Strength Punishes, Speed Kills: the Stryker Weapons Troop at National Training Center

by CPT Jared Wayne

Two historic "firsts" occurred during decisive-action-training Rotation 15-10 at the National Training Center (NTC), Fort Irwin, CA, in 2015.

The 1st Stryker Brigade Combat Team (SBCT) of 4th Infantry Division became the first Stryker BCT to achieve a decisive victory at NTC, and its assigned Troop E, 2nd Squadron, 1st U.S. Cavalry Regiment, fought as the Army's first Stryker weapons troop.

It was not a simple fight because 1st SBCT had to defeat an opposing force that was skilled and determined with considerable experience against Stryker organizations. Fortunately, the brigade's newly formed weapons troop changed the dynamic by providing the brigade's commanders a fast, lethal organization that was highly flexible and could be employed using a variety of methods to achieve or enable dominance at the decisive point.

Eagle Troop activated in April 2015. Four months later, the troop and 1st SBCT deployed to NTC. Eagle Troop's experience from activation through validation at NTC is my focus here. I will briefly discuss weapons-troop theory, organization, scenarios, capabilities and recommendations for increased effectiveness. My conclusions and observations are influenced by my time as the Troop E commander, during which I led the troop from its consolidation with the Stryker anti-armor company and activation as the weapons troop through the brigade's home-station field-training exercise at Pinion Canyon Maneuver Site (PCMS) and our validating rotation at NTC.

Historical perspective

The Army's decision to organize a Stryker weapons troop in each SBCT can be traced to our tank and tank-destroyer experiences in the first half of the 20th Century. The anti-tank vehicles (ATVV) and the Mobile Gun System (MGS) have striking similarities to the U.S. Army's World War II tank destroyers. Troop E explored some of the anti-armor and tank-destroyer concepts, capitalized on some of the Army's experiences and offered some examples of "a way" to lead, train and employ the formation.

At the outbreak of World War II, the U.S. Army watched the massed German armor formations decisively defeat the Polish and French armies. The German blitzkrieg's tremendous success in Poland and France convinced the United States that "the principal agent of the Allies' demise had been the German panzers … [resulting in] an exaggerated fear of the tank that overlooked Allied strategic blunders in France and obscured the combined-arms nature of the panzer division."[1] Having defined the anti-armor challenge as one of massed tank-pure formations, the U.S. Army's response was, in part, to create tank-destroyer units whose sole purpose was the destruction of massed tank-pure forces. The Army's rationale during World War II for tank destroyers was one of economy.

The rapidly deployable SBCT (relative to an armored BCT) is equipped with tube-launched, optically tracked, wire-guided (TOW) missile-equipped ATVVs that are light enough to rapidly deploy, but it lacks the M1 Abrams armor and tracks. The ATVVs formed the SBCT's anti-armor company and became the nucleus of the weapons troop.

The MGS arrived in the weapons troop by a different path. The MGS was not intended as an anti-heavy armor platform and was assigned to the infantry companies to support infantry operations. However, the low platform density, coupled with the challenges associated with having a low-density military-occupational specialty in each infantry company, meant that consolidating the MGS fleet and crews in the cavalry squadron would improve training and administrative effectiveness. However, it also meant new tactical opportunities beyond those for which the MGS was originally designed.

Much like the tank destroyers of World War II, the ATVV and MGS are heavily armed, lightly armored and highly maneuverable. They also support the SBCT's rapid deployability. The tank-destroyer experience serves as a primary backdrop to understand the weapons troop and can guide our development of the formation in a positive direction.

Tactical employment theory

Each vehicle platform in the weapons troop has a unique purpose and must be considered during task organization and tactical employment to produce maximum effects on the enemy while minimizing losses. To accomplish this goal, we centered our strategy for employment of a weapons troop on heavy exploitation of a potential adversaries' weaknesses.

Armies train armor crews to identify threats, prioritize them from most to least dangerous, and engage accordingly in rapid fashion. To that effect, the U.S. Army developed principles to help Soldiers make these assessments, followed by requiring their mastery during gunnery. Tank trainers teach crews to conduct single-target engagements rapidly and deliberately set the standard for loaders so they can load tank rounds at the same speed as the vehicle engages targets. Heavy-armored vehicles are now also increasingly capable of firing while moving, using equipment that greatly increases accuracy. Their gunnery practices also incorporate more difficult engagements where both the shooter and the target move.

By comparison, the ATVV can destroy heavy armor, but it can only fire while stationary and requires a significantly longer engagement time relative to its target. If an opposing tank can accurately engage a point target four times faster than an ATVV, this means the ATVV could potentially be destroyed four times before it has a chance to engage with a single TOW missile against a target. On the other hand, the MGS is capable of firing on the move but its 105mm main gun and automatic loader means that reloading each round may take twice as long as an opposing tank. These technical aspects are absolutely critical to consider when employing a weapons-troop platoon.

With these time standards as a guide, we developed a strategy that reduced an enemy's potential to engage accurately and rapidly. We determined that the main objective during any weapons-troop engagement was to enable the ATVVs – not the MGS – to successfully engage enemy heavy armor without being destroyed. We accomplished this by firing single rounds from each position before displacing since the firing signature alerts the enemy to its location. (There are exceptions that would permit multiple shots from the same firing position.) To do that, multiple alternate battle and firing positions are necessary. Leaders must also consider weapon ranges and munition flight times.

Another option is to use the MGS to force the enemy to concentrate on them. Their maneuverability allows greater survivability than the ATVV. Also, the engagement of an enemy vehicle's crew is just as debilitating to the target as is damage to the platform itself and can be conducted at the section or platoon level. This engagement can be coordinated by the weapons-troop commander. The damage inflicted by an MGS may also be sufficient to allow the ATVV to engage the target with less risk. To execute this maneuver, MGSs can engage while rapidly moving toward or adjacent to the enemy. The MGSs can also engage at close ranges, particularly from the flank or rear. These maneuvers can be initiated from multiple positions, preferably reconnoitered in advance.

A third option is to fire volleys in succession or simultaneously, using multiple weapons systems. The effect of these fires either distracts the enemy from targeting subsequent friendly shooters, or through the volume of signatures, it obscures which munitions are the most dangerous to the enemy. Friendly units can also use cross, depth, frontal or a mix of the three fire patterns to increase survivability by masking or obscuring the types of weapon systems being fired.

Task organization

Strength through flexibility. The weapons troop's main strength is its flexibility; its organization can be configured to meet a wide range of individual scenarios. The brigade commander determines the weapons troop's task organization, using the brigade S-2 section – with its information-gathering assets and ability to generate intelligence – to make the decision. The keys to the troop's flexibility are the habitual relationships between platoons and their supported units. These relationships increase the effectiveness of deliberately planned actions as well as enabling the troop to hastily re-task-organize if necessary.

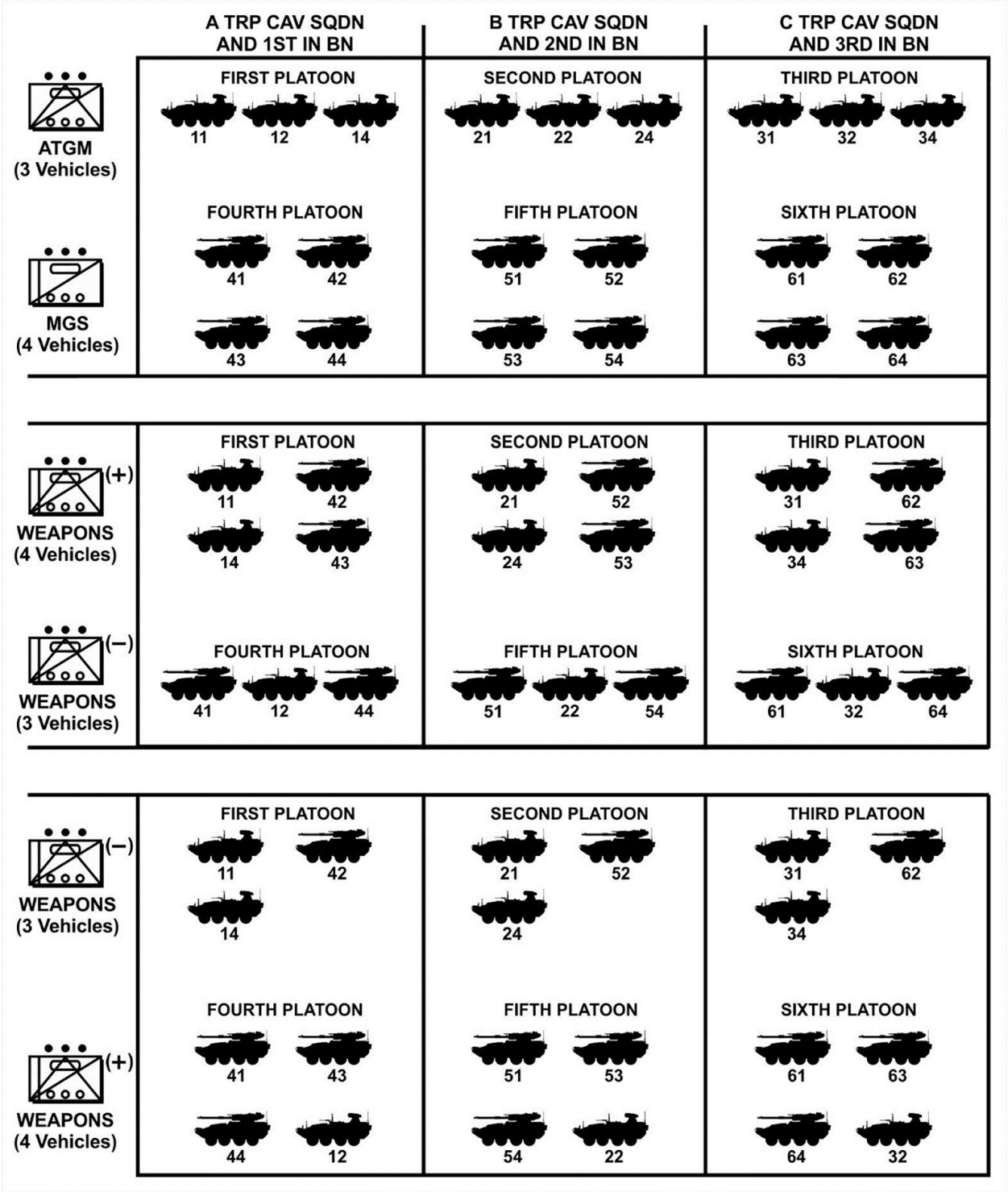

Figure 1. Task organization. *(Graphic by CPT Jared Wayne)*

We established external and internal habitual relationships with Troop E's platoons. Figure 1 illustrates the external relationships between platoons and with the infantry battalions and cavalry troops. We also established relationships between platoons within the troop. The external relationships enabled trust, familiarity, improved logistics support and increased tactical effectiveness. The internal relationships enabled platoons to "weaponize" by altering their platoon-internal compositions through platform exchange. There are several task-organization

techniques, each with their own set of advantages and disadvantages that, when coupled with habitual relationships, increase the troop's effectiveness. They are also not the only task-organization techniques, but additional options add unit training objectives with their associated costs.

Methods, scenarios

This section discusses some of the methodologies and processes used as well as scenarios that demonstrate Troop E's implementation at PCMS and NTC. The keys to the unit's success were flexibility, speed, violence of action and an intimate understanding of the enemy. We focused training on performing a limited number of basic collective tasks well and on conducting leader development that emphasized situational understanding, comfort with ambiguity, a willingness to exercise intelligent initiative and creative problem-solving. Our efforts created a unit that was very good at a few things, could confidently and effectively execute tasks that were not explicitly trained and had mentally adaptable leaders who could take advantage of enemy weaknesses, knowing when and how to do so.

Engagement-area (EA) template. EA development is critical to the execution of the anti-armor mission. Every EA is also subject to mission, enemy, terrain, troops available, time and civil considerations (METT-TC) and is therefore unique. Every EA also requires considerable planning by commanders and leaders, but the weapons troop may find itself in a situation where it must use a number of EAs while lacking the time to thoroughly plan each one. An approach to this problem involves creating an EA template that can be applied to every potential EA. These EAs can then be prioritized, modified and planned to standard with the time available. The remaining EAs can be modified hastily as conditions permit, including when activated, thereby reducing the amount of communication to subordinates, adjacent units and higher headquarters by transmitting only information pertaining to the template modifications.

It is important to note that the weapons troop does not necessarily initiate an engagement at the leading edge of the EA. If it does so, it reveals its positions and exposes the troop to unnecessary retaliatory fire, allows the enemy to decline to enter the EA or change its plan or method of attack. If the weapons troop initiates at a range with the MGS capabilities in mind, the enemy is already committed to the course of action (CoA) that takes them through the weapons troop's EA and forces them to lose combat power regardless of whether they continue or abort the attack.

Follow and support a zone reconnaissance. One task that the weapons troop can perform is to follow and support reconnaissance elements as they conduct zone reconnaissance. Weapons-troop platoons supporting a cavalry troop generally follow a terrain feature behind their supported elements, or they move from hide site to hide site to conceal their presence and preserve the element of surprise when committed. The rest of the weapons troop follows behind the weapons-troop platoons attached to cavalry troops, using positions that enable rapid movement to support the cavalry troop if their assigned weapons-troop platoon encounters a threat that exceeds its capability to destroy quickly. This method allows reconnaissance elements to remain concealed to facilitate the continuance of the reconnaissance mission while providing more lethality to destroy enemy forces.

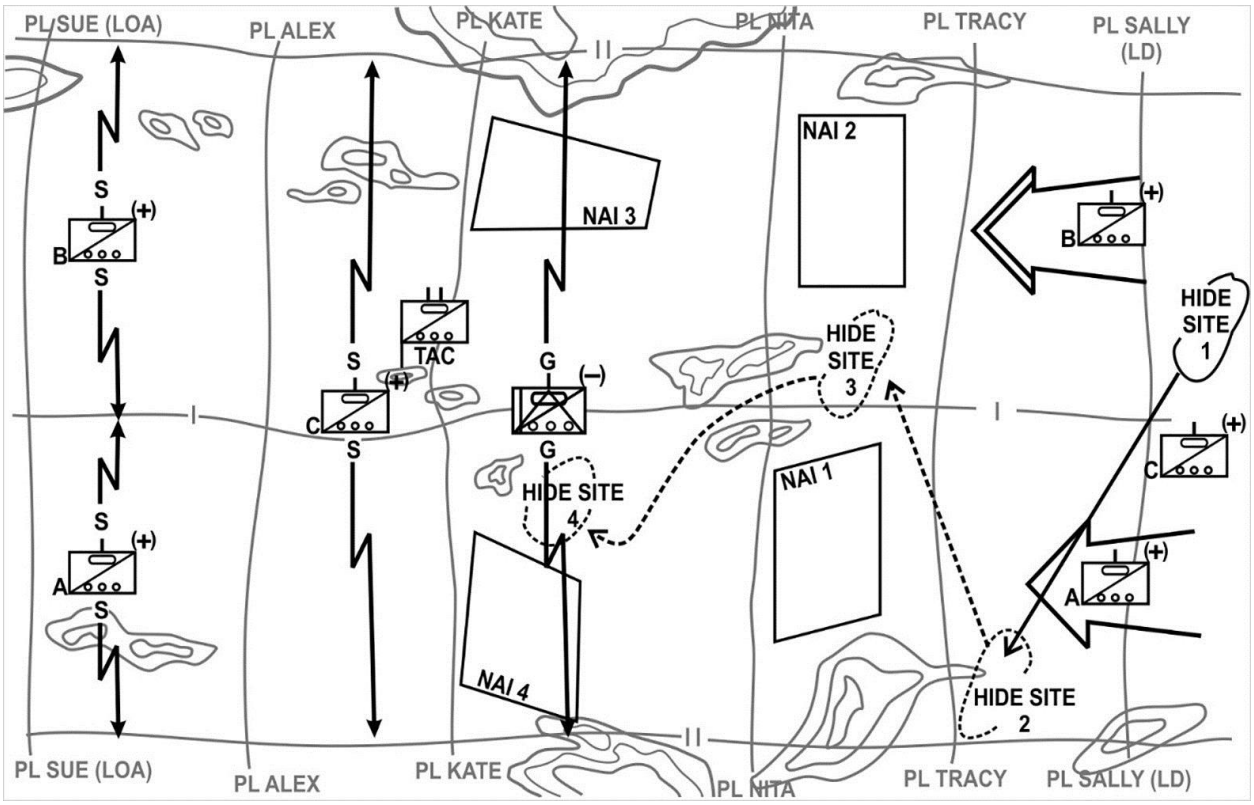

Figure 2. Follow and support a zone reconnaissance. *(Graphic developed by CPT Jared Wayne for Army Technical Publication (ATP) 3-21.91,* ***SBCT Weapons Troop****)*

As described in Figure 2, weapons-troop platoons follow their assigned cavalry troop. They occupy hide sites along the axis of attack to conceal themselves. Once the supported reconnaissance units make contact with an enemy force, the cavalry-troop commander decides whether to employ his attached weapons-troop platoon. Depending on the enemy's composition, the weapons troop can commit elements to support an attached weapons-troop platoon.

This method allows the destruction of enemy forces while preserving the weapons-troop platoons' combat power to the greatest extent possible. However, METT-TC conditions and the higher headquarters' guidance will dictate the degree of acceptability for lost combat power, which may mean re-engaging from the same positions. In practice, weapons-troop leaders must be comfortable with dynamic tactical conditions that affect position placement but also require the troop to rapidly change missions.

Guard. The weapons troop destroys enemy reconnaissance forces in support of a screen line in much the same way as it does while supporting a zone reconnaissance. The primary difference is that the operation is defensive rather than offensive. The key components of success are to remain concealed from the enemy except when engaging targets, use covered and concealed routes to and from friendly EAs and associated battle positions (BPs), and ensure the battle handover from the forward reconnaissance units to platoons in support of a cavalry troop and the weapons troop that are supporting the cavalry squadron or troop.

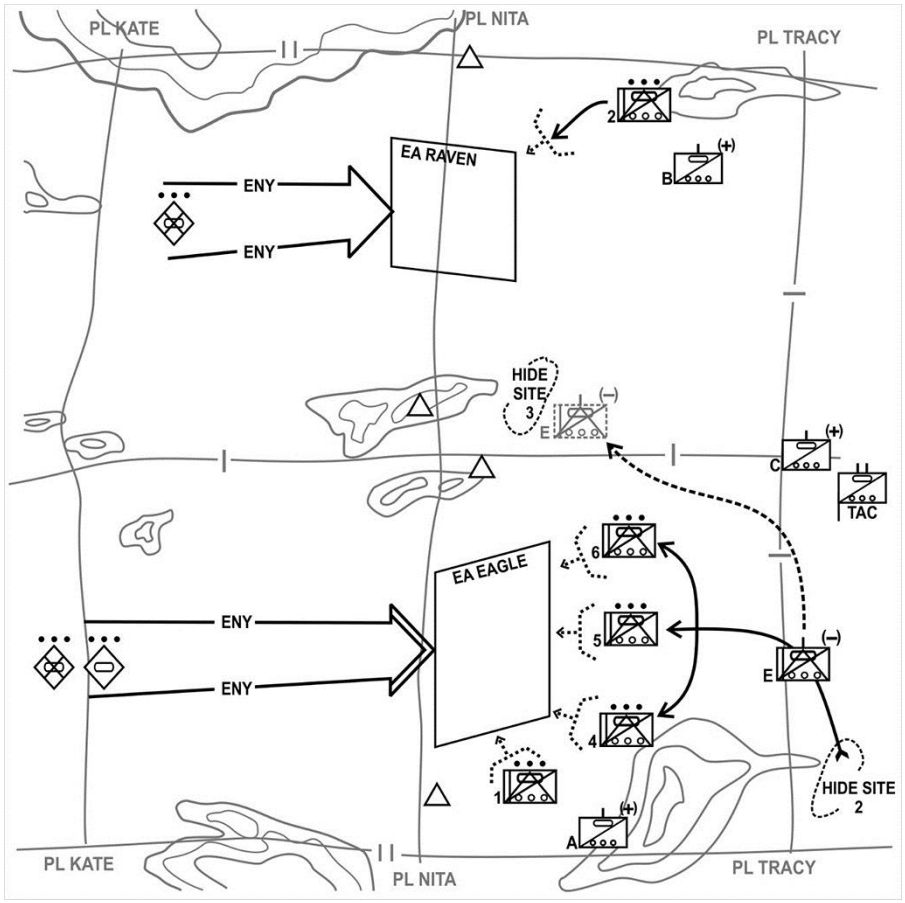

Figure 3. Guard. *(Graphic developed by CPT Jared Wayne for ATP 3-21.91)*

As illustrated in Figure 3, a cavalry troop is supported by a weapons-troop platoon, with the remaining weapons troop supporting the squadron. Both the larger weapons troop and its platoon attached to the cavalry troop are in separate hide sites, and the cavalry troop is deployed in depth on its screen line. Engagements occur based on the identified enemy's composition and disposition to maximize enemy casualties while minimizing target overkill.

Defend. More complex than supporting screen-line operations, a defense requires significant planning by the weapons-troop commander and his/her higher headquarters. A defense can be conducted at one or multiple locations, and it's limited primarily by the weapons-troop commander's ability to mission command the operations and by the disposition of the SBCT's defense. Depicted in Figure 4, the weapons troop has been tasked to defeat an enemy's mechanized penetration of the SBCT defense.

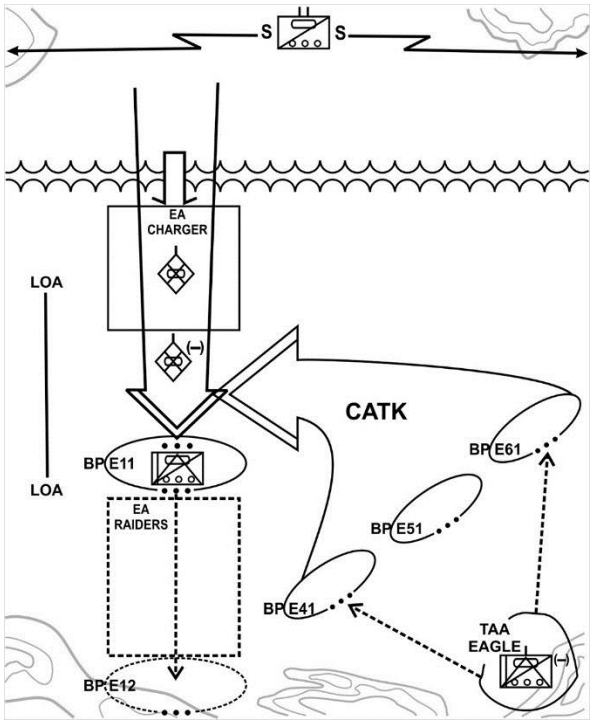

Figure 4. Defend. *(Graphic developed by CPT Jared Wayne for ATP 3-21.91)*

The weapons troop initially conducts a defense in depth using multiple EAs. This plan supports the mobility advantage of the Stryker platform and slows the enemy's rate of march. By trading space for time, the weapons troop can inflict casualties with multiple volleys using several EAs while preserving its combat power. However, once clear of the SBCT's primary defensive positions, a counterattack becomes a possible CoA.

Attack. The weapons troop also has the ability to conduct offensive operations. It attacks using two primary methods: a flank attack or a penetration. The flank attack is the preferred method because it uses an assailable enemy flank and allows the weapons troop to maintain its ability to maneuver. Any attack, such as a turning movement, where the weapons troop engages from a static position is less preferred because it fixes the troop once it occupies its primary BP. It also exposes the troop to enemy indirect fires and aviation assets.

Conduct a task-organized attack. To conduct a task-organized attack, heavy armor, infantry or reconnaissance units must be attached to the weapons troop. These capabilities enable the weapons troop to conduct a penetration and keep the passage lane open if necessary. A penetration can also allow a raid that disrupts enemy operations in depth, seizes key terrain that enables another unit's attack or diverts the enemy's attention from the location of the main effort. It can also be used to destroy critical enemy support units, mission-command nodes or indirect-fire assets. However, like other deliberate or special-purpose attacks, they require a significant commitment of reconnaissance assets to provide the necessary enabling combat information. Each has risks.

An example of a task-organized attack is included in Figure 5. This particular attack was a spoiling attack planned for Troop E at NTC, and it included two weaponized platoons (two ATVV and two MGS), a tank platoon and a Stryker scout platoon. The troop's mission was to destroy the opposing force's indirect-fire assets, logistics-support vehicles (Class III and Class V in particular) and mission-command nodes. The attack was conducted at night in less than 5 percent illumination, and it was heavily supported by aerial reconnaissance.

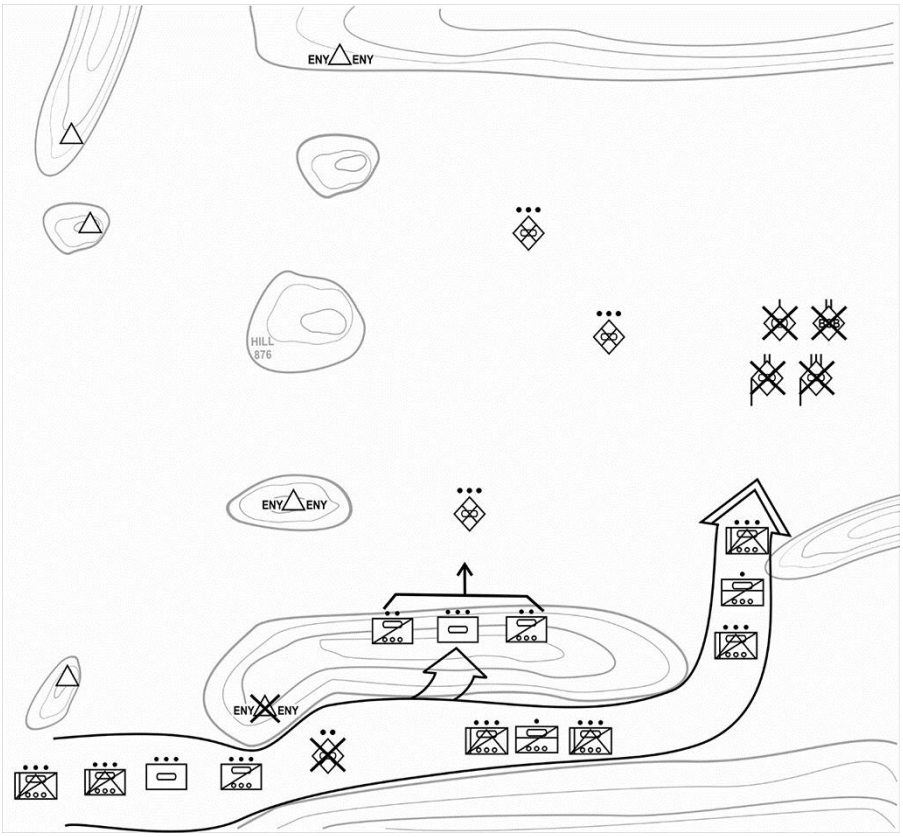

Figure 5. Task-organized attack. *(Graphic by CPT Jared Wayne)*

The plan used the scout platoon to locate enemy units in the vicinity of the western entrance to Hidden Valley and destroy them with the tank platoon to allow the weapons-troop platoons to penetrate the enemy's line. The tank and scout platoons then occupied a position overlooking the central corridor and engaged the enemy, compelling a response in force. This diversion enabled the weapons-troop platoons to move east and destroy the logistics, fires and mission-command nodes identified by aerial reconnaissance. Once complete, the weapons-troop platoons exfiltrated using the route secured by the tank and scout platoons.

The weapons troop's ability to rapidly move and maneuver was critical to the unit's successful employment. It allowed the troop to engage, disengage and re-engage on favorable terms. This increased lethality and preserved combat power. However, sustainment and mission command also contributed significantly to Troop E's success.

Sustainment

Sustaining the weapons troop is challenging. Our experience had three recurring difficulties:

- Understanding and forecasting requirements;
- Casualty evacuation; and
- Maintenance.

By the time of our NTC rotation, the brigade-support battalion, cavalry squadron and brigade headquarters became very adept at supporting the weapons troop. Our keys to successfully overcoming the challenges lay in predicting requirements, flexible plans, expertise and resources as far forward as possible. Then we had to communicate the requirements and capabilities to supported units. These keys facilitated planning and reduced the frequency and severity of reactive sustainment.

Mission command

Weapons-troop mission command can be challenging as well. Our goal was to rapidly achieve subordinate understanding of a situation and a leader's intent, and do so under combat conditions. In our experience, we

found some techniques to be particularly helpful: doctrinal understanding, succinct orders using truly useful templates and formats, graphics standard operating procedures, battle drills and aggressive use of parallel planning at echelon.

Influencing the enemy's command and control (C2). At NTC, the weapons troop made a deliberate decision to degrade the enemy's C2 system. Reducing their ability to react to our actions increased our lethality and survivability.

Our plan inflicted significant casualties on the enemy early in the rotation. We did this through careful planning and violent execution, accepting greater amounts of risk initially if it yielded considerably more damage to the enemy. In some cases, we even dismounted and destroyed enemy vehicles that failed to locally secure themselves. The confidence boost to our formation – coupled with the corresponding increased frustration in the opposing force – helped set the tone for the rotation. It also convinced the opposing force of our lethality and capability. This allowed us time to use other assets (such as indirect fire and aviation) to affect the enemy operations that attempted to fix or outmaneuver us.

When we executed a hasty defense in depth, our aggression also encouraged the enemy to overextend by having an element execute a retrograde. The advancing enemy was drawn into an EA overwatched by the weapons troop or another weapons-troop platoon, and was rapidly destroyed to prevent the communication of critical information to their higher headquarters.

The destruction of the enemy's observers and reconnaissance elements reduced the enemy's situational awareness and ability to execute operations. It therefore slowed the speed of enemy decisions. Also, it allowed us to influence their observations. For example, prior to destroying an enemy scout section, we might present the troop's guidon or additional forces to the observer and simulate an enduring presence. Once the observer was destroyed, we would rapidly move the troop to either exploit an enemy counterattack or move to another cavalry-troop sector in anticipation of an enemy response there. By doing so, any enemy retaliatory action was often against unoccupied terrain, and it sometimes unnecessarily revealed additional enemy forces that we could destroy.

We also presented multiple troop-level signatures in rapid succession when and where possible. The foundation of this strategy was the attachment of weapons-troop platoons to each cavalry troop, thus increasing the difficulty of determining whether the weapons-troop elements in the cavalry-troop sector were a platoon or the entire troop. This generated multiple reports from several enemy observers with seemingly conflicting information. Even if the enemy analyzed the reports correctly, determining the chronology of the weapons troop's actual actions and its current disposition was a difficult task. These actions allowed us to convince the enemy we were in a location of our choosing while simultaneously concealing our actual location. In several cases, the enemy committed forces to destroy the weapons troop at the false location, in turn allowing us to achieve surprise and engage on advantageous terms, inflicting considerable casualties.

Conclusion

The weapons troop's strengths are flexibility and speed. The unit can be task-organized to meet specific force requirements across the brigade, further enabled by habitual relationships. The weapons troop can also be committed at a location and time of a commander's choosing, optimizing the conditions under which the unit will fight. It can also be used to provide anti-armor capabilities across the brigade's area of operations, thus providing options for battalion- and company-level commanders. The most important asset is the unit's speed that allows it to rapidly relocate and reorganize to adapt to changing conditions.

Of course, the weapons troop's flexibility is only as good as the intelligence driving the decisions on where, when and how to employ it. The weapons-troop commander is an important part of the intelligence flow within the brigade. He/she must be able to outthink the enemy and exploit the enemy's weaknesses – ruthlessly. When engaged with enemy heavy armor, every shot counts, and every vehicle protected to continue the fight is significant.

Take-away

The weapons troop is capable of influencing the battlefield in a far greater way than its modified table of organization and equipment might suggest. Much like the Army's World War II tank destroyers, the weapons troop's strength in flexibility allows it to mitigate the advantages an enemy may have via its heavy armor. The weapons troop can also support reconnaissance and security, plus offensive and defensive tasks. It can even conduct its own offensive and defensive missions if properly task-organized. Employed correctly, the weapons troop is a formidable organization for the brigade and any unit that it supports.

Figure 6. Soldiers of 1st SBCT, 4th Infantry Division, tactically move a Stryker over the Mojave Desert during Decisive Action Rotation 15-10 at NTC, Fort Irwin, CA, Sept. 24, 2015. *(Photo by SGT William Howard)*

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A related article is available on-line at
https://army.deps.mil/army/sites/StrykerNet/Main/Weapons%20Troop%20Paper%20(20170223)%20(Final).pdf.
Note: A Department of Defense Common Access Card is required to access the article.

Notes

[1] Christopher R. Gabel, "Seek, Strike and Destroy: U.S. Army Tank Destroyer Doctrine in World War II," ***Leavenworth Papers No. 12***, Combat Studies Institute, U.S. Army Command and General Staff College, Fort Leavenworth, KS, 1985.

Acronym Quick-Scan

ATGM – anti-tank guided missile
ATP – Army technical publication
ATVV – anti-tank vehicle
BCT – brigade combat team
BP – battle position
C2 – command and control

CATK – counterattack
CoA – course of action
EA – engagement area
LD – line of departure
LoA – limit of advance
METT-TC – mission, enemy, terrain, troops available, time, civil considerations
MGS – Mobile Gun System
NAI – named area of interest
NTC – National Training Center
PCMS – Pinion Canyon Maneuver Site
PL – phase line
SBCT – Stryker brigade combat team
TAA – tactical-assembly area
TAC – tactical-actions center
TOW – tube-launched, optically tracked, wire-guided