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by Jon H. Moilanen, TRADOC G-2 ACE Threats Integration (DAC)

The opposing force (OPFOR) tasks and drills in US Army Training Circular 7-101 have been updated as of March 2017 to 17 tasks and drills. These tasks and drills are now posted in the US Army Combined Arms Training Strategies (CATS). For an easy 1-2-3 sequence to retrieve updated OPFOR tasks in CATS, go to the Army Training Network (ATN) with common access card entry, click on the CATS icon, and search using the keyword "OPFOR."

These updated tasks are in compliance with the new US Army "Objective T" format, and have a task number sequence in the format 71-CO-85xx, where the last two numerical digits identify the specific OPFOR task number. Several previous OPFOR tasks are being removed gradually from CATS, so look for these 71-CO-85-series company-echelon and subordinate-element tasks and drills for use in home-station training and other readiness venues.

RED DIAMOND TOPICS OF INTEREST

by TRADOC G-2 ACE Threats Integration

Force-on-force training at the Joint Multinational Readiness Center (JMRC) in Germany provides excellent opportunities for brigades to assess and improve their systems. One of the key processes that will make or break the rotational training unit (RTU) is the military decisionmaking process. During rotation Allied Spirit V, changes in the situation forced the opposing force (OPFOR) to revisit several steps of the process after its completion. The first article in this edition of the *Red Diamond* outlines this battle period at JMRC, starting with relative combat power analysis and ending with change of mission instructions.

With Chinese adoption and issue of the initial version of the QBZ-95 rifle, ergonomic design flaws became clear once training of personnel began in earnest. Though a vastly improved variant would eventually be fielded, a new rifle—the QBZ-03—was introduced six years after adoption of the original QBZ-95, conceivably as an interim fix for the latter's issues. The QBZ-03's excellent design, however, apparently resulted in its being kept in service. The next article reviews the development and specifications of this weapon.

Units attending a rotation at the National Training Center (NTC) either know, or will learn, key points when facing a near-peer threat. Potential enemies of the United States rely more heavily on artillery and less on aviation or fixed-wing air support. Unmanned aircraft will be used extensively in both reconnaissance and attack modes. Key terrain is still key terrain, no matter who controls it. American armor is not "bullet-proof" or omnipotent. And "they" have just as many, if not more, capabilities than "we" do. An article discusses these points, effective enemy weapons systems, and new OPFOR techniques and capabilities.

The purpose of a Ride Along with Mission Command Training Program (MCTP) OPFOR is to observe, learn, and grow in understanding the threat. Transparency is foremost and nothing is off limits. Participants can expect to gain a firm understanding of everything the OPFOR does in any given five-day period during an exercise. Participants are able to move about freely, talk with anyone as desired, and follow their own or units' observation priorities. In this article, LTC Jennifer Chapman, 3rd Infantry Division G-2, gives a first-hand account of her experiences on a Ride Along during Warfighter Exercise 16-5.

ACE-TI conducted the spring resident offering of its Threat Tactics Course (TTC) during March 2017 at Fort Leavenworth, Kansas. The student population was represented by 16 diverse organizations that included members from civilian, active, and Reserve/National Guard components. The final article provides a brief overview of the TTC and information on future course offerings.

Continuous Refinement of the Plan

A View of MDMP from the OPFOR at JMRC

by CPT Erik J. Prins, 1-4 Infantry, Joint Multinational Readiness Center

Force-on-force training at the Joint Multinational Readiness Center (JMRC) in Hohenfels, Germany, provides excellent opportunities for brigades to assess and improve their systems. One of the key processes that will make or break the rotational training unit (RTU) is the military decisionmaking process (MDMP). Executing the seven-step process is demanding for RTUs, particularly when they are simultaneously tackling other challenges. One of the most painful events of MDMP is found in an often-overlooked sentence in Field Manual 6-0, *Commander and Staff Organization and Operations*: "Commanders and staffs generally perform these steps sequentially; however, they may revisit several steps in an iterative fashion as they learn more about the situation."[1] During rotation Allied Spirit V, changes in the situation forced the opposing force (OPFOR), played by 1st Battalion 4th Infantry Regiment (1-4 IN), to revisit steps 3–7 after completion of the full MDMP process. Continuously revising the plan and adjusting to the situation on the ground is necessary for success. It requires recognizing the current plan is no longer valid. This continuous revision occurs at the staff level during planning and also at the command level during execution. This article outlines a battle period at JMRC, starting with relative combat power analysis and ending with change of mission instructions.

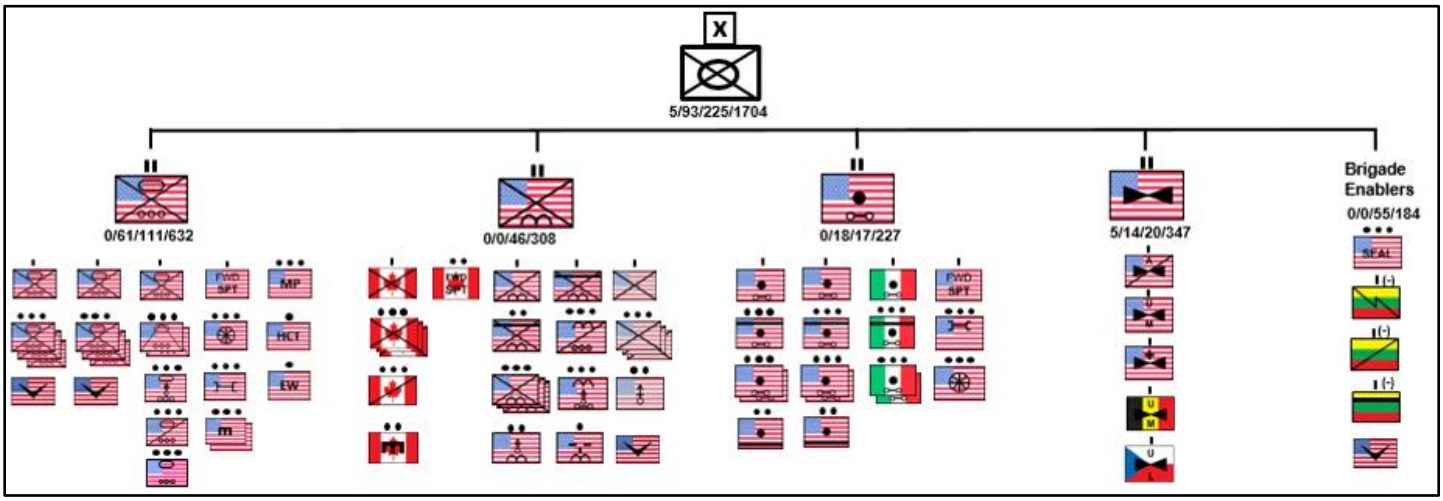


Figure 1. RTU forces

Combat Power Analysis

The RTU in this rotation was a composite brigade under a multinational headquarters. The ground combat forces consisted of one US Stryker battalion and one US Airborne battalion with a Canadian company attached. Fire support came from a US field artillery battalion with one Italian battery attached. The aviation was a multinational task force with US attack aviation, Belgian scout aviation, and both Czech and US lift assets. Brigade and higher collection assets included a Lithuanian reconnaissance (recon) company, a US SEAL platoon, UK Pathfinders, and two US Shadow unmanned aerial systems.[i] There was no dedicated brigade sustainment battalion or brigade engineer battalion in the RTU. Company and smaller elements within the task force covered these support functions. It was not clear exactly how this would happen; it was a challenge for the brigade to address. The RTU's task was to delay and then defend against advancing 1-4 IN armor

[i] "Unmanned aerial system" is the title given to platforms used by US, allied, and friendly forces. When these platforms are used by adversaries of the US—to include the opposing force (OPFOR)—they are referred to as "unmanned aerial vehicles."

to provide time for the RTU's division decisive operation (DO) to move into position in the north and prepare for a counterattack.

1-4 IN fought with a total of four companies. Two mechanized infantry companies had three tanks and six infantry fighting vehicles (IFVs) per company. One engineer company had three sapper platoons and two D7 Caterpillar bulldozer teams. One recon company consisted of one mortar platoon fighting as mounted infantry, one antitank platoon, and two platoons of special purpose forces (SPF; essentially OPFOR special operations forces). 1-4 IN had significant artillery at its disposal, including a 2A36 artillery battalion with 18 152mm howitzers, a 2S9 120mm mortar platoon, a BM-21 multiple rocket launcher system (MRLS) battery capable of firing chemical munitions, scatterable mines, conventional high explosives, and dual-purpose improved conventional munitions. 1-4 IN also had an Mi-35 Hind air weapons team at its disposal and direct support from brigade-level unmanned aerial vehicles and counterfire radar. 1-4 IN's mission was attack to neutralize the RTU to enable the seizure of Nurnberg by the division DO.

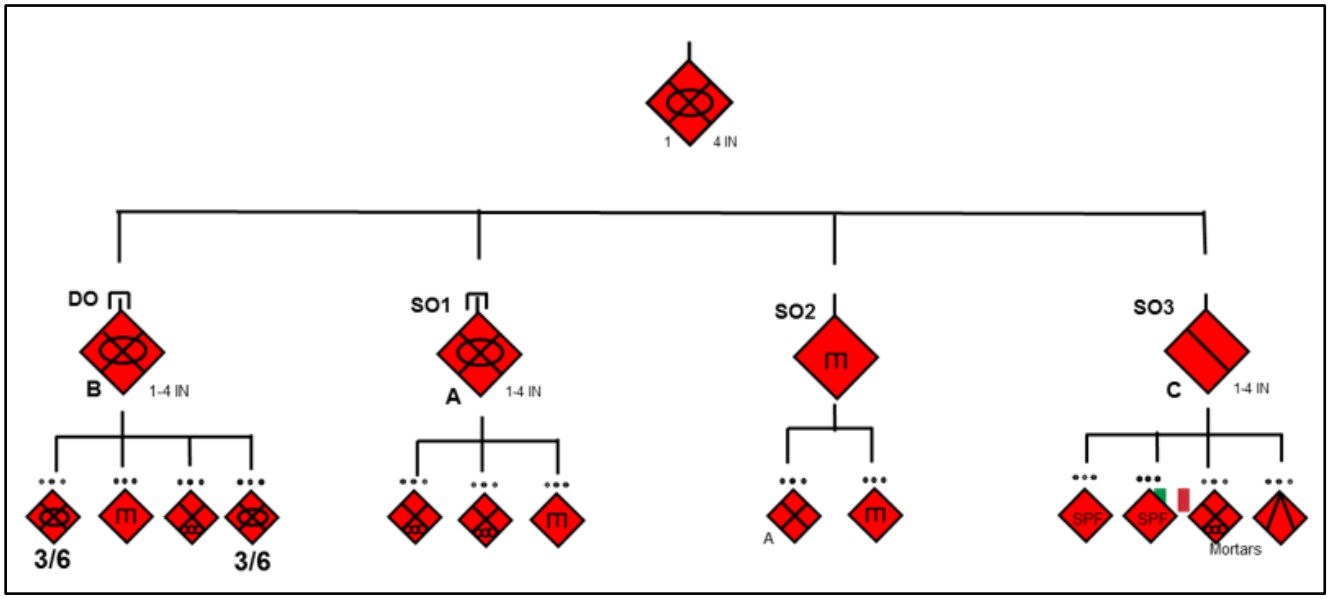


Figure 2. OPFOR task organization for the attack

The relative combat power analysis revealed several advantages for 1-4 IN to exploit in the attack: maneuver, mission command, and protection. The staff also assessed the RTU logistics would be susceptible to disruption given it did not have a dedicated brigade support battalion.

Maneuver advantage for 1-4 IN was inherent given the formations. The majority of 1-4 IN fought in tracked vehicles, which have significantly better off-road capabilities compared to the Stryker vehicle and obvious speed advantages over the RTU's dismounted infantry. From a movement/maneuver perspective, the only assets the RTU could rapidly reallocate against attacking forces were aviation assets and the Stryker battalion. 1-4 IN had the ability to focus the majority of its combat power on a narrow front and the RTU did not have the ability to rapidly respond to this challenge.

Mission command was a second advantage for 1-4 IN, particularly in the intelligence and fires warfighting functions. From an intelligence perspective, the RTU had a larger number of collection and analysis assets at its disposal; however, the force structure distributed the intelligence assets among multiple headquarters and several did not even fall directly within the brigade (SEAL and UK Pathfinders reported to Division through a separate chain of command). This created multiple steps between target acquisition, decision, and delivery, which made the unit susceptible to deception. 1-4 IN operated a much-flatter collection plan with all assets reporting to one intelligence cell. 1-4 IN had a similar advantage in the fires warfighting function, with a single mission command post receiving, approving, and processing all fire missions. The RTU's larger size and multiple headquarters made clearing and approving fires a much more difficult and time-consuming process.

1-4 IN's IFVs and tanks provided an additional advantage in protection. The RTU only had four weapons capable of defeating IFV and tank armor protection: attack aviation, mobile gun system (MGS) Strykers, antitank guided missile

(ATGM) Strykers, and Javelin antiarmor missiles. If 1-4 IN was capable of neutralizing these assets it could destroy the remainder of the RTU brigade with impunity.

The Plan

The 1-4 IN staff built the initial course of action (COA) off of this analysis. The recon company would confirm the location of the RTU, identify seams, and disrupt its engagement area development. All three maneuver companies would advance on one avenue of approach and mass against the RTU's Stryker battalion. The companies would neutralize the Stryker battalion and then move on the light infantry battalion. A chemical strike from division MRLS and massed indirect fire from 2A36 howitzers supported the attack. By attacking on one axis, 1-4 IN would be able to achieve a 3:1 combat power advantage at the point of its attack, even though the overall ratio was in favor of the RTU.

Antitank (AT) assets were the largest threat to 1-4 IN success. To control this risk, 1-4 IN tasked the recon company with targeting and destroying the easily identifiable ATGM and MGS Strykers. Unfortunately, Javelin missiles were harder to locate on the battlefield; a different method was required to neutralize them. The 1-4 IN SPF would disrupt the RTU support area, attacking logistics and mission command nodes. This would pull command focus to the rear, away from engagement area development, and reduce effective integration of AT systems into the RTU's defense.

Reality on the battlefield quickly showed itself to be different from expectations. 1-4 IN conducted a reconnaissance in force one day prior to the main attack. This identified two major changes in the enemy array that required a rethinking of the plan. First, the enemy task organization changed. The RTU cross-attached companies between the Stryker and light infantry battalions. This meant that 1-4 IN's initial plan of massing against only the Stryker battalion was no longer feasible—the infantry battalion also had Strykers. The RTU would be able to move forces from one task force to support the other if needed. Second, the enemy placed his defenses much further west than initially templated. With updated enemy information the staff went back, developed a new COA, wargamed it, approved it, and published a fragmentary order (FRAGO) with the new scheme of maneuver. From reconnaissance-in-force back brief to FRAGO issue, the process took roughly six hours.

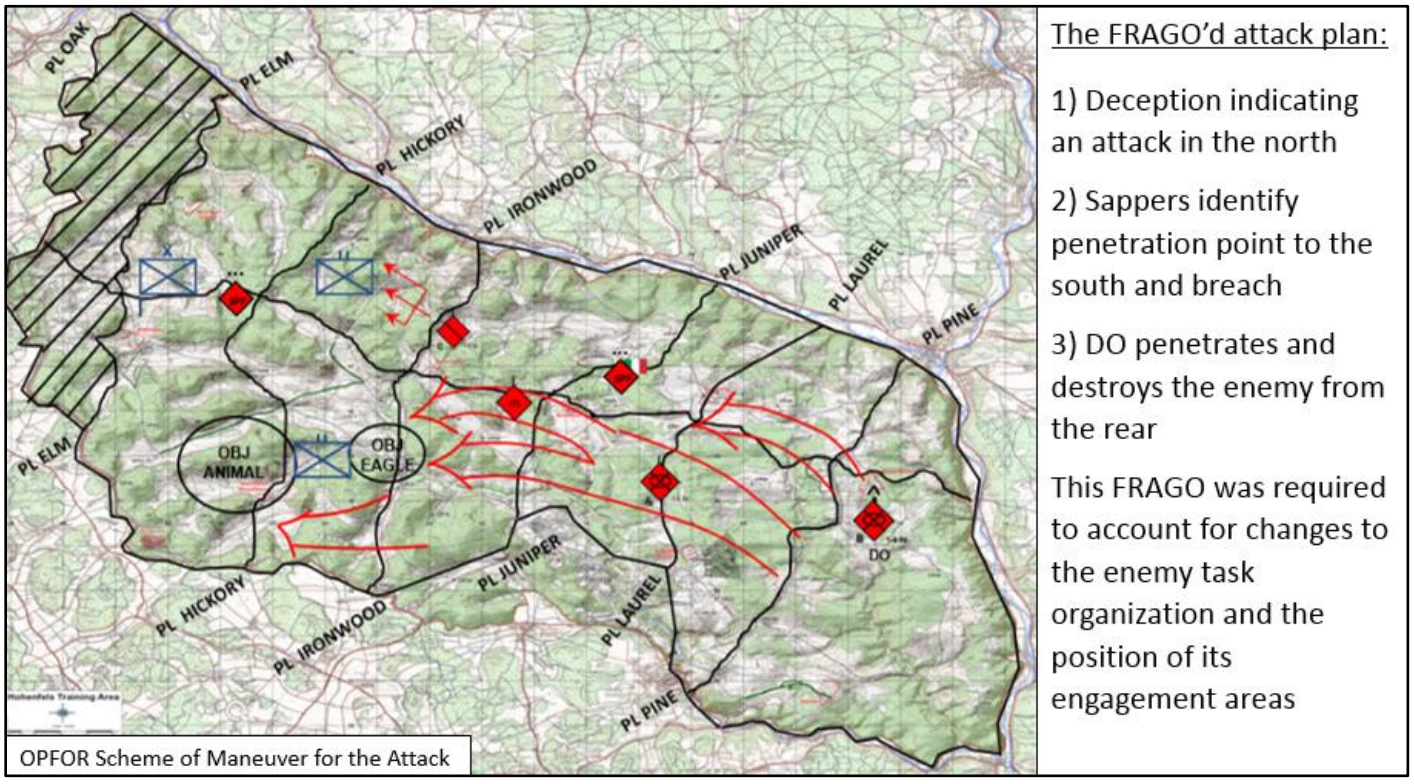


Figure 3. Revised OPFOR attack plan

The "FRAGO'd" plan was a penetration targeting the southern task force. The recon company would fix the RTU in the north, supported by indirect fire and smoke. The main body would initially move on a northern avenue of approach as deception. The intent was for the RTU to see recon forces and obscuration in the northern engagement area with tanks

advancing in support. However, the sappers would advance to the southern engagement area with a chemical strike supporting. The main body would turn south, penetrate the engagement area, and destroy the enemy from behind. With the FRAGO issued, it was time for execution and more refinement.

The Battle

As 1-4 IN initiated the attack it identified its first issue. The lead element was the attached reserve-component sapper company. While it had a guide from the recon company and an attached platoon familiar with the terrain, the element had difficulty maintaining the rate of march necessary to stay synchronized with its enablers. The chemical strike from division MRLS required an hour lead time. The MRLS fired according to the triggers planned but, with the lead company moving slower, the chemical agent dissipated on the target before the attack hit, which forced the tactical operations center (TAC) to make a decision:

COA 1—Conserve Combat Power: Halt the main body until the sappers reach the RTU engagement area. This would ensure awareness of the engagement area before the DO was committed. However, the MRLS would no longer support the DO's attack and the main body would be vulnerable to indirect fire and attack aviation.

Risk: Provides the enemy an opportunity to take the initiative

COA 2—Risk Combat Power: Allow the main body to close with or bypass the lead element. This would ensure the DO's attack was supported by all planned enablers but would also mean the main body would make initial contact with the enemy.

Risk: The DO enters the engagement area blind

In considering the options the TAC had to decide which risk was prudent. It decided halting the main body was a lesser risk because it preserved combat power. The RTU's defensive belts were unknown and bypasses were not yet identified. The halted DO would be vulnerable, but in order for the RTU to exploit and gain the initiative, it would have to identify the halted 1-4 IN main body, report it, decide on an action, and execute—all before the main body continued movement.

This decision to halt the main body was critical for the fight. Allowing the main body to bypass the engineers or decrease separation could have allowed the attack to hit in time with the chemical agent as originally planned; however, the main body would be making the initial contact with the RTU, reducing flexibility. While halting movement provided an opportunity for the RTU, 1-4 IN was safe halting for a short time based on an understanding of the RTU's ability to react. The flexibility provided by keeping the main body uncommitted showed its value when the sappers hit the RTU defense and identified the second issue: obstacles.

The RTU obstacle development was much more substantial than 1-4 IN had expected. The terrain at Hohenfels is not conducive to developing a brigade-size engagement area. The ridges and valleys split up the brigade area of operation into a series of company-size engagement areas. Normally, 1-4 IN is able to find one of the company engagement areas that the engineers did not reach and penetrate. In this case, the RTU engineers had been working directly at the battalion level and below and had built up most of the engagement areas very well. This further slowed the sappers and they were heavily attrited by RTU attack aviation.

The RTU used the attack aviation as a maneuver element and tasked it to screen. The advantage the RTU gained by this was that the aviation was not pulled to the north in reaction to 1-4 IN deception. The attack aviation stayed in a screen to the south, exactly where the sappers were entering engagement areas. The AH-64s did significant damage to the two lead 1-4 IN companies while they were attempting to penetrate obstacles. The aviation screen, however, also prevented the RTU from massing indirect fires because it was unable to clear air.

The fight at the breach lasted over three hours but only consumed 1-4 IN's shaping efforts. If the TAC had maintained the initial plan, the DO would have been the element attrited by the aviation, not the sappers. In this case, the change of plan ultimately resulted in a successful penetration by the DO with nearly all of its combat power.

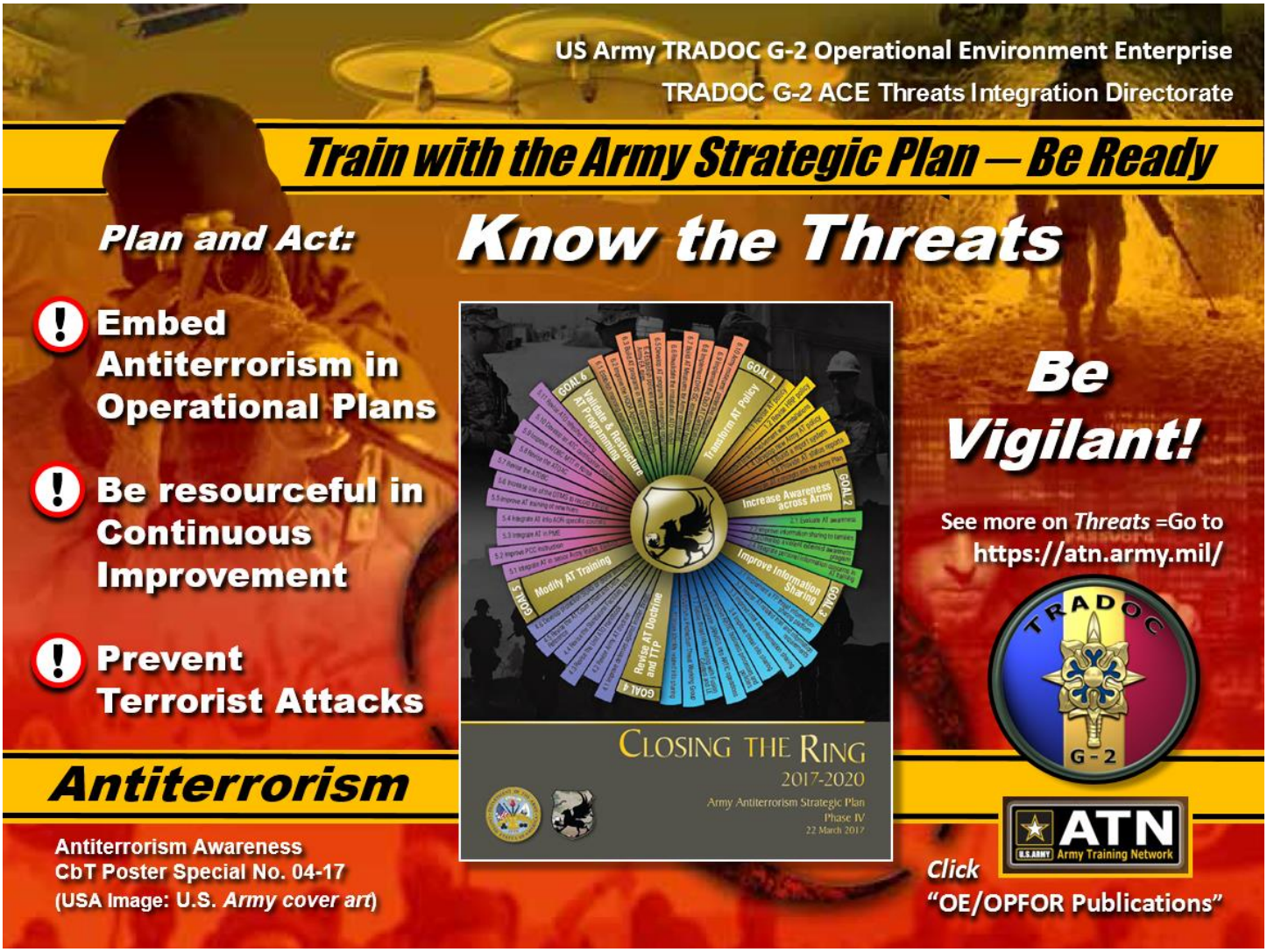
Conclusion

Neither the RTU nor 1-4 IN had a perfect picture of what the fight would look like. The fight on the ground turned out very different from what was anticipated on either side. The RTU was successful in overcoming many the weaknesses of its

task organization, particularly the lack of a battlefield enhancement brigade. 1-4 IN was successful in exploiting other weaknesses, such as the sensor-shooter disconnect and the lack of RTU mobility. Some decisions—such as the employment of attack aviation—are difficult to judge, as many of the advantages were offset by other problems they caused. This shows the necessity of continual refinement of the plan both during the MDMP process and during execution. In Allied Sprit V, as with most combat training center rotations, the constantly changing situation required the staff to continually analyze and adjust. During execution, nonstop supervision and refinement were necessary to ensure the units stayed synchronized when the pace did not match the planned tempo. Continual refinement is key to success.

Note

[1] Headquarters, Department of the Army. Field Manual 6-0, Commander and Staff Organization and Operations. May 2014. Para 9-6.



The QBZ-03— an Interim Solution to Initial QBZ-95 Issues

by Mike Spight, TRADOC G-2 ACE Threats Integration (CGI Federal CTR)

In a recent *Red Diamond* article,[ii] the Peoples' Liberation Army (PLA) bullpup assault rifle, the QBZ-95, was discussed in detail, along with the variants that have been subsequently developed since its adoption by the PLA in 1997. In that article, there was brief mention of the QBZ-95's predecessors, the Type 81 assault rifle and its specialized variant, the Type 87. In the case of the former, the Type 81 was chambered for the ubiquitous 7.62x39mm cartridge, but in the case of the Type 87 (virtually identical to the Type 81), it was chambered in 5.8x42mm (DPB-87), which was the new Chinese military round that was purposely developed to provide performance similar or superior to both the Russian 5.45x39mm and the US/NATO 5.56x45mm cartridges. The Type 87 served as a test bed for the new proprietary cartridge until the initial production runs of the QBZ-95 were ready for testing, and eventual adoption and issue. In that role, the Type 87 achieved very limited production, but those that were produced are reported to have been issued to PLA special purpose force units.

With adoption and issue of the initial version of the QBZ-95, its previously described ergonomic design flaws became clear once training of masses of military and security personnel began in earnest. The incredibly poorly located safety/selector switch (near the butt of the stock) was bad enough, but an ejection pattern that would throw empty, hot brass into the face of a left-handed shooter was even worse. It required that left-handed shooters be trained to shoot right-handed, with all the obvious issues that arrangement presented, and the not-as-obvious issues with learning to shoot accurately with one's dominant eye from the wrong side of the stock. Those issues resulted in a very quick evaluation and redesign effort for the QBZ-95, and a vastly improved variant (the QBZ-95-1) would eventually come out of that effort with the two major problems corrected. Those improvements directly affected accuracy due to a heavier barrel and the ability to fire an improved ammunition type (DPB-88 and DPB-10). The QBZ-95-1 began to be phased into service at some point in 2010, a full 13 years after initial issue of the QBZ-95 in 1997.

Figure 1. Chinese QBZ-03

It is only in the last seven years of that 13-year gap, when the QBZ-03 or Type 03 made its appearance, six years after adoption of the original QBZ-95. It can only be speculated that issues with the initial QBZ-95 variants were deemed so significant that the decision was made to provide an interim fix, but one chambered in the new 5.8x42mm cartridge. Apparently, the fact that the QBZ-03 was such an excellent design resulted in its being kept in service, primarily with PLA Air Force Airborne, PLA Marines, Peoples' Armed Police, and with some weapons issued to second-line PLA units.

[ii] Spight, Mike. "The QBZ-95: China's Adoption of a Bullpup Rifle and a Proprietary Caliber…and Not Many Noticed." Red Diamond. February 2017.

Figure 1 depicts the QBZ-03 both assembled and field stripped. It is a thoroughly modern design, with a mounting rail—located just in front of the diopter-type rear sight—that can be used for attaching conventional optical devices (telescopic or red-dot type sights) or night-vision sights. Additionally, the stock folds, making the rifle handier for use when troops are transported via aircraft, naval small craft, or infantry fighting vehicles. The rifle has a standard-type front sight, with hood, and a diopter-type rear sight with flip-up rear apertures for both short- and long-range engagements. That rear sight is somewhat similar to the rear sight round on issue M16/M4 rifles and carbines.

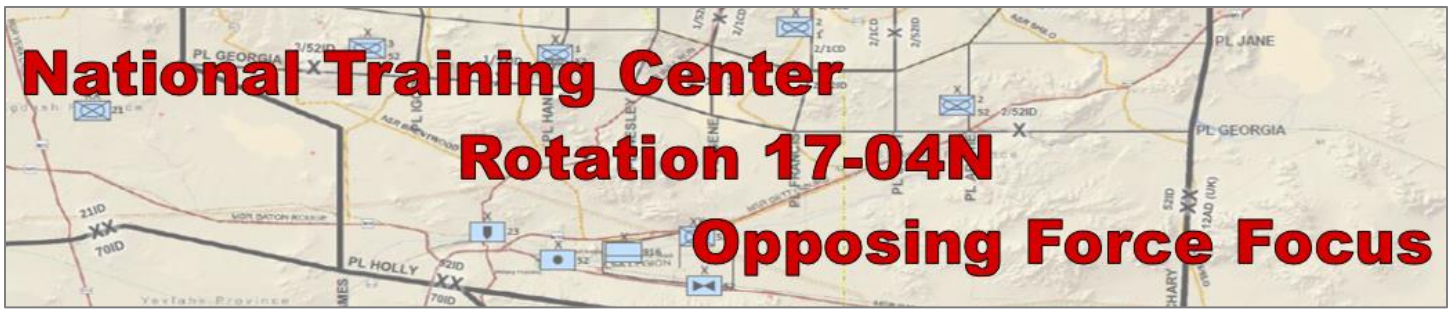
With regard to variants, there is only one other known PLA-issued variant, and that is a carbine with a shorter overall length of 29 inches versus the standard rifle's overall length of 37 inches (stocks extended). There is no indication that a light machine gun or designated squad marksman/sniper variant of the QBZ-03 was developed or exists. Like the QBZ-95, there are export variants produced for overseas sales, which are chambered in 5.56x45mm NATO, and their magazine wells are designed to accept standard NATO magazines. Those variants can be had in selective fire models designed for use by foreign military and security/police organizations, or semiautomatic-only versions for foreign civilian purchase and use. There is another variant that has a modern rail interface system (RIS) type of fore end on which tactical lights, laser-aiming devices, vertical fore-end grips, bipods, etc. can be mounted. It is depicted in Figure 2, and as it has a NATO 5.56x45mm magazine inserted into the weapon, this indicates that it may be available only on export models of the QBZ-03. This tends to make perfect sense, as assault rifles equipped with a RIS are a much-sought-after item in some civilian and law-enforcement markets.

Figure 2. Export version with NATO magazine and RIS

Like the QBZ-95 and QBZ-95-1, the QBZ-03 can fire rifle grenades, however this author is not aware of any capability to mount the PLA's 35mm under-barrel grenade launcher (QLG91B or QLG10A), both of which can be mounted on the QBZ-95 series of weapons. This author has not seen any pictures of a QBZ-03 with an under-barrel grenade launcher mounted, and only an export model with a RIS mounted. But there is no reason that the standard fore end of the domestic version of the QBZ-03 could not be replaced with a RIS and be made capable of accepting an under-barrel grenade launcher of either type.

General specifications of the QBZ-03 are as follows: weight 7.7 lbs (unloaded); length 37 inches (stock extended) or 28.5 inches (stock folded). The rifle is set up for firing the original 5.8x42mm ammunition (DBP87) and will produce a muzzle velocity of 3,030 feet per second. Rate of fire is 650 rounds per minute, and the rifle is a standard gas-and-piston operated, rotating-bolt design. In other words, the rifle does not represent any sort of breakthrough in small-arms technology or design.

In conclusion, although the QBZ-03 is an excellent weapon, now that the ergonomic problems inherent in the QBZ-95's initial design have been overcome with the QBZ-95-1, it is unlikely that the QBZ-03 will see additional, widespread issue within the PLA, Peoples' Armed Police, or Border Guards, as China's defense and internal security organizations seem fully committed to the QBZ-95 bullpup design. The QBZ-95-1 is and will remain the primary-issue individual weapon to PLA forces, with the original QBZ-95 being issued to reserve and second-line PLA forces in spite of its inherent design flaws.



by Marc Williams, TRADOC G-2 ACE Threats Integration (ThreatTec CTR) and 1LT Derek McCarty, 11th Armored Cavalry Regiment Ground Surveillance Radar Platoon Leader

> Developed by Training and Doctrine Command (TRADOC), the Decisive Action Training Environment, a combination of Combined Arms Maneuver and Wide Area Security, in which units at NTC [National Training Center], JRTC [Joint Readiness Training Center], and JMRC [Joint Multinational Readiness Center] come to train against was designed to bring the Army back to its roots after a decade and a half of fighting counterinsurgencies in Iraq and Afghanistan. While there are many people within a rotational unit wearing combat patches on their right arm, few if any have experienced tank on tank combat operations and **none have experienced a fight against a near-peer threat like the one they are about to face**.[1]
>
> MAJ James King
> #DAweek: Welcome to Atropia

Units attending a rotation at the National Training Center (NTC) either know, or will learn, key points when facing a near-peer threat. Potential enemies of the United States rely more heavily on artillery and less on aviation or fixed-wing air support. Unmanned aircraft[iii] will be used extensively in both reconnaissance and attack modes. Key terrain is still key terrain, no matter who controls it. American armor is not "bullet-proof" or omnipotent. And "they" have just as many, if not more, capabilities than "we" do. This article will discuss these points, effective enemy weapons systems, and new opposing force techniques and capabilities.

Rotational Training Unit (RTU) Training Objectives

The 17-04N RTU was 2nd Armored Brigade Combat Team (ABCT), 1st Cavalry Division (2/1 CD). In accordance with Training Circular (TC) 7-101, *Exercise Design Guide*, the Brigade Commander provided clear training objectives for the rotation. The Operations Group used these to design the exercise, develop the scenario, and provide the opposing force (OPFOR) guidance for challenging the unit. The major training objectives included:

- Setting will be in the Pacific Command area of responsibility,
- OPFOR will be a near-peer armored force with offensive chemical-warfare capability,
- An insurgency will be part of the scenario,
- Rotation will include a reception, staging, onward movement, and integration phase, and
- Missions will include offensive operations and a non-combatant evacuation operation.

Scenario/International Situation

In 17-04N, the two major countries involved were Donovia to the north, and Atropia to the south. In a continuing conflict reaching back to the 14th Century, relations between the two countries had deteriorated to the point of a possible Donovian invasion. The NTC scenario writers developed a "road to war" that was comprehensive and included escalating events, state-sponsored terrorism, an active insurgency, suppressed ethnic groups, cyber attacks, possible weapons of mass destruction, United Nations Security Council resolutions, and European Union sanctions. Five months before the start, the scenario included Donovian aircraft violating Atropian airspace and Donovian short-range mobile missile

[iii] "Unmanned aerial system" (UAS) is the title given to platforms used by US, allied, and friendly forces. When these platforms are used by adversaries of the US—to include the opposing force (OPFOR)—they are referred to as "unmanned aerial vehicles" (UAVs).

launchers moving to the coast. The resulting diplomatic flurry of recalled ambassadors, protests, and political speeches only inflamed the future combatants. Donovia then demanded that historic territorial claims to Atropia's Vetlia, Erdabil, and Hachzi Provinces be recognized. After a series of boat seizures and border violations, both countries became too entrenched to peacefully resolve the situation. Seventy-six days prior to deployment (D-76), the United States Secretary of Defense authorized notification of deployable forces (N-Day), resulting in numerous units across the military receiving notification for deployment. US flexible deterrent option (FDO) 1 commenced by positioning mission command and intelligence capabilities to facilitate assessment of the situation and to discourage hostile actions against US interests. Carrier strike groups repositioned in the Indian Ocean and the Black Sea to within range of Donovia. Also, special operations forces began working with Gorgan and Atropian militaries to bolster internal defense efforts.

On D-60, the US commenced FDO 3 with the intent to support Atropian and Gorgan military operations with intelligence, military equipment, and airborne fire support to further deter Donovian and Arianian aggression. Theater opening operations began at numerous Gorgan ports. A marine expeditionary brigade and a Stryker cavalry regiment began arriving into Gorgas. Three days later, the US Congress passed a resolution supporting a military response in the event that Donovia invaded Atropia. More cross-border artillery duels and airspace violations took place and both countries moved forces closer to the border. D-30 to D-2, US and United Kingdom (UK) forces flowed into the region, anticipating major combat operations.

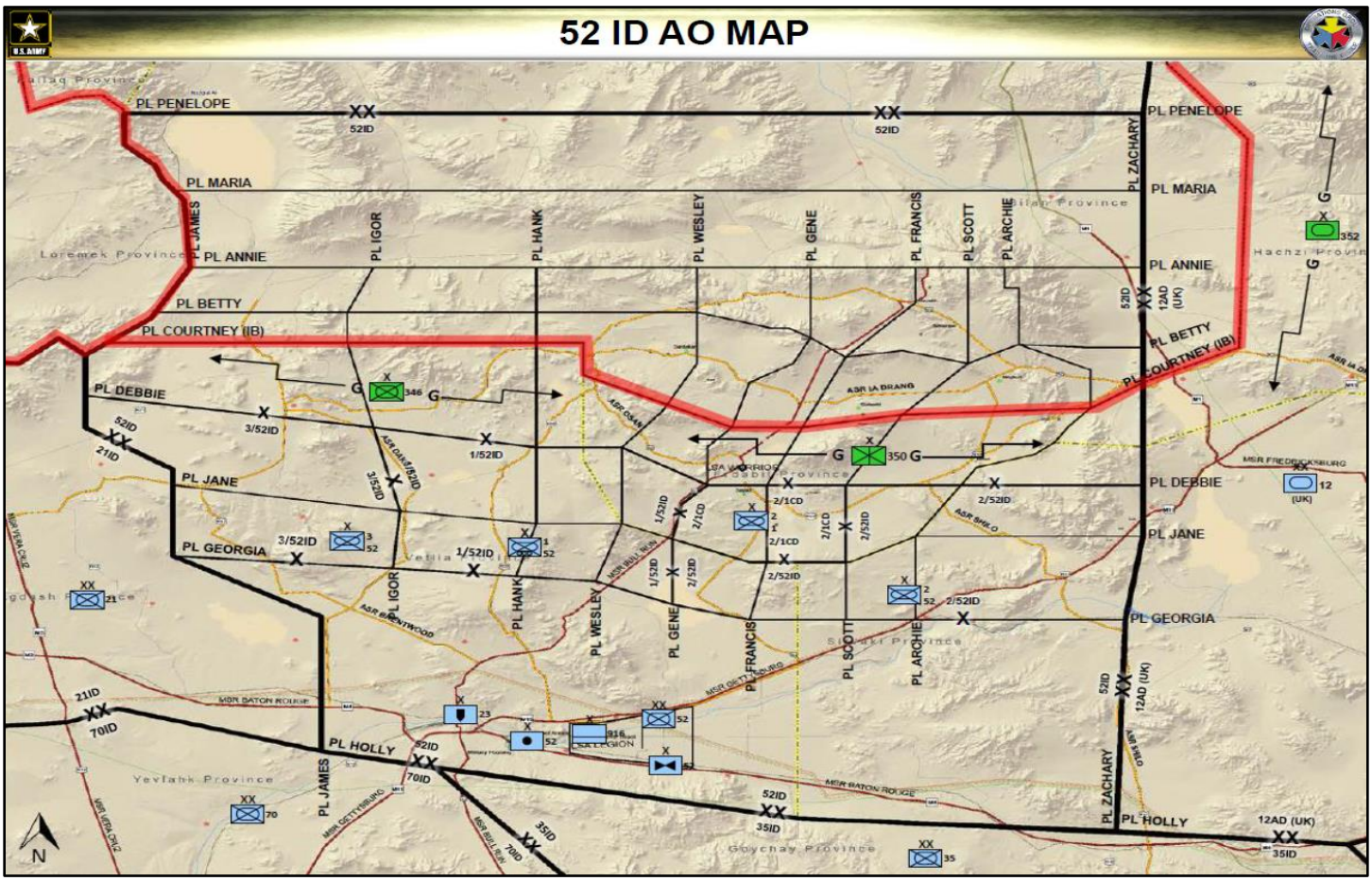


Figure 1. Rotation 17-04N scenario map

Operations Order 17-04-DA-ATR (ATROPIAN RESOLVE) for 52nd Division was issued at 0800 on 13 February 2017. It assessed the Donovian Operational Strategic Command-South (OSC-S) as the higher headquarters in charge of an invasion of northern Atropia. OSC-S was comprised of five division tactical groups (DTGs), including the 80th (Mechanized) DTG.

OPFOR Order of Battle

During a rotation, the 11th Armored Cavalry Regiment (ACR) replicates an OPFOR DTG. For rotations with ABCT formations (as 17-04N was), it becomes the 80th Mechanized Infantry Division (See DATE 2.2, page 2C-2-10). This provides less

dismounted infantry and a larger amount of mechanized forces. For rotation 17-04N, 1st Squadron, 11th ACR (1-11 ACR) replicated both the 801 Brigade Tactical Group (BTG) and the 802 BTG. Although the entire regiment is involved every rotation, the active squadron replicates all the combined arms maneuver threat, while the "inactive" squadron plans for the next rotation and also plays the special purpose forces role. All troops from both squadrons are in play every rotation.

This formation provided a near-peer lethality against the RTU. It had good reconnaissance capabilities with two recon squadrons (DTG and BTG assets), 16 unmanned aerial vehicles (UAVs) throughout the DTG and BTGs, and powerful indirect fire systems with family of scatterable mines (FASCAM) and non-persistent chemical rounds. The DTG was augmented with one company of infantry and one battery of self-propelled field artillery assigned where the situation dictated. Other elements on the battlefield included a criminal network and the Bilasuvar Freedom Brigade (BFB). Due to the specifics of this particular rotation, the People's Army of Lezgin (PAL) was not replicated. However, there were strategic missile systems with chemical warheads on the battlefield and chemical factories in some of the cities.

Separate from the OPFOR were 147 civilians on the battlefield and multiple other role players to provide atmospherics and sources of intelligence for the RTU. These role players included local government officials and chemical engineers.

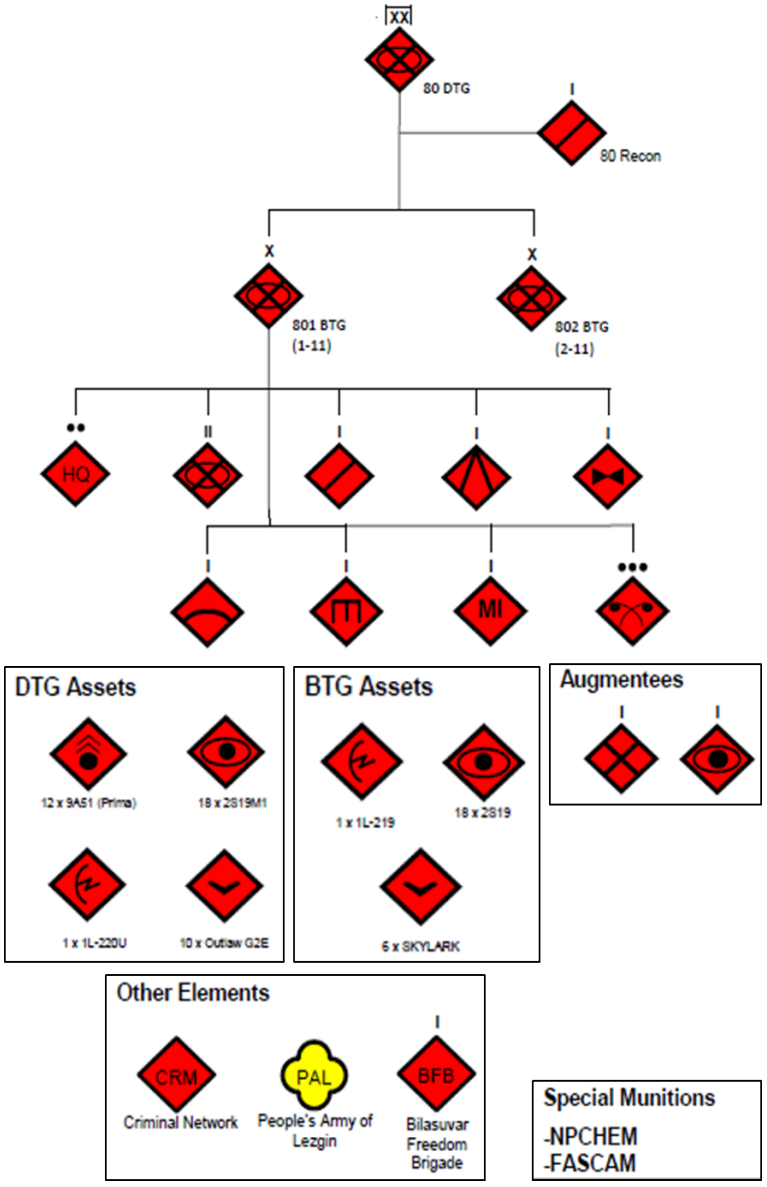


Figure 2. 80th Mechanized Infantry Division (IFV)[2]

Key Observations

OPFOR Artillery

OPFOR artillery keyed in on what it perceived to be high-value targets. For the DTG, those were RTU tactical operations centers. These were recognized as the key to command and control. For the BTG, the priority targets were the maneuvering forces. Once these were identified, the BTG would attrite the RTU infantry and armor battalions ruthlessly. FASCAM would be used to channel the RTU into kill zones and minefields, or stop its movement through mountain passes.

Battles for the Passes

A recurring observation at NTC is the role of terrain and its dominance. The OPFOR recognizes the crucial nature of mountain passes and will work to control these through continuous reconnaissance, emplacement of obstacles and minefields, and simple battle positions. Units that fail to conduct rigorous reconnaissance missions followed by clearing operations will find their forward movement stalled. With nowhere to maneuver, the mountain passes become clogged by numerous "destroyed" vehicles, i.e. stationary vehicles with flashing (activated) Multiple Integrated Laser Engagement System (MILES) indicators. Units that do manage to force their way through these passes are severely attrited and find themselves on an open plain where they are subjected to galling flank fire, more artillery, antitank guided missiles, and aerial attack. Battalion and brigade staffs must conduct thorough intelligence preparation of the battlefield to anticipate natural chokepoints and develop courses of action to mitigate their effects.

Through direct observations and interviews with NTC personnel, it became obvious the biggest killers of the RTU armored forces were ATGMs and towed AT guns. Whether used in overwatch positions, in a defense, or in a disruption element formed into a combat security outpost, these systems were accurate and lethal when engaging both the M1 Abrams main battle tank and the M2/M3 Bradley infantry fighting vehicle (IFV).

Antiarmor Assets

ATGM

At NTC, the ATGM and vehicle of choice are the AT-14 Kornet mounted on a BRDM-2M. To replicate this, 11th ACR uses a BGM-71 tube-launched, optically tracked, wire-guided missile launcher mounted on an OPFOR surrogate vehicle (OSV).

The BRDM-2M has multiple versions with a crew of four (driver, commander, gunner, and loader). It is powered by a diesel engine and has a range of 500 kilometers. It has a maximum road speed of 100 kilometers per hour and, being amphibious, can swim 9–10 meters of water.[3] More details on the BRDM-2M are found in the 2016 Worldwide Equipment Guide, Volume 1: Ground Systems.

The AT-14 Kornet has both a day sight with an acquisition range of 5,000 meters, and a night sight with an acquisition range of 5,500 meters. The warhead range is 100–5,000 meters with penetration capability of 1,100 millimeters. The warhead is a tandem-shaped charge. Flight time to maximum range is 22 seconds, moving at 255 meters per second.[5] More details on the AT-14 Kornet are found in the 2016 Worldwide Equipment Guide, Volume 1: Ground Systems.

Figure 3. BRDM-2M with AT-14 Kornet (top), and OSV BRDM-2M with AT-14 Kornet (bottom)[4]

Figure 4. 125mm towed antitank gun 2A45M (top), and NTC visual 125mm towed antitank gun 2A45M (bottom)[7]

Towed AT Gun

At NTC, the towed AT gun is the 2A45M. This weapon system was introduced in 1980 by Russia. It has a cyclic rate of fire of 8 rounds per minute and a range of 3,000–5,000 meters day or night, depending on the ammunition type. It can be aimed using iron sights, an OP4M-48A direct fire 5.5x day sight, or a 1PN53-1 night sight. Additionally, it comes equipped with a 9S53 laser-guidance system. The round is less expensive than an ATGM and offers a fast response (1–5 sec) to defeat target vehicles before they can employ their weapons. With a high-explosive antitank warhead and 700mm penetration, lethality is sufficient for a mobility or firepower kill against tanks and a catastrophic kill against other targets.[6] This gun cannot be fired on the move, so it is vulnerable once stopped. At NTC this gun is replicated with a visual towed gun, with firing replicated by

a grenade simulator. Despite this, the crews are well-trained and can emplace and displace quickly. More information on the 2A45M towed antitank gun is found in the 2016 Worldwide Equipment Guide, Volume 1: Ground Systems.

Puma Technique

> The OPFOR recognizes that an enemy will take significant measures to prevent the OPFOR from gaining critical intelligence. Therefore, quite often the OPFOR will have to **fight for information**, using an offensive operation to penetrate or circumvent the enemy's security forces to determine who and/or what is located where or doing what.
>
> TC 7-100.2, *Opposing Force Tactics*, paragraph 3-193 (emphasis added)

An OPFOR unit may conduct a reconnaissance attack "to gain information about the enemy's location, dispositions, military capabilities, and quite possibly his intentions."[8] During Phase 1 of this rotation, the OPFOR commander wanted to gain as much intelligence as possible in a short time. The Puma platoon leader knew he could not provide that information from the OPFOR unit's rear. So he formed his unit into reconnaissance (recon) and security elements and infiltrated as close as possible to the RTU's location. Launching from there, the Puma UAV, with a range of 15 kilometers, was able to penetrate deeply into the RTU airspace and provide real-time information on RTU locations, dispositions, and equipment. The UAV caused confusion in the RTU as both sides employ UAVs/UAS, and it was not fired upon during the mission. This was an excellent example of an OPFOR unit fighting for information, rather than sitting back and requesting strategic-level assets to do the recon. It provided the BTG with effective recon and targeting far outside its expected range. The Puma data, integrated with combat recon, ground surveillance radar, and intelligence assets, provided information for the OPFOR to plan future operations and reallocate recon assets. At NTC, the RQ-20 Puma is used by the OPFOR to replicate the Shmel-1D.

Figure 7. Puma UAV

	Shmel-1D[9]	RQ-20 Puma
Propulsion	3 blade shrouded pusher propeller	2 blade propeller
Length	2.78 meters	1.4 meters
Wingspan	3.25 meters	2.8 meters
Max Take-off Weight	6.67 kilograms	5.9 kilograms
Maximum Speed	60 km/h	54 km/h
Range	20 kilometers	15 kilometers (line of sight)
Endurance	2 hours	2 hours
Payload	Video Camera, TV, IR linescan	Dual electro-optical (EO) and infrared (IR) camera, fully gimbaled

More information on the Shmel-1D is found in the 2016 Worldwide Equipment Guide, Volume 2: Air and Air Defense Systems.

New GSR Capability

The OPFOR at NTC has a new capability for detecting ground and air activity. Since September 2016 (rotation 16-10), it has been using a ground surveillance radar (GSR). The Man-portable Surveillance and Target Acquisition Radar (MSTAR) is a lightweight all-weather battlefield Doppler radar operating in the J band. It is usually used by forward observers to acquire and engage targets in bad visibility or at night. It is capable of detecting, recognizing, and tracking helicopters, slow-moving fixed-wing aircraft, tracked and wheeled vehicles, and troops, as well as observing and adjusting artillery fire. In the UK, the system is designated as "Radar, GS, No. 22." In Australia, the designation is AMSTAR. In the US, it is AN/PPS-5C. It is also in use in Egypt, Poland, Canada, Finland, the Netherlands, Portugal, Saudi Arabia, and Spain.[10]

The radar display is an electro-luminescent screen that can be overlaid with a map grid. It also shows the areas of ground visible to the radar and those that are masked by terrain. Target location can be presented as either map coordinates or bearing and distance (polar coordinates) from the radar. The complete radar weighs 30 kilograms. The system can detect targets at a distance of 3–42 kilometers. The AN/PPS-5C is extremely reliable, easily transportable, and operates in all weather conditions, day or night. The radar head (antenna and electronics) is connected by a 20-meter cable to the display. The radar uses standard military rechargeable dry batteries, is man-carried in three loads, and can be set up in under 30 minutes. The simple-to-operate man-machine-interface allows rapid self-location and surveillance area set-up while providing sophisticated interface-support features such as network and wireless control. The AN/PPS-5C locates moving targets and uniquely classifies them as personnel, tracked vehicles, or wheeled vehicles.

Figure 8. AN/PPS-5C[12]

Doctrinal OPFOR use of GSR falls under signals reconnaissance. Per TC 7-100.2, *Opposing Force Tactics*, "Signals reconnaissance is action taken to detect, identify, locate, and track high-value targets (HVTs) through the use of the electromagnetic spectrum."[11] Signals reconnaissance is part of the overall OPFOR recon effort including ground recon, target acquisition elements, chemical/biological/radiological/nuclear elements, engineers, and aerial recon in support of the maneuver unit's mission. The GSR may be part of the security force in the offense or defense. Sometimes it may be included in a counterreconnaissance detachment along with long-range recon units, mounted and dismounted (combat) recon units, aerial recon, and special purpose forces. The danger in using a GSR is the increase of the OPFOR electronic signature, making it susceptible to electronic detection.

Figure 9. AN/PPS-5C operator[13]

At NTC, the OPFOR GSR platoon deploys as part of the recon force. The platoon stations itself at the rear of the force, and with a range of 3–42 kilometers, can range almost everywhere in the tactical box. Named areas of interest are designated by the BTG S2 (intelligence officer) and the recon force commander to identify key avenues of approach and possible locations of decisive action. The GSR platoon is also given the flexibility to report on activity outside its mission set that stands out to the operators. In the future, the platoon will be upgraded to the SR Hawk™ (V)2 enhanced radar.

Conclusion

The NTC OPFOR comes into the box knowing it is outmanned and outgunned. Knowing this, it leverages intimate knowledge of the key terrain with aggressive ground and air reconnaissance. OPFOR decentralized operations and tactical expertise with antitank weapons provides the RTU with an enemy that is neither compliant nor willing. The OPFOR will aggressively pursue new capabilities to keep the RTU challenged.

Notes

[1] MAJ James King. "#DAweek: Welcome to Atropia." 25 March 2017.
[2] National Training Center and 11th Armored Cavalry Regiment. "Donovia Red Book." 2 December 2016. Pg 2-4.
[3] US Army, TRADOC G-2 Analysis and Control Element (ACE) Threats Integration. Worldwide Equipment Guide – Volume 1: Ground Systems. December 2016. Pg 12.
[4] National Training Center and 11th Armored Cavalry Regiment. "Donovia Red Book." 2 December 2016. Pg 3-8.
[5] US Army, TRADOC G-2 Analysis and Control Element (ACE) Threats Integration. Worldwide Equipment Guide – Volume 1: Ground Systems. December 2016. Pg 66.

[6] US Army, TRADOC G-2 Analysis and Control Element (ACE) Threats Integration. Worldwide Equipment Guide – Volume 1: Ground Systems. December 2016. Pg 52.

[7] National Training Center and 11th Armored Cavalry Regiment. "Donovia Red Book." 2 December 2016. Pg 3-11.

[8] Headquarters, Department of the Army. Training Circular 7-100.2, Opposing Force Tactics. TRADOC G-2 Analysis and Control Element (ACE) Threats Integration. 9 December 2011. Paras 3-193 and 8-111.

[9] US Army, TRADOC G-2 Analysis and Control Element (ACE) Threats Integration. Worldwide Equipment Guide – Volume 2: Airspace and Air Defense Systems. December 2016. Pg 17.

[10] Defense Update. "DRS to supply border surveillance radars to Egypt." 2 July 2013; ArmyProperty. "Radar Set Part Number AN/PPS-5C." 2017; Military & Aerospace Electronics. "Canada orders ground surveillance radars." 27 July 2005; Military Periscope. "AN/PPS-5C MSTAR ground radar." 2017.

[11] Headquarters, Department of the Army. Training Circular 7-100.2, Opposing Force Tactics. TRADOC G-2 Analysis and Control Element (ACE) Threats Integration. 9 December 2011. Para 7-18.

[12] Steve Wasilausky. "AN/PPS-5C." TRADOC G-27. 1 March 2017.

[13] Steve Wasilausky. "AN/PPS-5C Operator." TRADOC G-27. 1 March 2017.

OPFOR Tasks Update in Combined Arms Training Strategies

***Note*: The current 17ea tasks have a collective task number with the following sequence (71-CO-85xx). The last two numerical digits are the specific task number 01 through 17.**

by LTC Jennifer Chapman, 3rd Infantry Division G-2, and Patrick Madden, TRADOC G-2 ACE-TI (BMA CTR)

> *"Our fundamental task is like no other—it is to win in the unforgiving crucible of ground combat. We must ensure the Army remains ready as the world's premier combat force. Readiness for ground combat is—and will remain—the U.S. Army #1 priority."*
>
> *General Mark A Milley*
> *39th Chief of Staff of the Army Initial Message to the Army*

This article is third in a series of three associated Red Diamond articles. The first article (September 2016) began with an explanation of the Opposing Force (OPFOR) Ride Along/Augmentation program as part of the Mission Command Training Program (MCTP) Warfighter exercises (WFX). This initial article also described how the experience would benefit participants that are scheduled to participate in a future WFX. The second article (February 2017) focused on WFX 17-1, which LTC Chapman participated in from Fort Stewart, Georgia. The 3rd Infantry Division (ID) performed relatively well despite an early exercise termination due to Hurricane Matthew. The following is LTC Chapman's first-hand account from her participation in the OPFOR Ride Along/Augmentation program during WFX 16-5.

Ride Along/Augmentation

My experience with the MCTP OPFOR was extremely helpful and I would recommend it to anyone preparing to conduct a WFX or who otherwise wants to learn how the OPFOR conducts the operations process. The OPFOR offers and welcomes "Ride Along" opportunities, also known as OPFOR Augmentation. The augmentation is different from the opportunities provided at the National Training Center (NTC) or Joint Readiness Training Center (JRTC). Each augmentation is tailored to the type of exercise, training provided, and audience.

The purpose of a Ride Along with MCTP OPFOR is to observe, learn, and grow. Secondary is developing relationships that support mutual trust and understanding of the integrity of the system. This provides the Ride Along officers the opportunity to see best practices in operation. This program is also dynamic, not static. Transparency is foremost and nothing is off limits. The program is of great value to mature field-grade officers based on the echelon of operations conducted and nature of the systems. Although there is value to be gained for anyone attending, its value may be diminished for those with little experience above the brigade level or currently operating at the brigade or battalion level. The MCTP OPFOR operates at the operational-strategic command (OSC) echelon, which is a corps equivalent, as well as at the division tactical group (DTG) echelon at division level. The OSC also receives additional weapon systems and units from the Strategic High Command.

Augmenters can expect to gain a firm understanding of everything the OPFOR does in any given five-day period during a WFX. During this time the entire OPFOR is focused only on that WFX and does not have competing demands outside of the exercise. In general, OPFOR will NOT specifically task augmentation/ride-along personnel with duties other than to observe. As a result, participants are able to move about freely, talk with anyone as desired, and follow their own or units'

observation priorities. This enables the ability to develop a collection plan, find answers, and further develop an understanding in specific areas. This also enables the opportunity to engage with technical personnel responsible for network architecture.

At the beginning of my visit I was provided an overview and escort through the labyrinth of the facilities to ensure I knew where everything and everyone was located. After the first two days I was provided the schedule of rhythm events that MCTP thought valuable and then was let go. I was able to observe anything and everything I desired. Also provided was unprecedented access not only to the OPFOR, but to the higher command (HICOM) replicated by 3rd ID and to MCTP Exercise Control (EXCON) for the entirety of WFX 16-5. This included the final preparations for the exercise. This was available during WFX 16-5 because the Exercise Control Group (ECG), OPFOR, and HICOM were all located at Fort Leavenworth. The OPFOR operates from Fort Leavenworth for all exercises, while the ECG and HICOM usually operate from a forward location with a training audience (e.g. Forts Bragg, Hood, Campbell, etc.).

Exposure Prior to the "Ride Along"

The 3rd ID also served as a response cell for the division adjacent to 1st ID during WFX 16-4. As a result, we had a decent understanding of the WFX construct, mostly from the Blue Forces (BLUFOR) perspective. The division staff had also completed the MCTP-facilitated Mission Command Training (MCT). This is the equivalent of the Leader Training Program at JRTC or NTC. During our MCT, we received a hybrid threat brief provided by the OPFOR Commander. We had other dialogues that week with OPFOR personnel, which set the stage for the OPFOR Ride Along. Much of what was covered there were things the OPFOR Commander covered in some fashion during the hybrid threat brief, but truly came to light when conducting an exercise.

Expectations

Near-Peer Doctrine

I expected and observed a near-peer opponent fighting force executing doctrinally sound tactics. There is also a liaison officer from TRADOC G-2 ACE Threats Integration (ACE-TI) who observes the OPFOR during every exercise. In addition, the OPFOR is accredited every year by the TRADOC G-2. I initially felt a definitive sense of trust and integrity in the system and my initial thoughts were only reinforced over the subsequent two weeks.

I was able to observe anything and everything I desired. Also provided was unprecedented access not only to the OPFOR, but to the higher command… and MCTP Exercise Control for the entirety of WFX 16-5.

OPFOR personnel have a training program just as any other organization. This includes two significant training events, with each one lasting a week. First, the OPFOR Academy is an internal program in which all of the full-time OPFOR personnel (military and contractor) discuss internal standard operating procedures, each warfighting function, and the doctrinal employment of those systems. The second significant training event is the Threat Tactics Course provided twice each year by TRADOC G-2 ACE-TI at Fort Leavenworth. This course is one week long and provides the opportunity to learn all the resources available (doctrinal, educational, etc.), an overview of significant operational tasks, and practical exercises to develop courses of action based on the understanding of the organization and doctrine.

The OPFOR is near peer. The first mistake others make when facing the OPFOR is to underestimate its weapon system capabilities. Failure to research and understand that OPFOR has the best systems from across the world has second and third order effects. For example, one of those effects comes to light when a given training audience has a platoon destroyed in the disruption zone by 9A52 long-range artillery. If the training audience does not understand the reach and capacity of the 9A52, it immediately dismisses the incident as "the OPFOR cheating."

Free Thinking versus Free Play (Exercise Control)

A free-thinking near-peer opponent does not equal free play. The OPFOR desires a challenging fight across the operating environment and exercise timeline. However, the training audience's training objectives and mission command systems take precedence over all other priorities. The exercise controllers place constraints on the OPFOR that enable the accomplishment of BLUFOR training objectives.

One example provided by the integrated fires command was related to counterfire. During a previous exercise, a training audience was having difficulty with counterfires. The OPFOR was constrained on its ability to shoot beyond a certain phase line for a period of time until the training unit was able to troubleshoot its systems and procedures and ensure it was ready. The OPFOR worked directly with the BLUFOR to set aside a firing platoon separate from the competitive zone and fire directly through the radar coverage to test the system. The exercise controllers were able to reduce the variables to enable the Observer Controller Trainers to coach the training audience on the appropriate employment of the systems and procedures.

Mission Command Systems (Not Army Battle Command Systems)

I expected to observe and take away insights and best practices on how to conduct the operations process and enable Mission Command. The OPFOR Commander talked about these specifically in the hybrid threat brief. I was also able to observe the OPFOR conduct the operations process during the exercise. This included daily assessments, adjusting estimates, integration, synchronization of assets, and decisionmaking in order to reduce BLUFOR opportunities and create OPFOR opportunities. I expected that when doing all of these things correctly the OPFOR would be rewarded with success, or the lack of synchronizing these efforts would result in failure. I also observed the OPFOR very deliberately and discriminately seizing opportunities that were created or allowing them to pass by, based on the exercise guidance exemplified by the example discussed in the previous paragraph.

I did not learn how to beat the OPFOR. I learned that winning means something different for every unit and this solidifies the importance of training objectives.

I was briefed on the OPFOR planning cycle for an exercise but did not have the opportunity to observe it. The planning cycle includes three weeks of the deliberate military decisionmaking process (MDMP), where the largest amount of time is spent conducting intelligence preparation of the battlefield (IPB) and reverse functional analysis. When the OPFOR conducts IPB, every function lead covers where he estimates the BLUFOR actions to be in time and space. The OPFOR believes that if it gets IPB wrong, then everything done after that is a waste of time. It also believes that if it gets IPB correct, the rest is easy given the mission command environment. The end state of the three weeks includes an operations order back-brief to the OPFOR Commander at the OSC and DTG level, which also includes all OPFOR functions.

Experience, Experiential Learning

I expected to observe what happens when you know your terrain and you've practiced something over and over again. The World Class OPFOR is good at what it does because it is all that it does. The Army is rusty when it comes to operating in a decisive-action environment. It will be almost impossible to "beat" the OPFOR or to get inside its decision cycle. However, applying the operations process/MDMP to solving all problems will help a given training unit become more efficient, effective, and help close the gap.

Professionalism, Success

My final expectation was nothing less than a professional and World Class OPFOR who was welcoming and transparent. Nothing was off limits to me. I did not learn how to beat the OPFOR. I learned that winning means something different for every unit and this solidifies the importance of training objectives. Leadership's definition of winning needs to be decided before the WFX, because every unit is at a different state of readiness.

Surprises

Context, Broadening

There are a few things that were not expected prior to my Ride Along. I learned more from the experience than I expected. This began with understanding of exercise design, the role of EXCON, and the multiple computer systems that make up the federation (e.g. Warrior Simulation, Warrior Simulation Intelligence Model and Air Warfare Simulation, etc.).

Simplicity, Priorities

The job of warfighting is complex. Units that do not have clear, concise, and specific priorities they ruthlessly reassess and enforce will have a difficult time. Staffs must be able to understand what is important, what is not, and prioritize

accordingly. Units must focus on what they can influence and solve accordingly. This must be done at all levels for an organization to be successful. OPFOR and the ECG are great at being able to prioritize at echelon and influence appropriately. Anything less is a waste of time.

Operations Process (MDMP) is NOT Linear

IPB does NOT end at mission analysis. Staffs habitually view MDMP as a linear process and are reluctant to employing it as a tool to solve problems. OPFOR embraces the iterative nature of the operations process and executes it very well. This was observed as the rapid decisionmaking process. Each and every day, the OPFOR leveraged its OSC Commander's update brief as an assessment tool to answer three big questions for the commander. This helped the staff focus on critical information to make decisions. The questions were:

- Is the enemy (BLUFOR) where we thought (estimated) he would be in time (operational timeline) and space (map)?
- Are we (OPFOR) where we thought we would be (estimated) in time and space?
- What is/are the next decision(s) we have to make?

This is clearly a gross oversimplification. However, if BLUFOR cannot answer these questions during a commander's update brief, then we are wasting time. Additionally, this is the OPFOR's primary means to provide assessments to the commander. It also implies that when we get to the third day of an exercise we planned on being somewhere in time and space. This translates to decisions, unit actions, and conditions on the battlefield that we are trying to achieve. This is the chance to understand opportunities we have created or risks we must mitigate. Both of these come about if BLUFOR or OPFOR are NOT where we anticipated. The MCTP OPFOR is extremely efficient and effective at this process, which provides it the ability to understand the larger picture and not get too deep into things that are not relevant.

Assessments

Your ability to assess informs how successful you are. The importance of assess, assess, assess, wasn't lost to me. We should always be asking ourselves "are we on track; is the opponent where we thought it would be in time and space; are we in react mode or do we have an opportunity to exploit an opponent weakness?"

Reconstitution

The OPFOR is not allowed to reconstitute anything unless it lacks the capacity to stimulate a training objective without the specific asset. When this occurs, it requires approval from the MCTP Commander. Reconstitution did NOT occur during WFX 16-5.

Decision Point Tactics (DPT) and Analysis of Competing Hypothesis (ACH)

The OPFOR Commander briefed during the hybrid threat brief that his two favorite documents were the Center for Army Lessons Learned (CALL) Newsletter from January 1997 titled "Decision Point Tactics" and "Analysis of Competing Hypothesis" by Richard Heuer, the C502 lesson plan from the Command and General Staff College. CALL is in the process of updating the bulletin on Decision Point Tactics. Both DPT and ACH documents are available through open-source search engines.

What I saw in my two weeks with the OPFOR was the practical application of both ACH and DPT in an operational environment. The OPFOR does not view these as separate from MDMP, but complimentary. The OPFOR also does not create a single course of action with detailed and specific plans. Instead, it creates a single plan with multiple courses of action consisting of branches or sequels. The OPFOR only plans deep on something that requires it, and it practices mission command everywhere else.

We should always be asking ourselves "are we on track; is the opponent where we thought it would be in time and space; are we in react mode or do we have an opportunity to exploit an opponent weakness?"

Insight—Behind the Curtain

There are a few things I observed that, if taken out of context, could distract from training.

Balance, Finding and Maintaining the Sweet Spot

"Finding the Sweet Spot" is often discussed by OPFOR. The OPFOR goes through painstaking detail to ensure it finds and maintains the balance to challenge each unit in a WFX appropriately, without overwhelming or underwhelming the same. Both extremes are counterproductive to training objectives.

An OPFOR synchronization meeting occurs daily between the OPFOR, Scenario Design, EXCON, and each operations group. The OPFOR briefs its plan for the next 3–5 days that is in-depth across the battlefield. The operations groups have the opportunity to influence the course of action or let it play out. This includes letting the OPFOR know if it needs to increase or decrease the intensity in a given area. If the OPFOR needs to increase the intensity, it works diligently to ensure the actions are nested within its operational narrative and that indicators and warning are provided to the training audiences.

The OPFOR synchronization meeting is chaired and attended by a cast of lieutenant colonels. Any stimulus or decisions that require approval above the lieutenant colonel level go to EXCON for approval. These include significant deviations from the scheme of maneuver, commitment of a DTG-size force, or the employment of chemical munitions.

The OPFOR almost always has the capacity to mass and overwhelm a given training audience at any given time. It is a training aid and deliberately seeks the opportunity to reward positive behavior of a training audience or punish negative behavior. If a unit is struggling, the OPFOR will capitalize on opportunities presented but only to a certain extent. Anything beyond setting the conditions for a lesson to be learned becomes counterproductive.

OPFOR Cheating?

I have come to the conclusion that the OPFOR does NOT cheat and does not need to. It has the capacity to overwhelm all training audiences in any exercise simultaneously and win the WFX. This is NOT its mission or intent. I observed very deliberate efforts on the part of the OPFOR, the Exercise Control Group, and MCTP as a whole to protect the integrity of the exercise. When training units suggest that the OPFOR is cheating, they are creating excuses and not placing emphasis on their internal systems. They are also not focusing on getting the most out of their training experience.

Air Superiority as an Assumption for Ground Operations

MCTP can provide a scenario to train a Joint Task Force so training units can potentially work with joint and/or coalition partners. While these are Army exercises, the integration of joint fires is a critical component to success. The joint air force that is partially replicated through the simulation was extremely successful at destroying the OPFOR. So much so, that it distracted from the maneuver integration and synchronization with artillery and Army aviation. I assess that the air power effects during WFX 16-5 were likely unrealistic and MCTP is taking appropriate actions to adjust. I believe this adjustment was likely implemented prior to the execution of WFX 17-1.

The OPFOR almost always has the capacity to mass and overwhelm a given training audience at any given time. It is a training aid and deliberately seeks the opportunity to reward positive behavior of a training audience or punish negative behavior.

We as a military might need to challenge, or at least acknowledge, that "air superiority" is an assumption—not a fact. There are multiple locations around the world that this assumption might not be valid. This, coupled with the fact that we as an Army do not have the liberty to determine the conditions where we are employed, indicates we should at a minimum consider what this looks like if we do not have air superiority.

Sharing Experiences and Lessons across the Force

Each training audience in a WFX receives a final exercise report (FER) that captures critical lessons or best practices across each warfighter function for its specific unit and exercise. The FER is property of that training unit and is usually provided to the training audience within 30 days of the exercise. The comments of multiple FERs are sterilized and collated on a periodic basis to become lessons learned. These products are published for consumption across the force and include many best practices that MCTP has observed, with the intent to help units operate more efficiently and effectively.

I was provided two significant opportunities to prepare for our WFX. First was participation in WFX 16-4 as part of a response cell. Next was the OPFOR Ride Along during WFX 16-5. Both opportunities have provided great insight into the

lessons of others, as well as what others are struggling with. We all must be professional in our experience, learning, and sharing so that we may learn from others and they from us. We must share with others outside of our immediate chain of command and across units. I appreciate the opportunity others have provided to help me learn and grow as a professional. Writing this article is the first step I am taking toward repaying that endeavor. I encourage you to do the same and share your experiences.

Synergy across the Force

How you perform—or not—during a Warfighter exercise is informing the rest of the Army. While the report card concept is history, we truly are our own worst and hardest critics. Peer groups within each warfighter function are watching carefully as well. The Chief of Staff of the Army and the Forces Command Commanding General participate in all the final after-action reports, either in person or via video-teleconference. Lessons learned are captured and shared across the communities of interest and, while your specific unit name is stricken, you personally know "that was us!"

People, the OPFOR Team

Finally, I terribly regret not having enough time to get to know better the great Americans who serve as the OPFOR. I was honored to sit down and speak candidly to Chuck Hagameister, Medal of Honor (MOH) recipient—vice awardee, because I was reminded that "the MOH is not something you shoot for!" I was also honored to sit down and talk with renowned author Brice Barnes, who wrote an amazing compilation of Vietnam War vignettes telling the positive stories of the conflict. I was tickled to find out that the chief of OPFOR Information Warfare is a practicing lawyer—and darn good at it. The same holds true of the myriad of other great Americans who are willing to sit down and walk you through a process or operation, the integrated fires or air defense elements, or how to develop engagement areas or employ artillery in as much detail as you can stand—still serving their country many years after retirement. The cumulative years of experience on the OPFOR was tallied at around 600. My experience with the MCTP OPFOR was extremely beneficial and I highly recommend it to anyone preparing to conduct a WFX or who otherwise wants to learn how the OPFOR conducts the operations process. Just a hint at what you might find, but come see for yourself! If interested contact MAJ Josh Smith at 913-684-8718 or joshua.j.smith11.mil@mail.mil, or LTC Matt Rawlins at 913-684-8175 or matthew.c.rawlins.mil@mail.mil.

AFTER-ACTION REVIEW, MARCH 2017 THREAT TACTICS COURSE

by Kristin Lechowicz, TRADOC G-2 ACE Threats Integration (DAC)

TRADOC G-2 ACE-TI conducted the spring resident offering of the Threat Tactics Course (TTC) during 27–31 March 2017 at Fort (Ft) Leavenworth, Kansas. The student population was represented by 18 diverse organizations that included civilian, active, and Reserve/National Guard Army components. The TTC classroom's size normally holds between 14–16 students in order to conform to the Army learning model. The course graduated 29 students, including a number of students that chose to audit the course. Several students were stationed locally at Ft Leavenworth from organizations like the Mission Command Training Program (MCTP) and the Command and General Staff College. Numerous students also traveled from other installations such as Ft Riley, Ft Bliss, Ft Campbell, and Ft Sam Houston, and Reserve/National Guard elements were also represented from across the United States. Figure 1 illustrates the TTC student breakdown by organization.

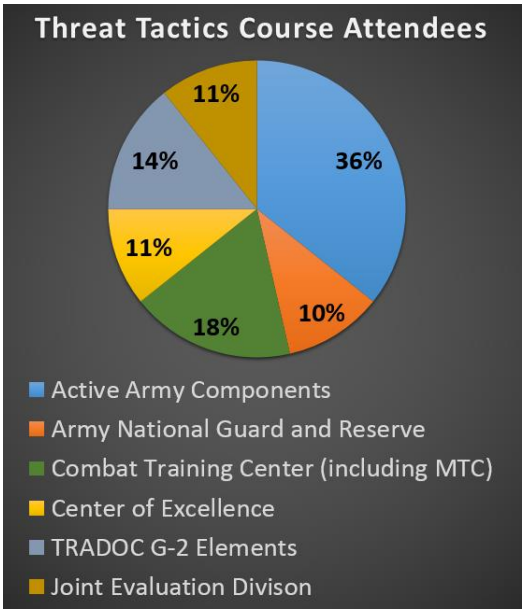


Figure 1. TTC attendees

The objective of the course offering was to deliver a professional 40–hour block of instruction focused on threat doctrine. The students defined threat actors and reviewed tactics and techniques based on the Training Circular (TC) 7-100 series of products on opposing force doctrine. The doctrine was supplemented and supported with past and present threat examples taken from the strategic environment. The following examples are derived from this evolution of the TTC.

The March offering of the TTC course was no different than past classes, which included topics that are important to a broad audience throughout the training community. This type of block of instruction is key to scenario developers at the combat training centers, centers of excellence, or home station training, along with S-2/G-2s, enabling them to understand the threat in training or deployment. Figure 3 illustrates how ACE-TI creates doctrine using real-world examples that, in turn, transition into the TTC.

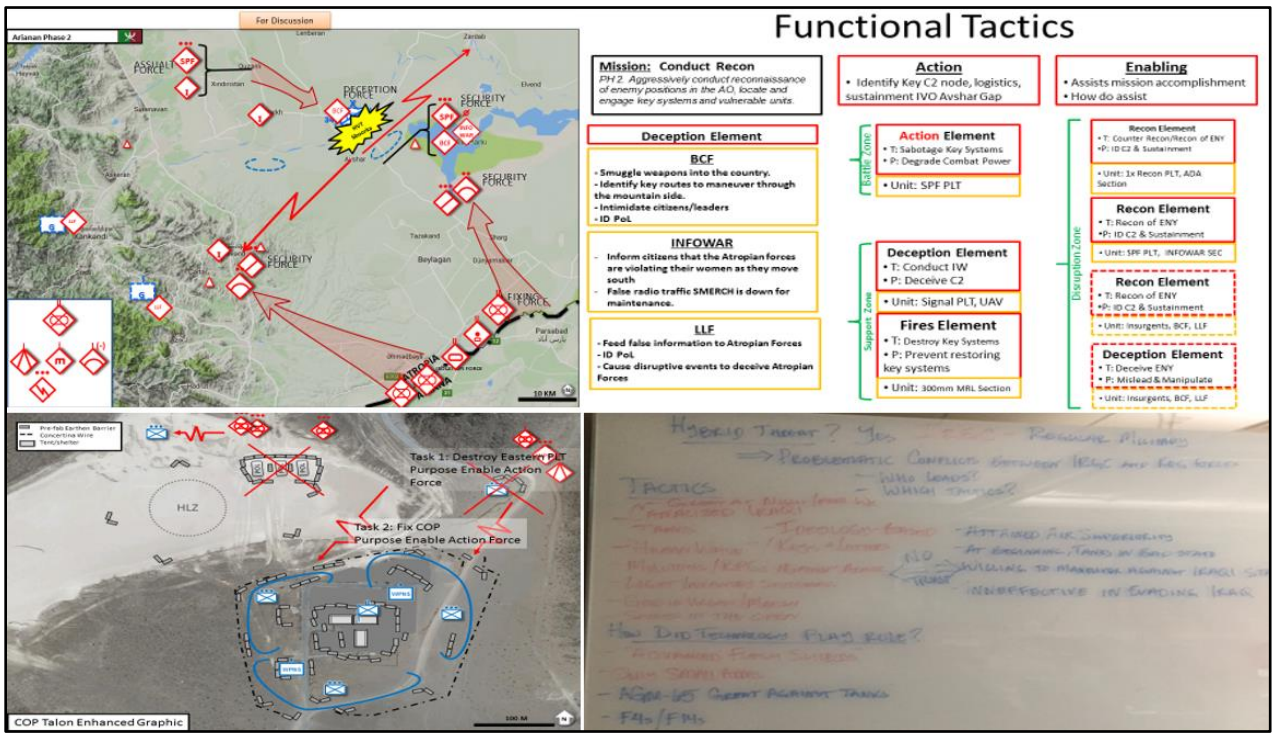


Figure 2. Student example products from March's resident Threat Tactics Course

Discussion topics included the following:

- Threat concepts and functional tactics,
- Operational environment (OE) variables and sub-variables,
- Hybrid threat in complex and persistent conflict,
- Threat actors: regular and irregular forces and elements,
- Offensive and defensive tactics and techniques, and
- Emerging threats.

Figure 3. ACE-TI's support products to the training community

The Threat Tactics Course, much like the threat, will continue to evolve and develop. The TTC block of instruction is now Foundry "approved training" and on the pathway to being included in the Army Training Requirements and Resources System (ATRRS) catalog. The next TTC offering will be held at Ft Leavenworth from 24–28 July of 2017. This course is limited to 16 students. The TTC is also offered as a mobile training team (MTT) under the condition that the instructor(s)' travel expenses are funded by the hosting unit or through Foundry funding**.** To receive information about future course offerings or to request an MTT, please contact Kristin Lechowicz at (913) 684-7922 or Kristin.d.lechowicz.civ@mail.mil.

What ACE Threats Integration Supports for YOUR Readiness

- Determine Operational Environment (OE) conditions for Army training, education, and leader development.
- Design, document, and integrate hybrid threat opposing forces (OPFOR) doctrine for near-term/midterm OEs.
- Develop and update threat methods, tactics, and techniques in HQDA Training Circular (TC) 7-100 series.
- Design and update Army exercise design methods-learning model in TC 7-101/7-102.
- Develop and update the US Army *Decisive Action Training Environment (DATE)*.
- Develop and update the US Army *Regionally Aligned Forces Training Environment (RAFTE)* products.
- Conduct Threat Tactics Course resident at Fort Leavenworth, KS.
- Conduct Threat Tactics mobile training team (MTT) at units and activities.
- Support terrorism-antiterrorism awareness in threat models and OEs.
- Research, author, and publish OE and threat related classified/unclassified documents for Army operational and institutional domains.
- Support Combat Training Centers (CTCs) and Home Station Training (HST) and OE Master Plan reviews and updates.
- Support TRADOC G-2 threat and OE accreditation program for Army Centers of Excellence (CoEs), schools, and collective training at sites for Army/USAR/ARNG.
- Respond to requests for information (RFIs) on threat and OE issues.

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