirements under the crawl-walk-run methodology. This helps to identify field or range preparation weeks, field or training density weeks, and field recovery weeks. The P-Week Battle Rhythm follows:

P1: Training density — LFX, FTX, STX, CTC rotations, overnight training

P2: Recovery — consists of Soldier, vehicle, and equipment recovery

P3: Preparation, leader development, marksmanship training, no overnight training

P4: Block leave

The benefit of the P-Week Battle Rhythm is not only predictability for the Soldiers, but it also allows families to know when their spouses will be training. In addition, a commander can conduct detailed analysis verifying the extent to which units are training, recovering, and preparing for training. This analysis ties into the overall readiness of the unit.

End State

Long-range and short-range training management are key to ensuring the success and readiness of our Army. We must build training plans that are nested with our higher headquarters, which follow current doctrine, and that challenge our leaders and Soldiers. As an Army, we have the necessary tools and experience to maintain and completely master training management. To ensure this happens, leaders must properly train, mentor, and develop captains on training management. Concomitantly, senior leaders must ensure that field grade officers are doctrinally proficient in training management.

"Traditionally, field grade officers have been expected to maintain the quality of training. Lieutenant colonels and colonels are the training managers and teachers at battalion, brigade, or group levels. They set the standards and manage the resources and facilities. They supervise and guide the

Figure 3 —Example Slide from Battalion Resource Meeting

HHC Training Support Calendar T+2 TW 39 P1
CACTI FOCUS

TW 39	MON- 24 JUN	TUE- 25 JUN	WED- 26 JUN	THU- 27 JUN	FRI- 28 JUN	SAT-29 JUN	SUN-30 JUN
EVENT	Qualification EIB	Qualification EIB		AASLT/ Land Navigation			
LAND	CTF Z/Q (EIB)	CTF Z/Q (EIB)		MAF PZ (1000-1015) ER 3A/3B Lightening LZ	FSE SAVT		
	QTR2 MRF (WT)	QTR2 MRF (WT)					
	*CFFT	*CFFT	*CFFT	*CFFT			
CL I Water Food Latrines	MRE	MRE		MRE			
CL V (DODIC/ AMT)	A059: 5,170						
	A059: 5,170						
CL V Drop-off Pickup	DROP: 0630 (0745)						
	DROP: 0700 (0800)						
TRANS Drop-off Pickup	1x HMMWV	1x HMMWV		1x HMMWV			
MED	2x FLA	2x FLA		1x FLA			

AASLT - air assault; CFFT - call-for-fire trainer; CTF - collective training facility; EIB - Expert Infantryman Badge; FLA - front-line ambulance; FSE - fire support element; HMMWV - high mobility, multipurpose wheeled vehicle; MRE - Meal, Ready to Eat; MRF - modified record fire; SAVT - supporting arms virtual trainer

efforts of the company, troop, and battery commanders. Above all, they teach lieutenants and captains how to train. Field grade officers must lead the way in establishing the high training standards required in peacetime so that the Army is ready for any national crisis."[13]

Leaders can ensure this by conducting leader professional development forums and following doctrine at all levels.

As training events are being reduced due to cost restrictions, it is ever more apparent that long-range and short-range training management are critical to our formations. Once units are identified for a CTC rotation, an exportable combat training center (XCTC), or multi-echelon integrated brigade training (MIBT), the staff officers and NCOs must be able to build a comprehensive training path within the commander's intent that fully prepares the unit for the culminating event and ultimately mission success.

Notes

[1] GEN Raymond Odierno quoted in J.D. Leipold's "Uncertainty Means Army must be Prepared for Multiple Threats," U.S. Army website (23 January 2015), http://www.army.mil/article/141620/Uncertainty_means_Army_must_be_prepared_for_multiple_threats.

[2] GEN Mark Milley quoted in Michelle Tan's "Milley: Readiness Helps Army Face Uncertain Future," *Army Times* (13 October 2014), http://www.armytimes.com/story/military/2014/10/13/milley-readiness-helps-army-face-uncertain-future/17221505/.

[3] CPT Paul Lushenko and MAJ David Hammerschmidt, "Back to the Future: Managing Training to Win in a Complex World," *Military Review* (January-February 2015): 52.

[4] Army Doctrine Reference Publication 1-0, *The Army Profession* (Washington, D.C.: U.S. Government Printing Office [GPO], 2015) 2-2.

[5] *The Leader's Guide to Unit Training Management*, (Washington, D.C.: U.S. GPO, 2013) 24.

[6] Arthur S. Collins, *Common Sense Training* (Novato, CA: Presidio Press, 1977), 38.

[7] Ibid, 67.

[8] The eight-step training model provides a guide for leaders at the brigade-level or lower to align resources to requirements as well as to sequence and synchronize training. The steps consist of plan the training, train/certify leaders, conduct a reconnaissance, issue an order, rehearse, execute, conduct an after action review, and retrain.

[9] *The Leader's Guide to Unit Training Management,* 131.

[10] Ibid, 128.

[11] Collins, 153.

[12] *The Leader's Guide to Unit Training Management*, 68.

[13] Collins, 156.

LTC Richard P. Taylor is currently serving as the executive officer to the commanding general of the NATO Special Operations Component Command - Afghanistan/Special Operations Joint Task Force - Afghanistan (NSOCC-A/SOJTF-A).

Editor's Note: The author included a few additional example training calendars which we were unable to include. If you are interested in viewing the additional calendars, email us at usarmy.benning.tradoc.mbx.infantry-magazine@mail.mil.

U.S. Army paratroopers from Company D, 1st Battalion, 503rd Infantry Regiment, 173rd Airborne Brigade, train on the use of the M41 TOW Improved Target Acquisition System during Exercise Sky Soldier 16 on 25 February 2016 at Chinchilla training area in Spain.

Photo by SSG Opal Vaughn

A Progressive Approach to Basic Rifle Marksmanship

1LT BRIAN COSTELLA
SGT NATHANIAL KALK

A Company, 2nd Battalion, 12th Infantry Regiment, is a light Infantry company under the 2nd Infantry Brigade Combat Team, 4th Infantry Division stationed at Fort Carson, Colo. Following a nine-month deployment to Afghanistan in 2014, the company was sent to Fort Knox, Ky., as a part of a U.S. Army Forces Command (FORSCOM) task to support the execution of the 2015 Reserve Officer Training Corps (ROTC) Cadet Summer Training (CST). One of the tasks assigned to our company during CST was to support the cadet rifle training ranges. As a result of these tasks, our company had the opportunity to invest deeply in basic rifle marksmanship (BRM). Members of our company attended the 75th Ranger Regiment's Ranger Marksmanship Instructor Course (RMIC) and the Asymmetric Warfare Group's CST Basic Rifle Marksmanship Instructor's Course. These training opportunities and the experience of training thousands of cadets on rifle marksmanship afforded our company the opportunity to gain numerous techniques to apply to our own BRM progression and to share with our sister units. The most significant conclusions that our unit pulled from our marksmanship experience were:

Photos courtesy of authors

Soldiers from the 2nd Battalion, 12th Infantry Regiment give a class to cadets on the use of night optics during Cadet Summer Training.

- The need for Soldiers to achieve a foundational knowledge base in marksmanship;
- The importance of Soldiers at the lowest level developing functional weapons safety habits; and
- The importance of mastering how and why to apply the fundamentals of marksmanship.

When we began the Asymmetric Warfare Group's marksmanship instructor course prior to executing CST, Senior Instructor Chris Crider emphasized first and foremost the importance of giving Soldiers a strong knowledge base and stressed the significant role that this plays in their marksmanship progression. In order to set the conditions for Soldiers to be successful in marksmanship, it is imperative that they have a solid understanding of the marksmanship fundamentals. It is not enough to simply tell Soldiers where to hold their sights as they engage targets at distance or to make adjustments for Soldiers' sights as they zero their weapons. These habits are effective in zeroing and qualifying Soldiers but cripple them when it comes to allowing them to develop a true understanding of marksmanship. To instill a lasting understanding of marksmanship, trainees should first be taught the science behind marksmanship such as minute of angle, trajectory, ballistics, functions of fire, and weapons maintenance. Once they have this knowledge base, Soldiers will be able to take the initiative in their marksmanship. (For example, Soldiers can make necessary holds as they engage targets at distance and make the appropriate adjustments

A Soldier fires from the kneeling position during advanced marksmanship training at Fort Carson.

to their sights when zeroing their weapons without having to wait for the directions or assistance of their leadership.)

Soldiers can still group and zero their weapons and qualify well if leaders do not spend the time to educate them through preliminary marksmanship instruction (PMI). However, by neglecting their education, we greatly limit Soldiers' potential for marksmanship progression. The use of the standard M4/M16 25-meter zero target (with numbers on the X and Y axis that tell Soldiers how many clicks to move their sights to zero their weapon) is a perfect example of how we as an Army have fallen back on the easier marksmanship solution instead of investing in the knowledge of our Soldiers. These practices detract from the overall capabilities of our units. Allowing a piece of paper to tell us how to make sight adjustments to our weapons instead of having an understanding of the minute of angle adjustments needed to properly zero our weapons accomplishes the immediate task of zeroing but inhibits our potential for marksmanship progression. By using these simplified techniques, we will not have the understanding needed to zero out to further distances for a more accurate zero. When we teach Soldiers the science behind marksmanship, they will understand not only the procedures necessary to operate their weapons but the reason behind those procedures. The use of the M4/M16 zero target is only an example of how simplified marksmanship techniques can inhibit a Soldier's marksmanship progression. Moving away from these expedited and simplified marksmanship practices and developing a deeper understanding of the fundamentals of marksmanship will allow Soldiers to effectively operate their weapons in any environment or circumstance.

During CST 2015, the first day of marksmanship training did not take place at the range but in the classroom. Marksmanship instructors dedicated a full day of PMI to educate the cadets and set the conditions for success prior to them firing their first round. Their instruction included ballistics, minute of angle, trajectory, and a strong emphasis on the fundamentals of marksmanship. Even at the range, there was still an emphasis on PMI. If cadets were unable to apply the fundamentals of marksmanship as they grouped and zeroed their weapons, they were taken by a dedicated PMI instructor to identify and fix any deficiencies in their understanding and application of the fundamentals of marksmanship.

As FORSCOM units, we can replicate the knowledge-based BRM progression that our CRT committee used to train the cadets. Using Chapter 4 of FM 3-22.9, *Rifle Marksmanship M16/M4 Series Weapons*, we should be conducting PMI and teaching our Soldiers about BRM days before we go to the range. Although all Soldiers should have been given this instruction during their initial entry training, it will provide a good refresher and fill any gaps in their knowledge of marksmanship. At a minimum, our PMI instruction should include weapons safety, disassembly, assembly, maintenance, functions of fire, minute of angle, ballistics and trajectory, and an overview of the type of shooting to be executed. Soldiers' knowledge can then be tested and improved upon through numerous dry fire drills that instill marksmanship habits and set the conditions for success when they are on the range. Having a common understanding of information such as the minute of angle for each weapon and optic that are to be used, effective firing positions, and the proper holds for each distance to be fired will be critical in setting our units up for success in marksmanship. This also saves time and resources while significantly increasing the marksmanship capabilities inside of our formations.

Although a strong knowledge base is essential in the success of marksmanship, no marksmanship program will be successful if they do not actively practice weapons safety habits. Both the Asymmetric Warfare Group's team and the RMIC team emphasized the importance of safety above all else while training marksmanship. The attitude of "the safer we are, the more we can do" that Crider stressed through his course is one we should strive to emulate in the planning and execution of our training. By the chain of command identifying risks and then avoiding them through blanket safety policies that take away individual Soldier responsibility, we limit the capabilities and the outcomes of our training and reinforce bad habits for Soldiers. Instead, we should mitigate those risks to the best of our abilities by instilling habitual, simple, and effective safety practices at the individual Soldier level.

Imperative to the practice of safe marksmanship is the internalization of the fundamentals of safety. The atmosphere of responsibility that was emphasized by the RMIC instructors allowed Soldiers to internalize the principles of weapons safety. The most effective way that we as leaders can train our Soldiers to practice habitual weapons safety is by making

Soldiers practice shooting from the standing position during a reflexive fire range at Fort Carson.

them comfortable with their weapons through instruction, dry-fire drills, and the example of their leaders. When Soldiers have demonstrated that they have mastered the basic principles of weapons safety, the redundant control mechanisms can then be minimized to allow them the responsibility to practice safety. Once the basic controls have been mitigated to the bottom-line necessities, we should then hold them to the highest standard of weapons safety to ensure that they continue to practice these fundamentals before progressing to more complex shooting such as advanced rifle marksmanship, close quarters marksmanship, and live-fire exercises, with risks that are both more frequent and more severe.

The typical "safety" practices that the Army habitually uses — such as firing our last round and immediately passing our weapon off to a safety for clearance or finishing a firing iteration and placing our weapon on a sandbag pointed down range where we cannot accidentally discharge a round — ingrains bad habits of poor weapons safety in our Soldiers. As Crider explained, when we place these blanket safety policies over our Soldiers, "we train them to think that weapons are dangerous, instead of training them to think of weapons as their tools — their personal life lines." During our CST instructor course, when the AWG instructors observed us becoming more confident and responsible with our weapons and able to practice the four safety rules, they slowly lessened the blanket safety restrictions that were placed on us, allowing us to feel more comfortable and confident in the use of our weapons. For example, our instructors told us to move up and down range to check targets with our weapons slung at the low ready, allowing us to carry our weapons in a safe manner. This practice not only made the range safer as we did not have unattended weapons pointed at us, it also instilled the habitual practice of carrying our weapons properly and safely at all times. During the training, if any of the Soldiers were unsafe with their weapons, such as pointing their weapons in unsafe directions while picking up brass, the instructors and the Soldiers to their left and right were quick to correct the deficiency. The four safety rules that were instilled in us through our AWG training and that were instilled in the cadets through CST are as follows:

1. Treat all weapons as if they are loaded at all times.
2. Only point your weapon at something you are willing to destroy.
3. Finger off the trigger and weapon on SAFE until a sight picture is acquired.
4. Positively identify your target, what is beyond it, and what is left and right of it.

By continually allowing us to take ownership of the range and more importantly our own weapons safety through use of the four safety rules, our coaches allowed us to become comfortable with our weapons, creating an end state of good safety habits.

Similar to what we experienced during our training, the cadets at CST became much safer and more efficient with their weapons as they became more comfortable. Not only will fostering an environment of personal responsibility and ownership help our Soldiers on the range, it will improve them holistically as it instills in them core values such as responsibility, accountability, and discipline. We must realize that the Soldiers we should be trusting to carry a loaded weapon on a flat range today are the same Soldiers that we will trust to carry loaded weapons on deployment in the near future. Therefore, we must instill in them a habitual practice of the four safety rules.

In our marksmanship progression, once we have come to a common understanding of safety, we should begin with the five fundamentals of marksmanship:

1. Stable body position
2. Breathing
3. Sight alignment and sight picture
4. Trigger squeeze
5. Follow through

While conducting our training prior to CST, Crider and his team continuously stressed the significance of understanding the fundamentals of marksmanship and slowly progressing to more advanced shooting only as each Soldier is ready. Before Soldiers fire a round, they should have a firm understanding of the five fundamentals of marksmanship. Through instruction, demonstration, and dry fire drills, Soldiers should be given an opportunity to conduct PMI and practice and master these fundamentals before even going to the range. Once at the range, Soldiers will then put into practice the principles that they have already drilled. With one Soldier firing on the line and a peer coach behind them coaching and critiquing, they

are able to identify deficiencies that couldn't be identified in PMI due to a lack of recoil and the anticipation of the round firing.

Throughout the sequence of a slow progression in fire, a coach and shooter pair, with the help of experienced leaders, should be able to use their understanding of the five fundamentals of marksmanship to identify the deficiencies that they have in their shooting and greatly improve their marksmanship capabilities. Once the fundamentals of marksmanship are understood and have been mastered in basic sequences of fire, firers should then progress to more advanced marksmanship. By beginning unit marksmanship programs with this slow, knowledge-based progression, leaders are sure to see greater and longer lasting improvement in their Soldiers' marksmanship capabilities with even fewer resources.

While training cadets at the BRM range during CST 2015, our coaches effectively grouped, zeroed, and qualified an average of 300 cadets a day for 20 ranges with more than a 97 percent success rate. This was no easy task as many of the cadets had never fired a weapon before and only had three days to be prepared for a team live fire. Their success in coaching so many cadets can be credited in most part to their common understanding and coaching of the five fundamentals of marksmanship. Giving the cadets the base of knowledge on marksmanship the day prior through the PMI committee allowed our coaches to simply reinforce the fundamentals they had already been taught. Since the cadets already knew the five fundamentals, our coaches were able to systematically pinpoint each fundamental to hone the cadets' marksmanship and make them successful in grouping, zeroing, and qualifying. Our coaches' common understanding of the five fundamentals kept all them consistent in the corrections that they made to cadets, limiting confusion and regression in marksmanship. Though our coaches had differing levels of experience in marksmanship, they were all invaluable in the combined effort of coaching 6,000 cadets over the summer due to their consistent adherence to the five fundamentals of marksmanship.

In conclusion, in order to establish an effective BRM progression, a unit must invest in a strong knowledge base for their Soldiers, entrust their Soldiers with and hold them to the highest standard of weapons safety, and have a strong understanding of the fundamentals of marksmanship. By applying these aspects of marksmanship, a unit will produce not only good marksmen but marksmen who are able to adapt to adverse situations and engage targets accurately in varied circumstances. In a world with threats continually emerging, it is imperative that our Army stand ready to deploy, close with, and destroy the enemy; and paramount to this is our ability to train and remain proficient in marksmanship.

1LT Brian Costella was commissioned as an Infantry officer from the U.S. Military Academy at West Point, N.Y. He graduated from the Infantry Basic Officer Leadership Course and Ranger School prior to being stationed at Fort Carson, Colo., where he is currently a rifle platoon leader.

SGT Nathanial Kalk is an Infantryman who was stationed at Fort Stewart, Ga., for three years as a rifleman before moving to Fort Carson where he served as a team leader and now serves as a squad leader. SGT Kalk has deployed twice to Afghanistan.

A team from A Company, 2-12 IN competes in a stress shoot, which uses fatigue to test the marksmanship fundamentals of shooters.

The 75th Ranger Regiment Post-OEF:
Adapting Training and TTPs Following 13 Years of War

MSG MARCUS BRANCH
CPT CHRISTOPHER GREER
CPT JONATHAN KINGSLEY
MAJ VINCENT KUCHAR

> *"The 75th Ranger Regiment is a lethal, agile, and flexible force, capable of executing a myriad of complex, joint special operations missions in support of U.S. policy and objectives. Today's Ranger Regiment is the Army's premier raid force."*[1]

The Special Operations Training Detachment (SOTD) at the Joint Readiness Training Center (JRTC), Fort Polk, La., provides relevant and realistic training for Special Operations Forces (SOF), including the 75th Ranger Regiment. JRTC's training environment allows SOF elements to refine their skills along the special warfare-surgical strike continuum envisioned in *ARSOF 2022*.[2] Recently, JRTC Rotations 14.10.5 and 15-06 met Ranger training objectives including surgical strike; SOF/conventional forces (CF)/ joint, interagency, intergovernmental, and multinational (JIIM) interdependence, integration, and interoperability (I3); and SOF mission command.[2]

Thirteen years of fighting the global war on terrorism (GWOT) has ingrained an Operation Iraqi Freedom (OIF)/ Operation Enduring Freedom (OEF) mindset in all JRTC rotational training units (RTU) in terms of planning and conducting operations. Likewise, Ranger units training at JRTC have had to adapt to a complex environment in which they lack the resources they have become accustomed to during GWOT. The unique challenges and friction of JRTC allow Ranger units to refine their tactics, techniques, and procedures (TTPs) while responding to an adaptable enemy.

During GWOT, the 75th Ranger Regiment developed remarkable skills in close quarters battle (CQB) raids (typical mission in Iraq and Afghanistan). However, with the drawdown of major combat operations, the regiment must re-establish its ability to execute the basics well to respond to unknown threats of the future operating environment (FOE). The Rangers must remain the subject matter experts on the Infantry doctrinal tasks of Army Techniques Publication (ATP) 3-21.8 (formerly FM 7-8, *Infantry Rifle Platoon and Squad*) to meet *ARSOF 2022 /ARSOF Next* requirements while keeping abreast of best practices in an ever-changing geopolitical

Rangers from 1st Battalion, 75th Ranger Regiment, as part of a combined Afghan and coalition security force operating in Ghazni Province, Afghanistan, await a CH-47 for extraction.
Photo by PFC Pedro Amador

environment. The 75th Ranger Regiment may be among the first units tasked with combat operations in a future campaign.

In support of these objectives, JRTC provides a vehicle for the Rangers to transform their combat experiences into an enduring set of TTPs in preparation for short-term expeditionary or extended combat operations. Particularly useful for commanders is the situational awareness and external feedback that JRTC provides. JRTC's superb collective training environment allows the 75th Ranger Regiment and other surgical strike SOF units to preserve the lessons of combat, cement the doctrinal fundamentals, cultivate I3, and practice new TTPs in response to an ever-changing FOE.

Evolution of the Ranger Regiment during OIF/OEF

The proficiency of Ranger units is a function of the quality and quantity of training, and Ranger leaders say the best training is combat. During a typical combat deployment to OEF, a Ranger element could expect a continuous find/fix/finish/exploit/analyze (F3EA) targeting cycle. The Rangers removed thousands of insurgents from the battlefield. Combine this high combat operations tempo (OPTEMPO) with junior leaders who take every opportunity to refine their skills, and the result is a level of proficiency that is arguably unmatched by previous generations of Rangers.

Of particular note, the Ranger Regiment is the Department of Defense (DoD) leader in casualty survivability. Factors such as dedicated rotary wing medical evacuation (MEDEVAC) during operations, detailed planning and rehearsals, medical training (such as Ranger First Responder), and quantity and distribution of medically trained personnel in Ranger units have led to the regiment's remarkable record of the combat-wounded surviving their injuries.[3]

Prior to GWOT, the focus of the 75th Rangers was to be the premier light Infantry unit, with unparalleled joint force entry (JFE) capability. The Rangers specialized in airfield seizures and air assault raids within a 24-hour recall. Going into GWOT, the Rangers were the best at the basics. Consequently, they evolved into a combat-hardened force that became expert in dealing with the unique challenges of Iraq and Afghanistan.

This scope of operations led to many changes over the GWOT timeframe. In 2006, the regiment added **mobility training** to the original "Big Four" training tasks — **marksmanship, physical training, medical training,** and **small unit tactics**.[4] Also during this period, OIF deployments refined Rangers' CQB abilities while OEF deployments cultivated an unprecedented level of competence in Ranger weapons squads and mortar sections.

Learning from GWOT to Prepare for the FOE

GWOT allowed the Rangers to enhance CQB expertise, the F3EA cycle, and air assault proficiency, among other skills that have laid the groundwork in preparation for any number of threats the FOE may present. Like many conventional units — and despite their traditional use as a unilateral force — the 75th developed a limited capacity to train international forces in a geographically confined area. However, ARSOF 2022 places the 75th Ranger Regiment firmly on the surgical strike end of ARSOF's critical capabilities spectrum.

Like mission creep, a decline in combat operations may have caused a decline in direct action proficiency. Meanwhile, budgetary constraints reduce the opportunities for privately contracted training, causing the Ranger Regiment to face the challenge of sustaining its elite force using internal and big Army-resourced training. Fortunately, the competitive environment in the 75th Ranger Regiment fosters leaders at all levels with an intrinsic desire for mastery, and these leaders demand the same from the men they lead. Thus, the unit itself is capable of developing and executing highly effective training without relying on the private contractors of the past, especially if the 75th incorporates low-cost, high-yield collective training opportunities like those JRTC provides.

Collective Training Post-OEF

The 75th Ranger Regiment can no longer solely focus on the CQB raids and the airborne and air assault operations of the past decade in Iraq or Afghanistan. Instead, the regiment faces varied regional threats of the FOE. Thus, an important question for Ranger leaders is: "How do the Rangers continue to remain the elite Infantry force in this unpredictable threat environment?" One Ranger officer's answer was simple: "Preserve quality though training and repetitions at places such as JRTC." JRTC offers a resourced, immersive training environment that the Rangers are unable to replicate at their home station.

As much of the Army draws down in Afghanistan and units across the Army become regionally aligned, the Ranger Regiment remains a global response force and must prepare for a breadth of threats in anticipation of the next conflict. While senior leaders refine the Ranger mission essential task list (METL), the "Big Five" will remain fundamental to Ranger training. Combat Training Centers (CTCs) such as JRTC will continue to provide the Ranger Regiment a unique venue to sustain and improve its marksmanship, medical skills, physical endurance, tactics, and mobility skills.

In addition to the Ranger "Big Five," elements from the 75th accomplish a range of other ARSOF 2022 training priorities at JRTC. These include executing the fundamental Infantry patrolling tasks and battle drills of ATP 3-21.8 and the *Ranger Handbook* that will ensure the Rangers are adaptable to any environment. Additionally, Rangers must shape the operational environment through an organic F3EA process. Training at JRTC is multi-echelon — from fire team to mission command. Units operate within fully developed human terrain, facing realistic threats interspersed with civilians, among whom they must discriminate. Thus, JRTC's scenarios allow SOF units to train ARSOF 2022 priorities, light Infantry skills, and CF/SOF/JIIM I3 tasks throughout their rotations.

Recent Ranger rotations commenced with company live fires in which Rangers employed and synchronized direct and indirect fires as well as air assets for fire support and

MEDEVAC. Following the company live fire, the Rangers conducted compressed timeline planning for the force-on-force (FOF) decisive action training environment (DATE). During rotation 15-06, Rangers executed an airborne infiltration followed by an all-night movement to conduct a raid and detainee transfer. Next, they established company area ambushes with decentralized platoons for 36 hours.

To make matters more challenging, the JRTC scenario forced the Rangers away from the Iraq/Afghanistan model of conducting missions from a secure forward operating base (FOB). Instead, Rangers had to secure their own command, control, communications, computers, and intelligence (C4I) element while conducting sustained offensive operations. The JRTC field conditions and scenario are arguably as mentally and physically intensive as any apart from combat itself.

Best Practices Observed at JRTC and Recommendations

JRTC not only provides the best venue for tactical-level training the Rangers need but also provides CSA-directed I3 opportunities. At JRTC, the Rangers train as they will fight: side-by-side or in close coordination with joint, interagency, CF, and other SOF units. Thus, the Rangers practice the SOF truth, "most Special Operations require non-SOF assistance," while implementing Abram and Odierno charters by sharing Ranger standards, doctrine, TTPs, and esprit de corps with the Army.[5]

In real time, JRTC requires Rangers and CF to establish interoperability in order to exchange information between diverse systems.[6] Rangers and CF must also create interdependence by maximizing the complementary and reinforcing effects of one another's capabilities.[7] Last, they must integrate by synergizing their respective support activities and operations to ensure a unified purpose and effort.

During Rotations 14-10.5 and 15-06, 2nd and 3rd Ranger Battalion leaders leveraged pre-existing relationships with the 82nd Airborne Division to effectively synchronize logistics, operations, targeting, and information sharing. Hasty establishment of the battalion and company tactical operations center was a key factor that contributed to mission success. It facilitated communication with CF and with the SOTF and set the conditions for a successful F3EA targeting process. Placing an experienced Ranger liaison officer (LNO) with the conventional brigade tactical operations center (TOC) further advanced these and other SOF/CF I3 training objectives.

The challenges of JRTC demonstrate that doing the basics well in an austere environment is difficult even for elite forces. However, doing the basics better than the enemy is an effective strategy; the Rangers in recent rotations adapted quickly and inflicted significant enemy losses. While understanding the capabilities of other SOF units is important for I3, the Rangers do not need to be experts in special warfare tasks like foreign internal defense (FID) or unconventional warfare (UW). Instead, the Ranger Regiment can preserve its elite strike capability by continuing to focus on the "Big Five" and light Infantry fundamentals. A limited mission scope allows the regiment to be the best light Infantry, with precision CQB capability, fully prepared for the next direct action or JFE mission the nation calls on it to conduct.

Conclusion

Overall, JRTC can meet the 75th Ranger Regiment's annual collective training requirements and can provide a venue to certify Ranger collective training tasks. JRTC can support an entire Ranger battalion training with assets it might have in combat, such as the 160th Special Operations Aviation Regiment (SOAR). JRTC can also support complex, full-spectrum operations including mission ready exercises (MRX) and multilateral airborne training (MLAT). With the staffed and supported live-fire and force-on-force training at a single venue, JRTC allows the Rangers to focus on their mission tasks rather than backside support.

Ultimately, Ranger leaders who demand excellence make the 75th Ranger Regiment the Army's premier Infantry force. High training standards translate to effectiveness in combat. Such was the case with the Rangers for Rotations 14-10.5 and 15-06. The Rangers maximized the JRTC collective training opportunity while cementing lessons from 13 years of combat in the minds of the younger generation. The 2nd and 3rd Battalions of the 75th Ranger Regiment adapted the basics to defeat an evolving enemy threat. If Ranger leaders continue to inculcate the value of adaptive solutions and realistic training — like those JRTC provides — the 75th will remain the Army's premier raiders and force of choice for surgical strikes.

Notes

[1] 75th Ranger Regiment website, http://www.benning.army.mil/tenant/75thRanger/.

[2] *ARSOF 2022*, U.S. Army Special Operations Command, http://www.soc.mil/Assorted%20Pages/ARSOF2022_vFINAL.pdf.

[3] Marine GEN James N. Mattis, Memorandum. Subject: Killed in Action (KIA) Reduction Initiative, 18 January 2013.

[4] 75th Ranger Regiment website, http://www.benning.army.mil/tenant/75thRanger/.

[5] U.S. Army Special Operations Command website, http://www.soc.mil/USASOCHQ/SOFTruths.html.

[6] Joint Publication 6-0, *Joint Communications Systems*, 10 June 2015.

[7] Joint Publication 3-0, *Joint Operations*, 11 August 2011.

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The Science of Sit-ups:

An Assessment of Total Physical Fitness

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The effectiveness of Soldiers depends in large part on their physical fitness. Due to the diverse nature of military operations, the Army requires its Soldiers to possess a high level of strength, stamina, agility, resiliency, and coordination which are the factors of physical fitness this study uses for analysis. The Army Physical Fitness Test (APFT) consists of two minutes of push-ups, two minutes of sit-ups, and a two-mile run. Physical readiness training in the Army goes far beyond preparation for the APFT and is focused on a Soldier's total fitness as it relates to combat readiness. The purpose of this study is to determine which events from the APFT — along with pull-ups, a timed obstacle course event, and a foot march — most highly predict a high level of total physical fitness as measured by repetitions or time. The data used to assess these relationships between these events was obtained from the competitive military individual advanced development tryouts conducted at the U.S. Military Academy (USMA) between 2012-2015. Each year of data included six events: push-ups, sit-ups, a run of varying distance, a foot march of varying distance, pull-ups, and USMA's indoor obstacle course. The hypothesis, based on multiple other studies, was that success in foot marching would be a predictor of success in the other physical events tested. This study refuted that hypothesis, however, and statistical analysis suggested the sit-up event was likely the best indicator of total physical fitness.

Background and Assumptions

The Army often conducts physical tests in an attempt to assess fitness. These tests are often conducted at the outset of many competitive Army proficiency schools such as Special Forces Assessment and Selection (SFAS), Ranger School, Sapper School, etc., as well as during Army Basic Combat Training for new enlisted Soldiers. According to Field Manual (FM) 7-22, *Army Physical Readiness Training*, physical development training is meant to prepare "Soldiers and units for the physical challenges of fulfilling the mission in the face of a wide range of threats, in complex operational environments..." Clearly, the focus of physical fitness in the Army is to "meet the physical demands of any combat or duty position, accomplish the mission, and continue to fight and win."[1] This is not an easily quantifiable goal as there are different definitions of fitness, and people have varying opinions on which aspect of fitness is most important. Regardless, the Army's goal is to measure and quantify a Soldier's level of fitness and ability "to march long distances in fighting load through rugged country and to fight effectively upon arriving at the area of combat; to drive fast-moving tanks and motor vehicles over rough terrain; to assault; to run and crawl for long distances; to jump in and out of craters and trenches; and to jump over obstacles; to lift and carry heavy objects; to keep going for many hours without sleep or rest."[2]

As a result, the needs of the Army demand a multi-faceted approach to fitness. To test the many necessary aspects and levels of a Soldier's fitness, the Army includes a variety of physical challenges in its physical assessments. At all of the Army schools previously listed, the physical assessments include additional events to the standard APFT such as foot marches, pull-ups, obstacles courses, etc. But, the primary focus of Army training is combat readiness and all of the physical assessments, although varying in length and intensity, attempt to gauge the Soldier's combat fitness. This study attempts to define which physical tests such as push-ups, pull-ups, a foot march, etc., correlate most highly with a Soldier's level of total combat physical fitness.

The Army conducts, evaluates, and analyzes various events to assess Soldier fitness. In general, total physical fitness in the Army consists of aerobic and anaerobic activity as well as strength.[3] One specific study was conducted at the 75th Ranger Regiment in 1999. According to MAJ Michael Pemrick, a former Ranger company commander who conducted the study on total physical fitness, foot marching "develops all three of the primary physical fitness components" the Army has defined. Because foot marching is a vitally important physical skill for combat arms Soldiers, FM 21-18, *Foot Marches*, recommends a PT program that includes two sessions per week of marching. FM 21-20, *Physical Fitness Training*, claims foot marching is "an excellent aerobic activity" while FM 21-18 states that foot marches meet the requirement for both aerobic endurance and muscular endurance. Others have postulated that foot marching is the best predictor of total physical fitness, and the purpose of this study was to confirm or deny this hypothesis.

It is not only the authors of Army field manuals that consider foot marching an important aspect of physical fitness. In other studies concerning physical fitness in special operations training, foot marching has been seen to be an important indicator of success. Scott Beal, who conducted a study titled "The Roles of Perseverance, Cognitive Ability, and Physical Fitness in U.S. Army Special Forces Assessment and Selection (SFAS)," infers that "physical fitness forms the primary basis upon which SFAS success results." Based on this conclusion, it is clear the physical testing at SFAS plays

a major role in determining the candidates' success. Of the physical tests conducted, foot marching was the best predictor of success based on analyses of 25 SFAS classes between 1989 and 1991, according to Beal's study.

Foot marching is not only a test of physical fitness, it is also an effective measure of one's "grit." This factor, as described in another study, is one's level of "central fatigue." The concept of central fatigue suggests that "fatigue may be controlled by changes in efferent neural command."[4] According to this study, "after several hours of repetitive exercise… excitation/contraction coupling failure has been shown to cause fatigue during low intensity training" such as a multiple-hour foot march. But, a lack of "motivational capacity" was also identified as a source of fatigue during these tests. Therefore, a person's perceived level of fatigue during an event in which there are "several hours of repetitive exercise," such as a foot march, can be affected by his/her level of motivation.

This mental aspect is a factor when considering one's physical fitness because it determines a person's ability and willingness to push the limits of physical ability. A willingness to continually press on regardless of discomfort leads to a higher level of physical fitness from training, as well as a higher level of performance during physical assessments. Because a foot march is a test of physical fitness as well as mental toughness, it is doubly important as any of the other physical tests examined in this study.

In order to improve performance on competitive foot marches, the most effective training regimen does not necessarily need to include frequent foot marches. However, in certain cases such as when a Soldier is preparing to depart for SFAS or Ranger School, it is appropriate to foot march more frequently. The purpose of this specific training is not to increase performance during foot marching, but rather to acclimate the body to long marches. When training for a short and relatively intense physical test, such as the competitive military individual advanced development (MIAD) tryouts, the most effective way to train is to focus on strength and endurance. A proper training regimen for total body and core strength would consist of compound lifts such as the deadlift, squat, and shoulder press.[5] In terms of endurance, running, biking, swimming, rowing, and many other cardiovascular workouts are suitable options to increase capacity. Of course, these other activities do not put as much stress on the body and therefore are able to be conducted more frequently than foot marches. Overall, an overly intense schedule of foot marching is not only a sub-optimal training plan; there is also an increased risk of injury as a result of overuse.[6]

Overall, it is clear that Army doctrine and studies conducted in the realm of physical fitness both consider foot marching a strong indicator of total physical fitness. The second assumption in this study is that the series of physical tests used to assess the participants accurately tests the overall physical fitness of the participants. In other words, it is assumed the data used in the study was obtained from a series of physical events (competitive MIAD tryout) that accurately tested a candidate's level of fitness.[7]

Methodology

In order to determine which events are predictors of total physical fitness, the methodology in this study focused solely on the "high performers" or candidates who scored in the top quartile in each event. Because the purpose of this study is to determine which events are predictors of total fitness, it was logical to only focus on the fit candidates. The six events were: 1) West Point's Indoor Obstacle Course Test (IOCT), 2) foot march, 3) push-ups, 4) sit-ups, 5) pull-ups, and 6) 2-mile run. An event was classified as a high-quality predictor of physical fitness if 75 percent or more of the candidates in its top quartile was also above the average in many other events. The proportion of 75 percent was selected as the primary point of analysis because it was a natural break in the results. After initial analysis was conducted, in one-third of all interactions 75 percent of the top quartile in any one event performed above the total average in other events.

The methodology for this study consisted of binning every event in every year into quartiles and then analyzing the results of the top quartile in each event. The data was analyzed on a year-by-year basis because the events in the

A Soldier with the 2nd Battalion, 135th Infantry, 1st Brigade Combat Team, 34th Infantry Division completes a ruck march to earn the Expert Infantryman Badge on 27 January 2012.
Photo by CPL Trisha Betz

MIAD tryouts were inconsistent. For example, in 2012 the push-up event was conducted for one minute and in all other years it was two minutes. As a result, the data was binned and compared year by year. The candidates in the top quartile of each event were evaluated against every other event. Their performance in an event was evaluated against the average of the total population in that event. For example, if a candidate scored in the top quartile of the foot march, his performance in the run, IOCT, push-ups, pull-ups, and sit-ups was compared to the average of the total population for those events. If he scored higher than the average of the total population in an event, he was considered above average in that event. The output was the percentage of candidates in a quartile that were above average with respect to another event. This output was generated for each event's top quartile with respect to every other event. An event is considered a high-quality indicator of total fitness if 75 of the candidates in its top quartile are above average in multiple other events.

Total Population Events

2012	AY APFT	IOCT	FM TIME	MIAD PUSH-UP	MIAD SIT-UP	PULL-UPs	MIAD RUN TIME	n	# of events above 75%
IOCT	74.0%		86.0%	60.0%	62.0%	62.0%	76.0%	50	2
FM TIME	78.2%	81.8%		63.6%	67.3%	52.7%	89.1%	55	3
MIAD PUSH-UPS	69.1%	76.4%	67.3%		60.0%	63.6%	63.6%	55	1
MIAD SIT-UPS	73.6%	77.4%	69.8%	67.9%		45.3%	69.8%	53	1
PULL-UPS	60.8%	84.3%	62.7%	68.6%	56.9%		60.8%	51	1
MIAD RUN TIME	78.9%	73.7%	91.2%	66.7%	61.4%	54.4%		57	2

Top Quartile Events

2013	AY APFT	IOCT	FM TIME	MIAD PUSH-UP	MIAD SIT-UP	PULL-UPs	MIAD RUN TIME	n	# of events above 75%
IOCT	70.0%		71.7%	61.7%	61.7%	56.7%	78.3%	55	1
FM TIME	62.7%	84.7%		59.3%	62.7%	59.3%	78.0%	56	2
MIAD PUSH-UP	80.0%	78.2%	70.9%		90.9%	74.5%	74.5%	61	3
MIAD SIT-UPS	91.1%	83.9%	75.0%	67.9%		64.3%	89.3%	60	4
PULL-UPS	63.3%	75.5%	67.3%	83.7%	63.3%		55.1%	59	2
MIAD RUN TIME	83.6%	90.2%	78.7%	63.9%	72.1%	55.7%		49	3

Top Quartile Events

2014	AY APFT	IOCT	FM TIME	MIAD PUSH-UP	MIAD SIT-UP	PULL-UPs	MIAD RUN TIME	n	# of events above 75%
IOCT	73.7%		73.7%	64.9%	54.4%	64.9%	82.5%	57	1
FM TIME	72.4%	75.9%		46.6%	62.1%	53.4%	81.0%	58	2
MIAD PUSH-UP	72.5%	56.9%	72.5%		52.9%	56.9%	80.4%	51	1
MIAD SIT-UPS	84.3%	76.5%	70.6%	74.5%		76.5%	74.5%	51	3
PULL-UPS	74.5%	76.6%	59.6%	85.1%	63.8%		68.1%	47	2
MIAD RUN TIME	77.6%	81.0%	69.0%	56.9%	67.2%	62.1%		58	2

Top Quartile Events

2015	AY APFT	IOCT	FM TIME	MIAD PUSH-UP	MIAD SIT-UP	PULL-UPs	MIAD RUN TIME	n	# of events above 75%
IOCT	60.0%		78.0%	64.0%	64.0%	68.0%	80.0%	50	2
FM TIME	67.3%	75.0%		63.5%	65.4%	61.5%	82.7%	52	2
MIAD PUSH-UPS	73.1%	73.1%	69.2%		73.1%	80.8%	67.3%	52	1
MIAD SIT-UPS	76.0%	70.0%	62.0%	60.0%		68.0%	70.0%	50	1
PULL-UPS	81.1%	73.0%	59.5%	78.4%	75.7%		64.9%	37	3
MIAD RUN TIME	69.2%	86.5%	75.0%	59.6%	69.2%	69.2%		52	2

Top Quartile Events

Figure — 2012-2015 Data

The performance of the candidate's top quartile in an event was assessed with respect to other events using:

(1) Where:

= the proportion of candidates in the top quartile of event 'x' who performed above average in event 'y'

= the number of candidates in the top quartile of event 'x' who performed above average in event 'y'

= the total number of candidates in the top quartile of event 'x'

$$P_{xy} = \frac{n_{xy}}{n_x}$$

Limits of methodology

One significant limit of this methodology is the data analyzed is from assessments that were already conducted before the formulation of this study. As a result, certain components of fitness were not tested as extensively as they should have been. FM 7-22 defines a Soldier's physical condition as strength, stamina, agility, resiliency, and coordination. The MIAD tryouts focused primarily on stamina with the 2 to 5-mile run and foot march. But, the foot march also tests resiliency as described in the study on the concept of central fatigue. The MIAD tryout tested agility and coordination with the obstacle course, upper body and core strength with the push-ups and sit-ups, and strength of back and bicep muscles with pull-ups. This set of events is a valid assessment of combat fitness, but it is possible to make a more comprehensive list of workouts. For example, if the current set of events added a squat of 225 pounds for males and 135 pounds for females, both graded on the number of repetitions completed, a lower body strength component would be added to the fitness assessment. Although the current MIAD assessments did not directly assess every possible component of total combat fitness, it is still a capable evaluation method.

Another limit of this methodology is that the data for women who tried out for the competitive MIADs was taken differently than their male counterparts. For example, instead of pull-ups, females conducted a flexed arm hang. Because the females were not subject to the same events, there is no valid data on any of the female candidates. As a result, none of the data points from female candidates were analyzed in this study.

Finally, it is important to note the candidates assessed in this study are self-selected to try out for the competitive MIAD opportunities offered at West Point. It is typical that only highly fit, motivated cadets try out for competitive MIADs. Even further, this methodology deals solely with the cadets in the top quartiles of each event. Therefore, this study is dealing strictly with the top performers in an already relatively high performing group. This claim is supported by the fact that the APFT averages of the entire population in every year are over 300 using the West Point extended scale to 375. The total number of data points across the four years of analysis is 914. The only units in the Army in which you can take a random sample size that large and still have an APFT average over 300 are Ranger battalions and Special Forces units. Therefore, the results of this study cannot necessarily be applied to Soldiers with lower levels of physical fitness, only physically high-performing Soldiers because those are the only candidates whose data is analyzed throughout this study.

Results

The cells are highlighted in green if 75 percent or more of the candidates in the top quartile scored higher than the

average of the total population in the associated event. For example, in the 2012 data set, 80 percent of the candidates in the foot march top quartile ran the IOCT faster than the average of the total population so that cell is highlighted green. If the percent of candidate's in the top quartile that performed above the average of the total population is between 60 and 75 percent, the cell is highlighted yellow. If that percentage is under 60 percent, the cell is red. The Academic Year (AY) APFT is not considered in this analysis because its three events are being analyzed from the MIAD tryouts. It is safe to assume a high level of performance on the AY APFT would predict high levels of performance on the MIAD push-up, sit-up, and run events.

Analysis

When examining the results of data analysis, it is not clear which events are relatively high-quality predictors of total fitness. In 2012 the most predictive event may seem to be the foot march. The foot march could be determined to be the most predictive because more than 75 percent of the candidates in its top quartile performed above average in three other events. But, in that same year, being in the top quartile of the foot march was not a predictor at all of how a candidate would perform on the pull-up event as only 52.7 percent of the candidates in the top quartile of foot march completed more than the average number of pull-ups. This leads to the conclusion that while foot march may have been a predictor of certain events in 2012, it was not a predictor of overall fitness. This concept applies throughout all of this analysis. If at least 60 percent of the candidates in an event's top quartile are not above average in every other category, that event is not an indicator of total fitness. In order to be considered a high-quality indicator of total fitness, an event must be able to predict at least marginal success (60 percent of the candidates in the top quartile of the event above the average) with respect to every other event. In 2012, at least 40 percent of the candidates in every event's top quartile performed below average in one other event. In other words, 60 percent or less of the candidates in each event's top quartile performed above average in one other event. Because the candidates in the top quartile of every event performed poorly in one other event, it is helpful to only consider the events with a top quartile in which 75 percent of the candidates perform above average. In 2012, more than 75 percent of the candidates in the foot march event's top quartile performed above average in three other events. As a result, the foot march is considered the best predictor of total physical fitness in 2012.

The 2013 results are much simpler to analyze. More than 75 percent of the candidates in the sit-up event's top quartile performed above average in four other events and at least 60 percent of them performed above average in every event. This leads to the conclusion that the sit-up event is not only the strongest predictor of physical fitness in 2013, but that it is the strongest indicator of physical fitness in any year. The next best predictor of physical fitness in 2013 was the push-up event, but more than 75 percent of the candidates in its top quartile were above average in only three other events. It is interesting to note that foot march is near the bottom in the list of high-quality predictors in 2013. Seventy-five percent of the candidates in its top quartile were above average in only two events. Also, less than 60 percent of them were above average in two events. According to the 2013 data analysis, foot marching is not useful at all to predict a person's total fitness. One could argue that foot marching is in itself an indicator of a person's total fitness because of the importance of foot marching to a Soldier's mission in the Army. This is a valid argument as shown by the research conducted in earlier studies. But, if a person wishes to be considered well-rounded in terms of strength, stamina, agility, resiliency, and coordination, being in the top quartile of the foot marching event must be supplemented by being above average in other events.

In the 2014 data table, similar to the 2013 table, the sit-up event is the most high-quality predictor of total fitness. Not only are more than 75 percent of the candidates in the top quartile of sit-ups above average in three other events (more than any other event's quartile), more than 60 percent of them are above average in every other event. This is unique in the 2014 data because the top quartile of sit-ups is the only quartile that year in which 60 percent of the candidates are above average in every other event. When the results from 2014 are considered in combination with the 2013 data analysis, the data suggests the sit-up event is the most high-quality indicator of total fitness. Although the results are not overwhelming, the sit-up event is the only event that is the most high quality predictor in more than one year.

The argument for sit-ups being the most high-quality predictor of physical fitness is not discredited by the 2015 data results. Although the sit-up event is not the best predictor in 2015, neither is any other event. The only event with more than 75 percent of the candidates in its top quartile above average in three events was the pull-up event, but less than 60 percent of the candidates in the top quartile of the pull-up event were above average in the foot march. So, as described before, the pull-up event is not an indicator of total fitness, just of relatively high performance in a limited group of other events. The 2015 data shows the foot march event as the most potent predictor of total physical fitness as more than 75 percent of the candidates in its top quartile are above average in two other events and more than 60 percent of those candidates are above average in every other event. But, the 2015 data does not show the foot march event as an extremely high-quality predictor because 75 percent or more of the candidates in its top quartile were above average in only two other events. Therefore, when considering all of the available data, it seems that the sit-up event is the most high-quality predictor of total physical fitness. Although this assertion is disputable, the data does lead to that conclusion. Less than 60 percent of the candidates in the top quartile of the sit-up event are above average in only one event throughout the four years of data collecting. That was in the pull-up event in 2012. When comparing the results from all the other events throughout the years, no other event's top quartile performs as consistently above average as the sit-up event's top quartile.

Photo by SSG Kwadwo Frimpong

A Soldier completes the sit-up event during an APFT event.

Conclusion

The data collected does not conclusively show one event as the most high-quality predictor of total physical fitness. Based upon a thorough analysis of four years worth of data, the sit-up event is the most high-quality predictor of total physical fitness. This is due to the fact that 60 percent or more of the candidates in the top quartile of the sit-up event are almost always above average in every other event. This fact can be perceived in two ways. The first perspective being if a Soldier is able to perform well on the sit-up event, he is likely to have a high level of total physical fitness. The second conclusion this study could lead to is that if a Soldier performs well on the sit-up event, he likely does not have a low level of fitness. The latter conclusion is much sounder than the former. The candidates in the top quartile of sit-ups were not always top performers in the other events, but they were very rarely below average. The two most important takeaways from this study are summarized in the following points:

* It was an unexpected result that the sit-up event was the best predictor of total physical fitness. Due to the literature review, the expectation was that the foot march would be the best predictor of total physical fitness.

* High performance in the sit-up event, especially in the Army, is more than likely a measure of motivation. Generally, in order to perform at a high level on the sit-up event an individual must make a concerted effort to practice sit-ups. This demonstrates an individual's commitment to performing well on physical assessments. Furthermore, those individuals who concern themselves with performing well on physical assessments usually display a high level of total fitness. Sit-ups themselves are not inherently an indicator of total physical fitness; however, an individual that performs well on the sit-up event more than likely has a high level of total physical fitness. Consequently, the sit-up event is an indirect measure of total physical fitness.

It is possible to conduct future research based on the results of this study. One methodology initially attempted in this study was focused on determining which events correlate most highly with total combat physical fitness using single dimensional value functions and multiple correlation analysis. The purpose was to determine how important each event was to total combat physical fitness. But, the model could not be validated, and as a result the methodology was not valid. But, if a similar model that used a candidate's performance in different events as the independent variables and total combat physical fitness as the dependent variable could be validated, that model could result in a better understanding of how important different events are to a Soldier's level of combat fitness.

Based on the results of this study, another possibly beneficial study would be one that defines the relationship between the sit-up event and the other events on the APFT (push-up and run) based on a larger data set that includes both high and low performers. As a result of a more varied data set and larger sample size, such a study may be able to provide more insight into the predictive nature of the sit-up event to a Soldier's total APFT score. This would be valuable information and could possibly lead to changes in the way the Army conducts it physical readiness training.

Notes

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The Development of the Machine Gun and its Impact on the Great War

MAJ JACK R. NOTHSTINE

At the onset of the Great War, the tactics and strategies of all of the major powers did not take into account the technological development of the weapons that were implemented. All of the major powers held firm to the belief that the modern battlefield would allow militaries to maneuver and engage with tactics that had been used prior to the implementation of one major innovation — the machine gun. The introduction of this weapon to the battlefield allowed a concentration of firepower that changed the way war was fought and ultimately led to the establishment of the trench system. The defensive power of the machine gun created the stalemate on the Western Front, and almost all of the technologies that were introduced during the war were built in order to defeat it. The introduction of this weapon radically changed the strategies and tactics used by militaries in the future.

The Franco-Prussian War and the Russo-Japanese War are the two most significant wars that influenced military theorists prior to the Great War. These wars revealed the improvements made in artillery and small arms. The Russo-Japanese War of 1904-05 demonstrated the impact of the machine gun and revealed two important lessons:

* First, that use of the machine gun in the defense resulted in the digging of trenches, and
* Second, that machine guns could be used to decimate a far larger offensive force as was demonstrated by the Japanese use of the Hotchkiss gun.

World militaries were not ignorant to these lessons, but they tended to view the battlefield developments as proof of Russian military weakness and not the result of the inherent defensive power of the machine gun or the inevitability of trench warfare.

Instead, the European militaries were influenced primarily by the Franco-Prussian War of 1870-71. This war occurred in Europe and had been won using classic maneuver and encirclement tactics. It became the archetype for all of the European powers — particularly France and Germany — on how to conduct a successful military campaign. The major powers of the Great War failed to understand that in the 43 years since the Franco-Prussian War, technology had developed in such a way as to make previous tactics obsolete, as demonstrated in the Russo-Japanese War. These militaries envisioned a highly mobile offensive as the key to success

Photos from Library of Congress Prints and Photographs Division

Soldiers inspect a captured German Maxim machine gun near Vierzy, France, in July 1918.

in future battles. France was soundly defeated and humiliated at the Battle of Sedan (Franco-Prussian War, September 1870), and the provinces of Alsace and Lorraine were annexed. "Joffre [commander of French military] was an ardent admirer of the all-out offensive, l'offensive à outrance. He vowed never again to allow a French army to be encircled as at Sedan."[1]

German soldiers man a machine gun in a trench during World War I.

It was from these origins that the spirit of the offense became the cornerstone of all the major powers' military strategies. Prior to the Great War, a Polish writer named Jean de Bloch wrote a book arguing that "the increased fire power of infantry weapons would force troops to dig in for defense. Between the trenches a fire swept zone would be created which could be crossed only at the cost of devastating losses."[2] Although his prediction turned out to be remarkably accurate, the professional militaries of the time dismissed his claims, citing once again the importance of troop morale and offensive spirit. History seems to judge France particularly harshly when regarding its reliance on the offensive spirit (Elàn). It is true that the French believed that it was the offensive spirit that would win battles, but in reality all of the European powers were duped into the belief that the spirit of the infantry would be able to break a fortified defense. They all believed it would be the power of their offense that would be decisive in future wars.

When the Great War began in 1914, the attacks were linear in nature and based on pre-war theories which didn't account for the machine gun. Each battalion advanced shoulder to shoulder with a screen of skirmishers out front. Once the main force made contact with the enemy, reserves were fed into the battle in order to fill the gaps created by casualties. The advancing force had two objectives: to suppress enemy fire and inflict sufficient causalities in order to make the opposition waiver. Then, theoretically, once the enemy began to waiver, a bayonet charge would deliver the final blow. "Victory would result, therefore, not from superior tactics, or even superior weaponry, but from the imposition of superior will."[3] In reality, attacks very rarely ever culminated in a bayonet charge.

Much has been made of the battles of attrition, such as Passchendaele, Verdun, and on the Somme that occurred later in the Great War. Often the initial battles, which were not fought from trenches, have been forgotten. The impact of the machine gun was felt early on, and the result was the largest number of losses during the war. "The enormous losses in August and September 1914 were never equaled at any other time, not even at Verdun: the total number of French casualties (killed, wounded, or missing) was 329,000. At the height of Verdun, the three-month period February to April 1916, French casualties were 111,000."[4] It was the impact and associated losses of the machine gun that drove the major combatants into the trenches. The machine gun came to represent the use of technology applied to weaponry. The power it gave to a single man made the offensive doctrine of the European powers obsolete, forcing the armies on the Western Front into trenches. All of the combatants were left with the option to dig in or be annihilated.

The primary reason the machine gun caused trench warfare was that the weapon was defensive. The Maxim and Hotchkiss models were significantly smaller than previous models, but they were still heavy by modern standards. The German Maxim 08 weighed between 136.4-146.3 pounds. and required at least six men to carry it and its ammunition. The French and British machine guns of 1914 were not much better: the French Hotchkiss weighed 103.4 pounds and the British Vickers-Maxim 118.8 pounds.[5] This meant that the machine gun could only be utilized in a defensive role because it was far too heavy to incorporate in a highly mobile offensive manner. The results were catastrophic and completely unforeseen by the military leadership. Sir John French, commander of the British Expeditionary Force (BEF), captured the bewilderment of the now engaged European militaries when he said, "I cannot help wondering why none of us realized what the modern rifle, the machine gun, motor traction, the aeroplane, and wireless telegraphy would bring about."[6]

By 1915, a series of trenches stretched from the English Channel near Ostend to the northern border of Switzerland. This situation would remain relatively unchanged until 1918. The Germans started 1915 with several major advantages.

Because they were occupying significant areas of France and Belgium, they did not face the same political pressures to attack that the Allies had. The German army had chosen the areas for their trenches, and they naturally chose terrain that favored the defense. This meant that the Germans were able to take a primarily defensive position in the West, forcing the Allies to take an offensive strategy. The Germans also had a greater number of machine guns than the Allies. "At the beginning of the war, the German army had more than 4,500 machine guns, compared with 2,500 for France and fewer than 500 in the British army."[7]

The Allies stuck to their now outdated doctrine and attempted a number of attacks by overwhelming forces against the Germans with the hope that a combination of weight in numbers and offensive spirit would drive holes in the German lines. They were a wholesale failure. The Allies demonstrated a complete inability to change their tactical doctrine despite the unsuccessful nature of their repeated attacks. This lack of understanding was epitomized by British-Commander-in-Chief Douglas Haig, who in 1915 asserted that the machine gun was "a much overrated weapon."[8]

The German army would place their machine guns in such a manner that all areas of "no man's land" were being covered by the fire of multiple machine guns. This process of overlapping machine-gun fire was particularly successful because it meant that if an individual machine gun was knocked out of action, the weapons to the right and left of it could still cover all of the space between the trenches. It also meant that at all times the individual attacker was being shot at from two separate locations. This made it very difficult for an offensive assault to achieve cover because the enemy fire was coming from two separate directions. To further enhance the fire power of the machine gun, barbed wire became a common feature in "no man's land". It was used by both sides in order to slow down an attack and channelize the enemy into areas where they could easily be killed, called "kill zones." At the Battle of the Somme, one German soldier commented about how easy it was to defend against such an attack: "When the English started to advance, we were very worried; they looked as if they must overrun our trenches. We were very surprised to see them walking… When we started firing, we just had to load and reload. They went down in the hundreds. You didn't have to aim, we just fired into them."[9]

The attackers now had to run across open but uneven ground and cut through massive quantities of barbed wire before reaching the enemy trenches, all the while under machine-gun fire. Once the wire had been breached, the attackers would naturally mass at the opening, thus presenting an even more attractive target to overlapping fire. Expressing the feelings of a soldier facing masses of machine guns, French author Henri Barbusse described a French platoon waiting to attack: "Each one knows that he is going to take his head, his chest, his belly, his whole body, and all naked, up to the rifles pointed forward, to the shells, to the bomb piled and ready, and above all to the mechanical and almost infallible machine guns."[10]

In an effort to break the deadlock, the British and French began to rely heavily on their superior supply of artillery munitions. The concept was simple. They would bombard the German lines which would kill the front-line defenders and destroy the barbed-wire obstacles. This would allow the Allies to move forward and seize the enemy trenches. Artillery, as an indirect fire weapon, was still in its infancy, however, so it failed to achieve these two main objectives and was therefore unable to overcome the supremacy of the machine gun. The process of aiming indirect artillery fire (called registering) was notoriously inaccurate and unreliable. Even if the assault was successful, a dependency on artillery made extensive gains impossible. The process for targeting artillery was time consuming. The artillery's reliance on registration meant that it was only effective to a range where targets could be accurately identified. "Once beyond their original front line, the [attacking units] were no longer working from accurate maps and aerial photographs. The enemy did not occupy such obvious positions, and many attacks came unstuck in hidden belts of barbed wire or were decimated by previously concealed machine guns."[11]

Two British soldiers man a Vickers machine gun during World War I.

Even when artillery was effective, it still failed in its two main objectives. Artillery failed to destroy the barbed wire or sufficiently kill the defenders in the front-line trenches. Although they produced

many casualties, they did not result in significant gains. This was exemplified in the Battle of the Somme, which would later become iconic to the British for the futility of the frontal assault. During this battle, the British falsely believed that they could overwhelm the defensive might of the German trenches and machine guns with artillery alone. The tactic proved unsuccessful. When the infantry began their attack, they found that the German wire was intact and the German trenches were well defended. When the assault began, the Germans emerged from the bunkers, positioned their machine guns, and proceeded to mow down the advancing British infantry. "No matter how heavily the artillery pounded the enemy trenches, a few German machine guns survived and cut down thousands of attacking infantrymen. By November 19, when the offensive was called off, the deepest British penetration was seven miles from their starting point on July 1. They lost 419,654 men. The overwhelming majority of the dead fell to the machine gun."[12]

The deadlock caused by the machine gun gave birth to a number of new technologies. In April of 1915, the German army first used chemical weapons — in the form of chlorine gas — at the Second Battle of Ypres. The gas was a terrible new weapon, but ultimately it proved too uncontrollable to be used successfully. "The problem with releasing gas from cylinders was that the wind had to be just right, lest the gas blow back into the [attackers] own trench."[13] The Great War also saw the first military use of the airplane. The airplane was used primarily as a reconnaissance vehicle. When the war began, all of the aircraft were unarmed, but through the course of 1914, aircrews began to carry revolvers and carbines in order to attack other enemy aircraft. In 1915, all the major combatant powers began experimenting with machine-gun technology in the air.

In 1916, the tank first saw action during the Battle of the Somme. The tank appeared to offer the perfect solution to the machine gun. The tanks deployed by the British came in two separate models: "the male version which included six-pounder guns, and a female, which had only machine guns."[14] Later French and German tanks would also have mounted machine guns. The presence of machine guns is very revealing. The tank was seen as a means of carrying the power of the machine gun onto the offensive. It recognized that the best chance the infantry had of executing successful offensive actions against machine guns was to use other machine guns. In the Great War, tanks suffered from mechanical defects and were extremely slow (1.8 miles an hour on level terrain). For example, on 8 August 1916, the British began with "more than 450 [tanks] on the first day; there were about 150 left on the second day, and 85 on the third."[15] Most of the tanks failed to even make it across "no man's land." The tank would ultimately become a decisive weapon in World War II, but it would require years to improve the construction of the weapon and perfect the tactics.

The most successful efforts to overcome the supremacy of the machine gun came not from technological advances but from tactical changes. On the Western Front, the Germans had the advantage of being able to maintain the defensive and as a result suffered fewer casualties than the Allies. The German army was more progressive in tactics, having learned much by watching the continuous ineffectual results of Allied offensives. In 1915, "German divisions got smaller; this was seen as proof that Germany was running out of men, but in terms of firepower — which was the important measure — the divisions were becoming more and more powerful as machine guns replaced rifles."[16] More importantly, the German military began a long process of revising its tactical doctrine. The process would result in the development of modern small unit tactics and offered the most successful countermeasure to the supremacy of the machine gun.

Initially, the German military suffered the same fate as the Allies during offensive operations in 1915, but as opposed to the Allies they recognized that they needed to address shortcomings in the way they conducted assaults. In 1915, the German General Staff began exploring several different approaches to combat, and they were able to see marginal successes over the next few years because of their tactical refinements. German doctrine called for an active defense, which meant that limited attacks should be made even while holding a defensive line. The Germans created elite units called Storm Troops (Sturm Abteilungen) — "infantry able to mount countering attacks that would throw the decimated attacking force back to its own line."[17] The Storm Troops were given greater ability to conduct tactical experiments and develop offensive tactics. The result was a sharp contrast to the grand offensives launched by the Allies. The Germans began operating in battalion or company-size elements using hand grenades as a primary weapon (thus the origin of the word panzergrenadier). The goal was to move with small units under the cover of darkness or by using a short artillery barrage. German tactics worked because the Germans decentralized decision making downward. In order to execute these actions, the soldiers had to be better trained and able to operate with minimal leadership. The result was the formation of modern small unit tactics and the increased role of NCOs.

In combination with their decentralized tactics, the Germans employed sub-machine guns. In 1914, the Germans began gathering the Danish Madsen and captured Lewis sub-machine guns from the British in 1916. These weapons were distributed to Storm Troops and played an important role in German counterattacks at the Somme.[18] After the Somme the German army introduced its own light machine gun — the MG08/15. These were produced in numbers significant enough for them to make an impact on Storm Troop tactics. "Fed by 100- or 200-round belts, the MG08/1915 could provide much greater volume of fire than the Lewis or Chauchet light machine guns being used by the Allies, and despite its weight (43 pounds), it anticipated the tactical role of the [machine gun] in World War II."[19] Technical refinements to the sub-machine gun continued after the Great War and would ultimately result in the creation of the assault rifle.

The Germans demonstrated their evolving small unit tactics during two large scale German offensives — Verdun

in 1916 and the Offensive of 1918. At Verdun, General Von Falkenhayn engaged the French in a number of limited engagements that were meant to take small amounts of land using Storm Troop tactics to limit casualties. Once territory was gained in one area, the attack was shifted to another section. These small gains would add up to significant territorial gains. French General Maurice Sarrail described the method as such: "They conquer parcels of terrain where the loss or gain is of minimal importance, but their operations permit them to conserve moral ascendancy."[20] The German objective was to seize Verdun and annihilate the French when they attempted to reclaim it. "It was fundamental to his plan that the place chosen for attack should be, for whatever reason, an objective for the retention of which the French General Staff would be compelled to throw in every man they have."[21] In effect once Verdun was captured using superior German tactics, then the French would destroy themselves against German machine guns using inferior tactics. Though gains were made, the Germans failed to capture Verdun and endured significant losses in the effort. The Germans often found themselves in the same predicament that the Allies had. At Verdun, "one [French] section of two guns was isolated [and] held off the enemy for 10 days and nights, during which the two guns are supposed to have fired in excess of 75,000 rounds."[22] But their tactics were marginally vindicated. They suffered roughly an equal number of casualties as the French. But this was still a far better ratio then the Allies' offensives against the Germans, where they often suffered eight times the number of casualties as the defender.[23]

The Germans came very close to victory using decentralized tactics in the 1918 offensive. With victory in the east over Russia, the Germans found themselves with a numerical superiority on the Western Front. The strength of their position was only temporary as the U.S. was now entering the war, and the Allies would soon (and once again) outnumber the Germans. In March 1918, the Germans gambled on one last offensive in an effort to win the war — the Kaiserschlacht (Kaiser's Battle). Unlike all of the previous failed Allied assaults against the German trenches, the Germans would achieve a significant territorial gain. "By the time the Storm Troops led the great German offensive of March 1918, German infantry tactics had changed beyond recognition."[24] The tactics of the Storm Troops were continually being refined and disseminated throughout the army. "The Landwehr troops learned to fight in platoons and sections, rather then lining up each rifle company in a traditional skirmish line. [sic] For the first time, NCOs found themselves given a real job of leadership — making their own tactical decisions."[25] The change placed an emphasis on short artillery bombardments (Sturmreifschiessen), the empowerment of small unit leaders, and by passing strong points such as the machine-gun positions.[26] The policy of bypassing strong points would be further refined after the Great War and would become the foundation of blitzkrieg (lightning war) tactics of World War II. The result was an overall improvement of the entire German army's ability to defeat the machine gun's domination of the battlefield.

German soldiers man a machine gun in a trench during World War I.

The success of these tactics was remarkable. On the first day alone, German forces took about 98.5 square miles of territory, "which was about the total amount of German-held territory re-conquered by the British during the whole of the 140 days of the Somme offensive in 1916."[27] Ultimately, the German's tactical refinements came too late. Despite their success after

one week, the German army was unable to advance further. They had achieved the greatest gains in territory since the stalemate began in late 1914. But in doing so, they incurred 239,000 casualties during the advance while the newly arriving American numbers in May rose from 430,000 to 650,000.[28] The gamble had been lost, and the German government realized that defeat was inevitable. There is a certain amount of irony in the fact that it was the German army that found the key to the breakthrough, but they would ultimately lose the Great War.

There were a number of technological advances introduced during the Great War, but the machine gun was the most decisive. WWI European powers failed to recognize how the machine gun would impact their tactics; they all believed it would be the power of the offense that would be decisive in future wars. They were proved wrong in numerous battles which resulted in significant loss of life for minimal territorial gains. Ultimately, it was the implementation of small unit tactics developed by the Germans — not the grand offensives of the Allies — that provided the best solution. The machine gun was the decisive weapon of the Great War, and its introduction to the battlefield would radically change the strategies and tactics used by militaries in the future.

Notes

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[27] H.P. Willmott, *World War 1* (NY: Dorling Kindersley Publishing Inc., 2003), 253.

[28] Willmont, 257.

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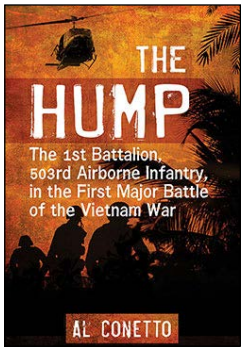
Book Reviews

The Hump: The 1st Battalion, 503rd Airborne Infantry in the First Major Battle of the Vietnam War
By Al Conetto
Jefferson, NC: McFarland & Company, 2015,
206 pages
Reviewed by MG (Retired)
Richard D. Chegar



Fifty years after the first major battle of the Vietnam War, an extraordinary account of the operation finally appears in print by one of the officers engaged in the fight. Rarely does any rendering of battle weave such a detailed picture as seen through the eyes of a large array of the participants. With vivid accounts from individual paratroopers and their officers who directed the battle, Al Conetto has elegantly achieved his purpose of paying "tribute to the hundreds of young paratroopers who for two days in War Zone D, Republic of Vietnam, fought against a reinforced Vietcong/People's Army of North Vietnam (VC/PAVN) regiment and destroyed it."

In addition to weaving a sequential view of the battle through multiple perspectives, Conetto provides a compelling story of his own journey as a young lieutenant through his continuing struggle with post-traumatic stress disorder (PTSD) and its impact on his life. He masterfully draws into his narrative the near-simultaneous battle in the Ia Drang Valley fought by the 1st Cavalry Division made famous by the book and movie *We Were Soldiers Once... and Young*. In pulling together both battles, he provides a historical perspective on the origins of America's ultimate failure to succeed in Vietnam and traces it to the current debacle in the Middle East.

As the first Army combat unit deployed to Vietnam in 1965, the 173rd Airborne Brigade (Separate) was destined to play a significant part in the escalation of the war from an advisory strategy in support of the South Vietnamese to a combat role directed by the Americans. Conetto not only does an excellent job of capturing the history of the brigade, but more importantly, he paints a superb picture of the key leaders who shaped the personality of the 173rd, in particular BG Ellis W. "Butch" Williamson. Seasoned by the conduct of numerous exercises throughout Southeast Asia, the 173rd was well rehearsed and prepared for its mission in Vietnam.

Operation Hump gained its name because it represented the halfway mark of the 12-month tour of duty for individuals, and thus the paratroopers were crossing over the hump to the downhill side of their tour. While there had been some sharp encounters with the Vietcong during those first six months, the contacts were typically brief engagements that ended with the enemy melting away. Operation Hump changed all of that for the 173rd and the U.S. Army!

The objective area, War Zone D, was situated a mere 10 miles from the 173rd's base camp at Bien Hoa Air Base. The operation included the 1st Battalion, Royal Australian Regiment and the 1st Battalion (Airborne), 503rd Infantry supported by the 3rd Battalion, 319th Artillery (both elements of the 173rd).

The operation order directed the two infantry battalions to air assault into War Zone D and conduct search operations for the Vietcong's Q762 Regiment and D800 Battalion. Operations commenced on 5 November 1965 with minor weather delays. The following two days found the Soldiers fighting their heavy combat loads, dense jungle, heat and humidity, leeches, red ants, and the draining boredom of movement — but no Vietcong! Conetto is at his best in capturing the grind of jungle operations through the memories of the young American paratroopers he walked beside and led.

The battle began on 8 November at 0800 with a squad leader in Charlie Company, 1-503 IN (SSG Andrew Matosky) encountering a squad of "regulars" in North Vietnamese uniforms. His quick action eliminated the enemy squad, though one of his Soldiers, PFC Julius House, suffered the first wounds in a battle that would ultimately claim 49 American lives and leave 83 wounded. Hill 65 was now on the map of American military history and remains there today. Charlie Company, under the command of CPT Sonny Tucker, would fight for its life the rest of the 8th and on into the night and following day with elements of Soldiers separated by circumstances and the fortunes of battle. Paratroopers take great pride in ensuring that no fellow Soldier is left behind on the battlefield, and Charlie Company fought valiantly and suffered to preserve that legacy.

Much of the fighting on 8 November hinged on Bravo Company, under the command of CPT Lowell Bittrich, which provided the flexibility and maneuverability to keep the enemy at bay through numerous attacks and counterattacks. Conetto affords CPT Bittrich particular praise for his indomitable will in sustaining the fight, having a keen sense of the tactical situation and exhibiting great skill in directing aviation assets against the larger enemy force.

Alpha Company, in which Conetto led a rifle platoon under the command of CPT Walt Daniel, played a key role in the relief of Bravo and Charlie Companies and the ultimate extraction of the battalion from the battlefield.

Two of the many heroes in the battalion were a medic, Specialist 5th Class Lawrence Joel, and a chaplain, CPT Jim Hutchens. Both saved countless lives and were wounded multiple times during the battle. Joel was awarded the Medal

of Honor by President Lyndon Johnson.

Weaving the fabric of a complex battle like the one that took place on Hill 65 requires numerous threads. Conetto's tenacious use of original sources — more than 30 firsthand accounts — provides the reader an exceptional view of the battle as it unfolded. His research, diligence in tracking down participants, and relentless scholarship are all worthy of great praise. Missing from this volume is a much-needed series of maps that would add immeasurably to the reader's understanding of the flow of battle. The book was inspired by his original master's thesis in 1993 and further encouraged by his professor at San Jose State University, Dr. Larry D. Englemann. That the book appeared literally on the 50th Anniversary of the Battle for Hill 65 is a tribute to Conetto's own sense of history and a celebration of his personal efforts to tell a story that he needed to tell on behalf of himself and those who fought on Hill 65.

The most poignant chapters in *The Hump* are those devoted to Conetto's own life from aspiring childhood where he was "…entranced with the concepts of honor, sacrifice, daring, courage, glory, patriotism, and military tradition" to his lifelong struggle with PTSD. After his initial obligation that included his service in Alpha Company, he left the Army briefly but then returned guilt-ridden that he had survived Hump while many of his close friends and fellow Soldiers had not. Following another three years that included a second tour in Vietnam with the 1st Cavalry Division including command of a rifle company, Conetto left the service for good. The second tour in Vietnam only added to the guilt and bitterness that began with Hump and has continued to this day. This book is a remarkable tribute to Conetto's courageous lifelong battle against a wicked personal enemy, PTSD.

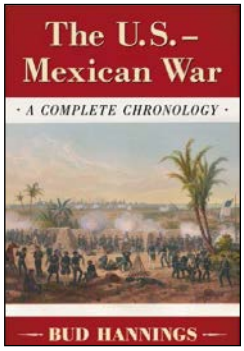
From the perspective of 50 years, Conetto has gathered a serious collection of "lessons learned" from both the tactical/strategic to the military/political. He cites a number of authorities including COL Walt Daniel, who had commanded Alpha Company in Operation Hump, and LTG Hal Moore, who had commanded the 1st Battalion, 7th Cavalry in the Ia Drang. Daniel focuses on the American failure to reinforce units, which in the "search" phase made significant contact but then failed to add additional combat power to seek the total destruction of the enemy force. Moore addresses the strategic limitations placed on American forces in Vietnam by allowing sanctuary to the North Vietnamese in Laos and Cambodia. Moore cites another tragic political limitation when General Westmoreland was advised of a Chinese soldier by a 1st Cavalry Division officer and was told, "You will never mention anything about Chinese soldiers in South Vietnam! Never!"

In honoring the enlisted Soldiers, NCOs, and officers in the 173rd Airborne Brigade (Separate) and the 1st Cavalry Division with whom he served, Conetto describes them as "America's finest!" He renders an equally emotional description of the politicians who "…were not of the same caliber. Many brave men gave their lives only to be sold down the river by those in Washington, D.C." In concluding, the reader finds a mature author, proud of his service and the opportunity to have led American soldiers in combat. You cannot help but be proud of Al Conetto for this significant achievement.

MG (Retired) Chegar served in the 173rd Airborne Brigade (Separate) from its beginning on Okinawa in 1963 and in the 1st Battalion (Airborne), 503rd Infantry during 1965-66 including Operation Hump.

The U.S.-Mexican War: A Complete Chronology

By Bud Hannings
Jefferson, NC: McFarland, 2013, 216 pages
Reviewed by Gerald Williams



Bud Hannings' *The U.S. Mexican War: A Complete Chronology* is a historical and fascinating collection of accounts and events before and during the U.S.-Mexican War. The book is written in an easy-to-understand format with focus on important dates from Texas' independence to the Battle of Chapultec (highly regarded as the battle ending the U.S.-Mexican War in 1847). With Hannings' focus on the war's background and events related to it, the *U.S.-Mexican War: A Complete Chronology* comes off as a strong source about the war.

The first thing noticed about Hannings' chronology of the U.S. Mexican-War is that it starts off a few years before the war in 1816. The events listed go far beyond just the battles between Mexicans and Texans. While these are at the focal point, he brings in other factors and events that give a larger perspective on the war raging from the extermination of piracy to Native Americans. Native Americans, particularly the Comanches and Creek Indians, are given special mention throughout the chronology's beginning dates. Depicted are situations of Native American raids on American towns and villages and how villagers sought to combat them.

One of the most interesting raids was an event known as the Fort Parker Massacre on 19 May 1836. Though a short passage, it inspired me to find out even more about it. This led me to reading the story of Cynthia Ann Parker, a 9-year-old victim of the raid. She was captured and soon assimilated into the Comanche, marrying a chief and bearing a son who would later become chief. When she was found years later, she could not assimilate back into American society and ran away to rejoin the Comanches.

With stories like these, Hannings seeks to give the full scope of the U.S.-Mexican War. It wasn't just a war between the U.S. and Mexican authorities but the natives as well. Although some recordings have more information than others, one can easily find more information about the event thanks to a plethora of material found online or in books. There are also some events listed surrounding the war that have little to do with the war but are still important enough

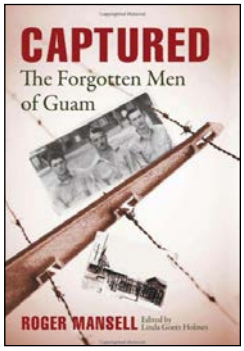
to know such as President Van Buren's address in 1838 about not assisting Canadian rebels against the British government.

The major events of the war, however, are very detailed. For example, Hannings' descriptions of the defense of Fort Texas in 1846 list each officer who fought during the battle, which lasted 3-6 May. He also details the positions of the garrison, cavalry, and infantry with respect to both U.S. and Mexican armies. This attention to detail is drawn from his many sources and compiled into one elaborate description of battles fought before and during the U.S.-Mexican War. Injuries and casualties are also listed for each battle.

While the scope of Hannings' chronology is wide, I would have liked to see more details regarding the occupation of the West and its policy on slavery.

Hannings' detailed list of events comes from an impressive collection of texts that paint an accurate history of life before and during the U.S.-Mexican War. I found that this book is a must-read for any historian or teacher who wants to know more about the battles and events of the U.S.-Mexican War. While the book is organized quite well, I wouldn't recommend it to anyone new to the U.S.-Mexican's war history, as it could use a little more background to introduce newer readers. I would treat this as a companion book to read with other source material in order to get an even wider scope of the U.S.-Mexican War. Overall, this book was an entertaining read.

Captured: The Forgotten Men of Guam
By Roger Mansell, edited by Linda Goetz Holmes
Annapolis, MD: Naval Institute Press, 2012, 228 pages
Reviewed by LTC (Retired) Rick Baillergeon



Upon until his passing in October 2010, Roger Mansell dedicated countless hours in researching the experiences of American World War II prisoners of war (POWs) in the Pacific. His efforts continue to touch the lives of many people. This has included assisting in finding the remains of POWs, linking up survivors of POW camps with each other, and providing family members with information on their loved ones who had been POWs. His research continues to be utilized on the website he developed, which is still active today — http://www.mansell.com/pow-index.html.

Prior to his death, Mansell was near completion on a book tied to his efforts. With the manuscript complete, what was now needed was someone with subject matter expertise to edit it. That someone was Linda Goetz Holmes. Clearly, Holmes possessed the expertise with many books published on POWs held in Japan during World War II. Her knowledge of the subject and past experience in publishing her own works were instrumental in bringing *Captured* to fruition.

The inspiration for *Captured* began when Mansell started his research of POWs in the Pacific. In his acknowledgments section he states, "As I gathered more stories, I realized no one had written much about the military and civilian personnel captured on Guam in the early days of the Pacific war; this became my mission for the next 10 years." Without question, Mansell achieves this mission and fills a void in our understanding of this area within World War II.

Within *Captured*, Mansell tells the story of the Guam POWs in significant detail — time spent in Guam prior to the Japanese invasion, their actions during the attack, their capture and subsequent movement to the POW camps in Japan, their years in captivity, and their ultimate release from the camps following Japan's surrender. Readers will obviously not truly understand what the POWs experienced, but they certainly obtain an appreciation of it.

The key ingredients in accomplishing this are the outstanding organizational skills and writing ability of Mansell (with the support of Holmes). First, the organization of the volume is superb. I have read several prior books of this genre where the author had difficulty connecting events, which made the volume a bit confusing to read. This is not the case in *Captured*. Mansell and Holmes have expertly developed a chronological flow which makes it effortless to follow the story of the Guam POWs.

The writing within *Captured* is exceptional. What is readily apparent is the ability of Mansell to express the wide spectrum of emotions through the complete ordeal of the Guam POWs. He captures the unthinkable lows of their captivity to the incredible highs of their release. In between, there is no sugarcoating or understating of anything the POWs experienced.

Have you read a book lately that you think would be of interest to the Infantry community and want to submit a review? Or are you interested in being a book reviewer for *INFANTRY*? Send us an email at: usarmy.benning.tradoc.mbx.infantry-magazine@mail.mil or call (706) 545-2350.

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