Punching Above Our Weight The New Infantry Tactics of the 2nd Cavalry Regiment

Lt. Col. Timothy Wright, U.S. Army Capt. Victoria Hulm, U.S. Army Command Sgt. Maj. Daniel Rose, U.S. Army

The doctrine of unified land operations states that in both offensive and defensive operations, Army ground forces "seize, retain, and exploit the initiative to gain and maintain a position of relative advantage."¹ The ways in which different kinds of land forces do this, however, vary greatly. Light infantry battalions achieve relative advantage over their adversaries in very different ways than combined arms battalions. These formations are optimized for different doctrinal templates, and those templates are best applied in certain types of



terrain. When these formations combine the right tactics in the right terrain, they maximize their effectiveness.

The infantry squadrons of the 2nd Cavalry Regiment (2CR) occupy the middle ground between light and mechanized forces. With the firepower upgrades of 2018, the range of threats and environments in which these squadrons can effectively conduct land operations has expanded dramatically.² 2CR's unique task organization has generated new tactics that, when applied in the right terrain, allow it to fight as no other infantry formation in the U.S. Army.

As a result of these upgrades and innovations, a 2CR infantry squadron is most effective against superior forces when it initiates contact with the enemy in terrain that prevents the enemy from massing combat power. Whether in the offense or defense, sequencing indirect, missile, and direct fires enables a squadron to disrupt, fix, and then destroy enemy armored formations. Following engagement, it then moves its combat power to another position of relative advantage and repeats the process in depth either forward on the offense or rearward in the defense.



To be clear, this article is far from authoritative. It is simply a summary of the innovation and training currently underway in 2CR and their potential implications. These concepts were developed and tested during platoon, troop, and squadron live-fire and situational training exercises from September 2018 to June 2019, including Dragoon Ready 19 and Saber Guardian 19. Initial results are promising. In the offense and the defense, 2CR infantry squadrons applying these tactics experienced great success against opposition forces fighting with a variety of tactics and with systems ranging from BTR-70 armored personnel carriers to M1A2 Abrams tanks. While much more testing is required, it appears that 2CR's combination of tactics, firepower, and mobility increases the range of threats against which it can effectively fight. Therefore, 2CR is uniquely suited to respond to crisis against the broad spectrum of near-peer adversaries in the European theater-more so than light, armored, or even other Stryker brigades.

Overview

With the firepower upgrades of 2018, 2CR's infantry squadrons possess unique capabilities that enable them to seize initiative and gain positions of relative advantage, yet much remains unchanged. The centerpiece of an infantry squadron remains the Stryker vehicle and the infantry squad it contains. The Stryker vehicle provides superior tactical and operational mobility while each squad carries one M148 Javelin antitank guided missile (ATGM) and two AT4 anti-tank rockets; each platoon also has one M3 Carl Gustav recoilless rifle. 2CR infantry squadrons possess more dismounted firepower than any other organization in the U.S. Army. They are supported at the troop and squadron level by ten 120 mm mortars, four 81 mm mortars, six 60 mm mortars, and small unmanned-aircraft-system capability.

The truly unique capability of a 2CR infantry squadron is its mounted anti-tank systems. In 2018, 2CR fielded the Infantry Carrier Vehicle–Dragoon (ICV-D) and the Infantry Carrier Vehicle–Javelin (ICV-J), the newest combat systems in the U.S. Army.

Infantrymen in a Stryker Infantry Carrier Vehicle–Dragoon from 1st Squadron, 2nd Cavalry Regiment, fire its 30 mm cannon 28 August 2018 during a joint combined arms live-fire exercise at Bemowo Piskie Training Area, Poland. (Photo by Sgt. John Onuoha, U.S. Army) The ICV-D replaces the standard armament of the ICV with a 30 mm autocannon, bringing responsive, mounted anti-tank fire to the platoon level. Similarly, the ICV-J brings a remote weapons station that not only fires the MK19 automatic grenade launcher or the M2 .50 caliber machine gun but also launches Javelin missiles from the same platform. Together, these systems provide mounted firepower that can defeat armored threats in multiple ways.

Despite these upgrades, the regiment's Strykers retain some of their critical vulnerabilities. To preserve mobility and dismounted firepower, the Stryker remains a lightly armored vehicle. It offers protection against direct fire up to heavy machine guns and against fragmentation from indirect fire, but it remains vulnerable to larger caliber guns, rockets, and ATGMs. Additionally, unlike mechanized forces that possess both autocannon and ATGM fires on a single platform, a 2CR infantry platoon's mounted firepower is split between two ICV-Ds and two ICV-Js. Third, firepower in each platoon is further distributed across mounted and dismounted systems. Massing firepower requires a combination of both dismounted ATGMs and rockets with mounted ATGMs and 30 mm cannons.

Given its capabilities and limitations, 2CR's infantry squadrons cannot rely on the tactics used by heavier mechanized and armored forces. Such forces have the armor and firepower to survive chance contact, seize the initiative, and defeat peer forces. They can assault established defenses, conduct combined arms breaches,

Lt. Col. Tim Wright, U.S. Army, is the commander of 1st Squadron, 2nd Cavalry Regiment, in Vilseck, Germany. He has also served with the 25th Infantry Division, the 1st Infantry Division, and the 75th Ranger Regiment. Wright holds a BS from the U.S. Military Academy at West Point, an MA from the U.S. Naval War College, and a PhD from the Massachusetts Institute of Technology.

and clear heavily fortified positions. In the defense, mechanized/ armored teams can

Capt. Victoria Hulm, U.S. Army, is an assistant operations officer for 2nd Cavalry Regiment in Vilseck, Germany. She previously served as the intelligence officer for 1st Squadron, 2nd Cavalry Regiment, and in the 3rd Infantry Division. She holds a BS from the U.S. Military Academy at West Point. utilize fixed positions and strongpoint defenses to defeat enemy assaults. The Stryker does none of this well.

Alternatively, using the Stryker only as a mobility platform and fighting exclusively dismounted forces fails to leverage the ICV-D/J's significant firepower upgrades. Fighting as light infantry leaves the majority of the squadron's antiarmor firepower out of the fight, effectively limiting the *s*pectrum of threats against which it can realistically compete. To maximize a 2CR infantry squadron's effectiveness, new tactics are required that leverage its increased firepower while limiting exposure of the Stryker vehicle and its light armor. An infantry squadron in 2CR can, and must, fight differently.

How We Fight

2CR is most effective when its infantry squadrons select the time and place of engagement with the enemy. Ideally, the squadrons fight in terrain that favors their strengths and minimizes their weaknesses. By doing so, they can seize the initiative and gain a relative advantage over mechanized and armored forces but only for a limited period of time. In either the offense or the defense, relative advantage is gained by sequencing indirect, missile, and direct fires to disrupt, fix, and then destroy enemy combat power in places where the enemy is unable to mass its forces. Once an enemy formation is destroyed, the squadron moves its combat power to another position of relative advantage and repeats the process in depth, either forward on the

Command Sgt. Maj. Daniel Rose, U.S. Army, is the command sergeant major of 1st Squadron, 2nd Cavalry Regiment, in Vilseck, Germany. He has served with 1st Ranger Battalion and with Stryker formations in the 2nd and the 4th Infantry Divisions. He has also served as a Ranger instructor in Florida and an observer controller/trainer at the Joint Readiness Training Center in Fort Polk. He holds a BPS and an MS from Excelsior College.

offense or rearward in the defense. A 2CR infantry squadron can combine tactics, firepower, and mobility to fight a wider range of mechanized and armored forces than what has been previously considered for Strykerbased organizations.

There are three principles that govern 2CR's tactics. First, a 2CR infantry squadron is most successful when it *initiates contact*, rather than reacts



to it. Lacking the armor and firepower of mechanized formations, these squadrons struggle to regain the initiative after it is lost. As such, a 2CR squadron maneuvers to and establishes positions of relative advantage prior to contact with the enemy; these positions allow the squadron to array both mounted and dismounted forces in terrain that eliminates the range advantages of threat weapons systems while massing the effects of the squadron's firepower at critical points. The squadron can decide where, when, and for how long it fights, achieving both surprise and simultaneity when it engages the enemy.

Second, 2CR infantry squadrons must *mass firepower against the enemy*. This is a challenge, however, as the infantry squadron's firepower is distributed among its dismounted ATGMs and rockets, mounted ATGMs and 30 mm cannons, and indirect fire systems (mortars). Both mounted and dismounted firepower lack protection, and massed effects are only gained by a deliberate sequencing of indirect, missile, and direct fires. This sequencing enables infantry squadrons to engage far more capable platforms and formations while minimizing risk to force.

Soldiers assigned to Bull Troop, 1st Squadron, 2d Cavalry Regiment, call for indirect fire 5 June 2019 during a live-fire exercise in support of Saber Guardian 2019 near Varpalota, Hungary. (Photo by Pvt. 1st Class Denice Lopez, U.S. Army)

Third, infantry squadrons must leverage their mobility to prevent the enemy from exploiting the Stryker's lack of survivability. Specifically, a 2CR squadron must *fight in depth*. If squadrons become fixed, the enemy can maneuver into position to mass the effects of its firepower. To avoid such a circumstance, squadrons must rapidly reposition forces prior to losing their advantage.

In the defense, repositioning forces often means defending in depth, commonly referred to as trading space for time. To do so, it is preferable to engage the enemy in accordance with limited engagement criteria such as destroying one or two vehicles or causing enemies to dismount. Once achieved, the unit breaks contact and moves to a subsequent engagement area to repeat the process. It is more difficult for a squadron to succeed if it attempts to kill all of the enemy in one or two large engagement areas. Such an approach encourages the enemy to mass the effects of its weapons systems and fails to take advantage of the asymmetric mobility advantages of the Stryker in the defense.

In the offense, squadrons can attack at a place of their choosing and then continue to move to the next position of advantage rather than waiting on resupply or mobility support to arrive. Unlike light formations that rely on external support for rapid mobility, 2CR can fight from ridgeline to ridgeline, terrain feature to terrain feature, at the *s*peed of the fight.

The amount of depth in which 2CR can fight varies significantly by terrain. In some circumstances, such as open terrain with rolling hills, a unit might displace hundreds of meters from intervisibility line to intervisibility line, extending the defense over multiple kilometers. In other cases, it could mean displacing from one position in a village to another position or village many kilometers away. It could mean clearing forces out of restrictive terrain with engagements at fifty to one hundred meters before seizing a ridgeline to establish a support-by-fire position on an objective 1,500 meters away. Once the far objective is cleared, the unit could bound forward and do it again. Light forces lack the mobility to operate in this kind of depth, while mechanized forces have higher sustainment requirements that limit their speed and tempo over time. Fighting in varying depths against armored threats is a capability unique to 2CR.

How We Fight in the Offense: The Anti-tank Battle Drill

These concepts, when applied in the offense, take the form of the anti-tank battle drill, a series of steps that sequence combat power against an enemy position at the squad, platoon, and troop levels. This battle drill can be applied at any time during an offensive operation, and it does not require a deliberate decision-making process. As depicted in table 1 (on page 113), the drill is conducted in seven steps.

Step 1. Identify enemy composition, disposition, and strength on the objective. The first step of the battle drill is fundamental to any offensive operation (i.e., conduct reconnaissance), but it is especially critical in this battle drill. First, reconnaissance of the objective determines whether the battle drill is required in the first place. If there are no antiarmor threats, this deliberate echeloning of anti-tank systems is not necessary. However, if there are threats that can defeat a Stryker vehicle, failing to identify them prior to making contact provides a significant advantage to the enemy.

Second, threat identification allows the leader to determine how many and what type of dismounted anti-tank systems are necessary to address the enemy threat. He or she can then allocate the right assets and give refined engagement criteria to the leaders of the support-by-fire element. Third, the leader can use the information gathered in the reconnaissance to determine what conditions must be set by the dismounted systems before transitioning to mounted anti-tank systems.

Knowledge of the enemy composition, disposition, and strength on the objective gained by reconnaissance has a direct impact on these decisions, and one can use a variety of resources to collect this intelligence. If available, scouts can be used to reconnoiter the objective, sketch the layout, then guide the support-by-fire elements into position. Unmanned aerial vehicles, whether Ravens, Pumas, or other similar aircraft, can accomplish the same effect, though their noise signatures can potentially compromise the attack. Joint fixed-wing assets can be employed, as can satellite imagery. Although all approaches have risks and limitations, some form of reconnaissance is necessary. At a minimum, the commander should gather enough intelligence to determine the greatest possible threats on the objective, as that will dictate where he or she must deploy his or her formation (i.e., the line of contact).

Step 2. Identify probable line of contact. Retaining the initiative and engaging the enemy on friendly terms are core tenets of this battle drill. In order to achieve them, the attacking force must identify where it will most likely make contact with the enemy and then stop short of that point and set conditions for its attack. If the unit fails to do so, pushing past this point and into contact, it cedes the initiative to the enemy, as the unit has likely entered an engagement area where the enemy has set the conditions for enemy success.

It is important to note that there are, by doctrine, eight forms of contact: visual; direct fire; indirect fire; aircraft; obstacles; chemical, biological, radiological, and nuclear; electronic; and nonhostile.³ For the purposes of this drill, audio contact ought to be considered as well. If the enemy can hear vehicles approach, ramps

the

mass casualties among dismounts.

Table 1. 2CR Anti-tank Battle Drill

1 Identify a performance of the second strength on the objective specifically known likely and taples and	
1. Identity energy composition, disposition, and strength on the objective, specifically known, likely, and calles and	d armored personnel
suspected positions of:	but it will likely degrade
a. Armor—tanks, armored personnel carriers, armored reconnaissance vehicles	d concorrs and may causa
b. Anti-tank systems—mounted and dismounted AIGMs and rockets Optics and	1 .11
C. Hardened positions, e.g., bunkers mobility.	kılls.
2. Identify probable line of deployment prior to reaching the line of contact Regar	rdless of the physical
a. Initiate indirect fires to fix the enemy in defensive positions and degrade his observation/ damage, a	all of these effects make it
optics/sensors much mc	ore difficult for the enemy
b. Dismount infantry squads/platoons and initiate movement to support-by-fire and assault positions to detect	the advance of friendly
4. Occupy support-by-fire positions forces an	nd to identify support-by-
a. Infiltrate dismounted anti-tank systems (M148 Javelin, M3 Carl Gustaf, AT4) fire and a	assault positions. This is
b. Move ICV-Ds into last covered and/or concealed position short of the support-by-fire position the essen	ntial effect: initiation of
5. Engage enemy anti-tank capabilities (those that can defeat Stryker vehicles) with dismounted effective	and sustained indirect
systems according to the following priority of engagement: fire facility	itates friendly forces'
a. Armored vehicles Likely in survivability positions such as	ted infiltration to posi-
c. Heavy machine guns frenches or bunkers, if present tions of r	relative advantage over the
6. Immediately following the dismounted AT engagement, move ICV-Ds into support-by-fire to destroy, enemy (e	e.g., the support-by-fire
neutralize, or suppress high-threat systems	ult positions)
a. Once high-threat systems are destroyed, initiate movement from the assault position	A Occupy support by
b. Re-engage with dismounted or mounted ATGMs as the situation demands	
7. Echelon indirect fire systems (155 mm, 120 mm, 81 mm, 60 mm) and direct fire systems (30 mm	tions. The leader must
ICV-D, MK19 ICV-J, .50 caliber ICV-J, M240 coax ICV-D, dismounted M240B) to facilitate isolation, now array	y the friendly forces so
breach, assault, and clearance of the objective that they	v can effectively mass fires
on the en	nemy's highest threat
* Forms of contact include visual, direct, indirect, aircraft, obstacles, CBRN, EW, and non-hostile	-its armor and anti-tank

drop, and squads dismount, the unit will cede the ini-

tiative just as if it had made another form of contact. Step 3. Determine a probable line of deployment prior to reaching the line of contact. Once the line of contact is determined, the leader can begin to set the conditions for the attack. The first step is to determine where to deploy friendly forces. They must halt short of the line of contact to deploy so that they can move into positions of advantage against the enemy. This takes time and requires a deliberate and rehearsed plan, and it must be done out of contact with the enemy.

When ready to move past the line of deployment, the leader initiates indirect fires on the objective. This creates several beneficial effects. Most importantly, it fixes the enemy on the objective. Under artillery or mortar fire, dismounted forces either remount or huddle down inside trenches or bunkers. Mounted forces button up and pick up scanning. These actions degrade the enemy. These fires may cause casualties, though trenches, bunkers, and battle positions reduce the likelihood of

(Table by authors)

dismounted anti-tank systems first. They infiltrate to covered and concealed positions that give them both maximum cover and stand-off from the objective. From this forward position, the leader or commander confirms the disposition of enemy threats and allocates combat systems accordingly. For example, if facing tanks on the objective, he or she may want them completely destroyed by Javelin missiles before bringing Strykers into the support-by-fire position. Likewise, if facing a lightly armored combat vehicle and dismounted AT systems in restrictive terrain, the leader may decide to use a volley of AT-4s on all bunkers and then immediately bring ICV-Ds into the fight.

capabilities (see figure 1, page 114).

To do so, the leader leads with

While the dismounted antiarmor systems are infiltrating to their support-by-fire position under the cover of indirect fire, the platoon's ICV-Ds move to their last covered or concealed position short of their own support-by-fire positions. This may be within audio contact with the enemy but outside of the other forms of contact. If so, indirect fires may mitigate the risk of compromise. Ideally, this is a position of defilade where, on their leader's order, they can rapidly gain direct fire contact with the enemy. Once in position, the leader relays the location of enemy threats to the ICV-Ds, giving each platform an initial target allocation. This reduces their engagement time once they move into position and can be done using polar coordinates, a quadrant system, or some similar method.

Step 5. Engage enemy anti-tank capabilities with dismounted systems. Steps 5 and 6 are the essential steps of the battle drill. The goal of this progression is to employ the most effective anti-tank systems in the Stryker formation in ways that give them the greatest effect with the least risk: dismounted anti-tank systems first, immediately followed by ICV-Ds, to destroy, neutralize, or suppress enemy anti-tank systems. At this point in the drill, indirect fire is landing



(Figure by authors. See Army Doctrine Publication 1-02, *Terms and Military Symbols*, tables 5-2 and 8-19, for symbol descriptions, https://armypubs.army.mil/epubs/DR_pubs/DR_a/pdf/web/ARN20083_ADP%201-02%20C1%20FINAL%20WEB.pdf)

Figure 1. Occupy Support-by-Fire Positions

on the objective. The leader has identified the highest threats on the objective and communicated them to the dismounted gunners and ICV-Ds. Dismounted anti-tank teams have identified, locked on, and prepared to engage their designated targets. ICV-Ds are in their last covered and concealed position short of their support-by-fire positions with target locations designated.

On the leader's command, Javelins, Carl Gustavs, and/or AT-4s simultaneously fire on the objective. As they impact, these missiles and rockets have multiple effects. The first effect initiates fire with the platoon's most effective systems that also have the smallest signature. In a second effect, missiles ideally kill at least some if not all of the enemy's antiarmor systems. At a minimum, multiple missiles and rockets on the objective simultaneously will stun the enemy and force that enemy to focus on assessing damage, regaining communication, and searching for the location of the missile teams. A third effect attracts attention to the dismounted fires. Even if the platoon fails to destroy all of the antiarmor threats on the objective, this engagement effectively neutralizes or suppresses the objective for a short period of time while the enemy attempts to recover.

Step 6. Move ICV-Ds into support-by-fire positions to destroy, neutralize, or suppress high-threat systems. To take advantage of the window immediately following the dismounted anti-tank engagement, the leader moves the platoon's ICV-Ds into their support-by-fire position immediately after the missiles leave their tubes (see figure 2, page 115). As they move into their position,

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Figure 2. Move Infantry Carrier Vehicle-Dragoons into Support-by-Fire Positions

the ICV-Ds immediately acquire and engage the tanks, armored personnel carriers, and antiarmor positions. ICV-Ds can acquire and engage targets much more rapidly than a Javelin missile, and their goal is to destroy the enemy's systems that can defeat a Stryker's armor.

The ICV-Ds' 30 mm cannon has proved effective against all but the most recent generations of threat tanks. If only light to medium armored personnel carriers, earlier generation tanks, or smaller armored vehicles remain on the objective, the ICV-Ds can destroy these systems on their own. If tanks survive the initial missile engagement, the ICV-Ds can suppress those targets until either dismounted Javelins reload or ICV-Js can enter the fight and fire from a position of defilade. Third, if the initial engagements did not destroy bunkers with ATGMs in them on the objective, the ICV-Ds can effectively suppress those positions until maneuver forces can clear them later in the fight.

With antiarmor threats neutralized, the leader can mass the full effects of the unit's weapons systems from the support-by-fire position as the risk to Stryker vehicles is now low. This is the key condition that must be set to initiate the assault on the objective. The commander can now initiate movement of his or her dismounted assault.

Step 7. Echelon indirect and direct fire systems to facilitate isolation, breach, assault, and clearance of the objective. To support the movement of the assault force, the leader must echelon indirect fires and direct fires (see figure 3, page 116). Without an-

tiarmor systems, the enemy poses little threat to the Stryker platform. The leader is now free to occupy the support-by-fire position with both mounted and dismounted direct-fire weapons systems. As the assault moves closer to the objective, the leader can shift or lift fires as necessary, echeloning direct fires from the ICV-Ds' 30 mm cannons and the ICV-Js' 40 mm MK-19 grenade launchers to the ICV-Js' M2 .50 caliber machine guns and the ICV-Ds' 7.62 coax machine guns, all the way down to M240B squad automatic weapons on tripods. Simultaneously, the leader must also echelon fires from his or her 120 mm mortars to 81 mm and 60 mm mortars. If available, fires from M777 howitzers, AH64 Apaches, or joint fixed-wing aircraft are integrated as well.

How We Fight in the Defense: Defense in Depth

To seize the initiative and gain a relative advantage in the defense, 2CR's infantry squadrons are most effective when they conduct an area defense in depth.⁴ As previously stated, infantry squadrons can establish a position of relative advantage over forces that enjoy greater firepower and survivability than the Stryker but only for a limited period of time. The longer a Stryker formation fights from a fixed position, the greater the probability of the enemy massing the effects of its combat power on that formation. It is therefore essential that squads and platoons avoid decisive engagement, instead trading space for time once specific enemy and/or friendly criteria are met. In doing so, these formations can attrit



(Figure by authors. See Army Doctrine Publication 1-02, *Terms and Military Symbols*, tables 5-2 and 8-19, for symbol descriptions, https://armypubs.army.mil/epubs/DR_pubs/DR_a/pdf/web/ARN20083_ADP%201-02%20C1%20FINAL%20WEB.pdf)

Figure 3. Echelon Indirect and Direct Fire Systems to Facilitate Isolation, Breach, Assault, and Clearance of the Objective

superior forces and successfully defend over time. As shown in table 2 (on page 117), the defense in depth is accomplished in seven steps.

Step 1. Analyze avenues of approach and enemy scheme of maneuver. As with any defense, the seven steps of engagement area development are essential for success. The process has *s*pecial considerations for the infantry squadrons in 2CR. Identification of locations where it is difficult for the enemy to mass combat power is essential for a successful defense. An infantry squadron can most effectively kill the enemy in these locations, *es*pecially when a squadron is augmented with a manmade obstacle effort, indirect fires, and direct fires. There are a number of characteristics that make massing combat power difficult. Canalizing terrain—such as wet-gap crossings, mountain passes, or the borders of forested areas—that prevent the enemy from bringing more than one vehicle abreast or establishing an overwatch position is ideal for a 2CR engagement area. These areas mask the enemy's firepower and prevent them from effectively maneuvering on defensive positions.

Infantry squadrons seek terrain that shortens the engagement range of direct-fire weapons systems. Nearly every threat platform possesses some antiarmor capability that outranges the Javelin or the 30 mm cannon. Restrictive terrain, vegetation, rolling terrain,

Table 2. 2CR Defense in Depth

- 1. Analyze avenues of approach and enemy scheme of maneuver to determine the optimal terrain in which to kill the enemy *
 - Canalized terrain and/or areas with natural obstacles that prevent him from transitioning from movement to maneuver
 - b. Terrain and/or vegetation that shortens direct fire engagements, taking away his range advantage and enabling engagement from our systems
 - c. Terrain that facilitates friendly battle positions in depth
 - 1) Multiple positions that have effects in the same engagement area
 - 2) Subsequent engagement areas and battle positions
 - Mounted/dismounted routes between positions that enable rapid displacement and re-engagement
- Integrate obstacles, indirect fires (mortars), missile/rocket fires (M148 Javelin, M3 Carl Gustaf, AT4), and direct fires (30mm, MK19/M2, dismounted machine guns) that enhance canalization, slow enemy movement, and facilitate limited engagements
 - a. Fires integrated at the point where obstacles and terrain have effect, rather than the obstacle itself
 - b. Account for enemy mounted and dismounted scheme of maneuver (i.e., protect anti-tank assets with dismounted security to prevent ambush/envelopment of battle positions)
- 3. As the enemy approaches, utilize sensors linked to shooters to engage and disrupt the enemy outside of direct fire range
 - a. Sensors: Puma, Raven, signal detection and direction finding, scout/troop observation posts, higher IC assets
 - b. Shooters: 120 mm mortars, 81 mm mortars, regiment or higher artillery/rockets, attack aviation
- 4. Engage enemy with missile, rocket, and 30 mm fire in accordance with specific criteria
 - a. Sequence missile/rocket fire with 30 mm against the highest threat systems
 - b. Utilize the system that best matches the threat, preserving most effective systems for highest threats
 - c. Where possible, destroy vehicles in locations that increase obstacle effects
- 5. Disengage in accordance with specific criteria, trading space for time and moving to subsequent positions that repeat this process
 - Enemy conditions—destruction of certain vehicles, enemy reaches a certain location, enemy achieves a specific movement formation or brings multiple vehicles to bear on a position
 - b. Friendly conditions—specific amount of combat power remaining, specific ammunition levels, or time triggers based on events in other areas
 - c. Short engagements in small engagement areas arrayed in depth preserve combat power, enable repeated seizure of initiative, and preserve relative advantages
 - d. Time needed to reload and re-acquire targets with Javelin systems likely limit repeated engagements from the same position
 - e. Preservation of depth facilitates continued engagement/disengagement while preventing enemy penetration
- 6. Utilize superior mobility to counterattack and disrupt the enemy's attack
 - a. Retake previously abandoned battle positions
 - b. Strike enemy's flank or rear to present multiple dilemmas at the same time, disrupt his tempo, and destroy his command and control
- 7. Pass remaining enemy forces on to subsequent forces.

* Key condition: locations where the enemy cannot mass his combat power

masked by the forward slop, serve a similar purpose. The closer the engagement ranges, the greater effect Stryker weapons will have relative to their adversaries. As a general rule, the more capable the adversary platform, the shorter the desired engagement range and the more restrictive terrain should be sought.

Friendly considerations factor into the decision on where to kill the enemy. As stated previously, an infantry squadron prefers multiple, smaller engagement areas arrayed in depth over fewer large engagement areas. Ideal terrain supports either multiple battle positions in depth that allow for massed fires in the same engagement area or subsequent engagement areas and supporting battle positions. Regardless of the array of engagement areas, routes that adequately support mounted and dismounted retrograde are essential. 2CR units strive to have at least two positions set and ready to engage the enemy while one is repositioning. Linear arrays of battle positions are avoided as they encourage massing of enemy combat power and penetration of friendly lines.

Lastly, strong consideration should be given to the size of the opposing enemy force and how many engagements it will take to cause the enemy to break off the attack or to destroy the enemy forces entirely. Starting from the last position, units should assess what they can realistically kill in each battle position. Unlike an armored unit that can fire tank-killing munitions from multi-

(Table by authors)

or any combination of the three creates intervisibility lines that mitigate this range advantage. Reverse slopes, where ranges are shortened and friendly positions are ple platforms in rapid succession, 2CR units lack responsive tank-killing capability. The 30 mm cannon provides highly responsive and effective fires against armored personnel carriers, but it lacks the armor to survive an extended exchange of fire. Therefore, by the time the enemy reaches the final battle positions, they must be attrited to a manageable level. It is safe to assume that the final position will struggle to succeed if it is asked to destroy the majority of the enemy's combat power. Therefore, units must determine how much of the enemy must be destroyed prior to the final position and build engagement areas that support those requirements. Failing to allocate enough engagement areas, the required firepower in each, the effect that each position must have on the enemy, or any combination of the three will make success difficult.

Step 2. Integrate obstacles, indirect fires, missile/ rocket fires, and direct fires that enhance canalization, slow enemy movement, and facilitate limited engagements. As with any defense, integration of obstacles, indirect, and direct fires is essential for success (see figure 4, page 119). 2CR infantry squadrons must set specific conditions prior to initiating contact with the enemy. First, given that 2CR units are fighting a defense in depth, it is difficult to effectively block in forward positions. It is more realistic to emplace obstacles that simply disrupt, or at maximum, fix enemy forces. Units overwatching forward obstacles will rarely stay in position long enough to prevent the enemy from eventually breaching. It is more important that the obstacle cause the enemy to take predictable action, rather than truly prevent it from moving forward. Therefore, obstacle efforts forward that slow the enemy or make it deploy its forces earlier than it wanted are preferred over complex obstacles forward. Such efforts are best conserved for final positions or no-penetration lines.

Second, indirect, missile and rocket, and direct fires should be integrated on the location where the enemy will change its movement in response to the obstacle, rather than on the obstacle itself. For example, if the enemy identifies an eleven-row concertina obstacle on a single lane dirt road, it is unlikely it will drive directly up to the obstacle and look at it. Most likely, they will identify the obstacle as the enemy crests an intervisibility line or comes around a corner in the road. Once identified, it will likely back out of visual contact, dismount infantry, and attempt to clear around the obstacle to the next intervisibility line. Friendly fires should be targeted on the suspected dismount location. Ambushing the enemy during their dismount drill is a way to seize initiative. Finally, 2CR units must be prepared for the enemy's mounted and dismounted schemes of maneuver. Though the greatest threat to 2CR units are the enemy's mounted systems, it is important to remain vigilant against the enemy's dismounted infantry. The enemy will attempt to protect its mounted systems by clearing restrictive terrain with infantry—2CR units must secure their antiarmor systems (mounted and dismounted) against such maneuver, ambush, or envelopment. In fact, if properly accounted for, 2CR units prefer to fight armored forces dismounted. Given 2CR's dismounted firepower, larger basic load of ammunition, and defensive posture, if the enemy leaves its vehicles' firepower and protection, 2CR units gain a significant tactical advantage.

Step 3. Utilize sensors linked to shooters to engage and disrupt the enemy in a forward security area. According to Army Techniques Publication 3-21.21, Stryker Infantry Battalion, establishing a forward security area is optional.⁵ However, for an infantry squadron in 2CR, the forward security area is an important element of the defense in depth. First, it enables squadrons to make contact with the enemy as far forward as possible, disrupt its formations, and begin to destroy enemy combat power outside of direct fire contact. This is accomplished, at a minimum, by linking organic reconnaissance assets (Puma, Raven) and forces (scouts, snipers) with the robust mortar capability resident in a Stryker battalion out to five kilometers. When supported with higher echelon reconnaissance (Shadow, Gray Eagle, Prophet/Trojan, or even the regiment's cavalry squadron) and fires (M777 howitzers, rocket artillery, attack aviation), this forward security area can triple in size.

Second, the use of a forward security area enables 2CR units to achieve greater success against the enemy's reconnaissance forces. Counterreconnaissance is essential in this fight because early identification of friendly defensive positions enables the enemy to target them with indirect fires prior to direct fire engagement. Such engagements could force forward units to retrograde earlier than desired, reducing the depth of the defense. An effective and robust counterreconnaissance fight retains the element of surprise for the defenders and enables 2CR units to seize the initiative in the fight.

Step 4. Engage enemy with missile, rocket, and 30 mm fire in accordance with specific criteria. Once the enemy has entered the main battle area,

INFANTRY TACTICS



LOA-Limit of advance

TAI-Target area of interest

(Figure by authors. See Army Doctrine Publication 1-02, *Terms and Military Symbols*, tables 5-2 and 8-19, for symbol descriptions, https://armypubs.army.mil/epubs/DR_pubs/DR_a/pdf/web/ARN20083_ADP%201-02%20C1%20FINAL%20WEB.pdf)

Figure 4. Integrate Obstacles, Indirect Fires, Missile/Rocket Fires, and Direct Fires

battle positions sequence missile, rocket, and 30 mm fires to achieve massed effects on the enemy (see figure 5, page 120). 2CR has antiarmor capacity that can have significant effects on a wide range of threat systems, but there are a number of employment considerations for these systems. As this firepower is distributed amongst dismounted infantry and vehicle platforms, units must make deliberate choices about how they engage. Ideally, units use obstacles and indirect fires to slow or disrupt enemy movement in designated areas. They then use dismounted or mounted ATGMs or, at close range, shoulder-fired

rockets to degrade or destroy mounted systems from small, concealed locations. After the initial volley is fired, mounted direct-fire systems (30 mm, MK19, or M2) follow to complete the destruction of the enemy.

If such deliberate sequencing is not possible due to terrain, defenders should look to engage threats with the smallest weapon possible that still yields the desired effect. When engaging tanks, the Javelin missile is the most appropriate system. When dealing with the variety of threat armored fighting vehicles and infantry carriers, M3 Gustavs, AT4s, and 30 mm cannons can all destroy those systems. Strykers cannot carry

unlimited ammunition for all weapons systems, so it is important to match the right weapon to the right threat.

Regardless of the system or the methods used, infantry squadrons in 2CR must strive to achieve maximum effects on the initial engagement. As time goes on from the first engagement and positions are compromised, it becomes harder and harder to retain the relative advantage. Therefore, it is important for units to set and describe specific engagement criteria that trigger the use of direct fires. These criteria vary with the situation, but in many cases, targeting the first vehicle in restrictive terrain has benefit, as a destroyed vehicle can block a route and facilitate disengagement. However, if a position is conducive to multiple simultaneous engagements, it may be desirable to allow some number of vehicles to enter the engagement area to maximize the effectiveness of the position prior to withdrawal. Regardless of the conditions, engagement criteria must be disseminated and understood so that the relative advantage gained by surprise is used to its greatest effect.

Step 5. Disengage in accordance with specific criteria and move to

subsequent positions to repeat this process. For a defense in depth to be effective, units must trade space for time. This means that they must deliberately disengage from contact, move to a subsequent position of advantage, then reengage the enemy. Clear disengagement criteria for each position most efficiently triggers displacement. Criteria can be based on enemy conditions: destruction of certain vehicles, the enemy reaches a certain location, it achieves a specific movement formation, or it brings multiple vehicles to bear on the defensive position. Friendly conditions, such as combat power reduced to a certain level, key munitions



EA-Engagement area

(Figure by authors. See Army Doctrine Publication 1-02, *Terms and Military Symbols*, tables 5-2 and 8-19, for symbol descriptions, https://armypubs.army.mil/epubs/DR_pubs/DR_a/pdf/web/ARN20083_ADP%201-02%20C1%20FINAL%20WEB.pdf)

Figure 5. Engage Enemy with Missile, Rocket, and 30 mm Fire

remaining, time triggers, or conditions in other areas of the fight that make current positions untenable, can also trigger withdrawal. In particular, the reload and reacquire time for the Javelin missile system, which can extend over a minute whether mounted or dismounted, makes it difficult for that system to have multiple successful engagements from the same position, especially at short range or in restrictive terrain. A Javelin engagement may be the condition for a withdrawal. No matter what condition triggers disengagement, it must be rehearsed at echelon (repeatedly, if possible) prior to engagement with the enemy.



Regardless of the trigger, once it is reached, the unit must disengage. Ideally, units should strive to have at least two elements in set positions engaged or ready to engage the enemy while a third is moving. Having only one position set or allowing set positions to become linear is less optimal as such circumstances increase the probability of enemy penetration. As previously stated, each element must prepare multiple engagements in depth and fully understand the effects they must have on the enemy at each position. By doing so, 2CR units gradually attrit the enemy so that by the time it reaches 2CR's final battle positions, it lacks the ability to mass fires or effectively maneuver and are destroyed.

Step 6. Utilize superior mobility to counterattack and disrupt the enemy's attack. The mobility of the Stryker platform provides the flexibility for maneuver units to not only withdraw but to also counterattack, either locally or in depth. Responding to changes in the enemy scheme of maneuver, disruption of its tempo, or unexpected openings, 2CR maneuver units should stay alert for opportunities to retake lost battle positions. In doing so, they appear in unexpected locations and can present the enemy with dilemmas from locations the enemy assumed to be abandoned. Soldiers assigned to Comanche Troop, 1st Squadron, 2nd Cavalry Regiment, prepare to conceal a Stryker Infantry Carrier Vehicle 2 November 2019 during Dragoon Ready 20 at the Joint Multinational Readiness Center in Hohenfels, Germany. (Photo by Spc. Ethan Valetski, U.S. Army)

Similarly, units should look for opportunities to launch elements of combat power at the flanks or in the rear of the enemy's attack. Making the battlefield nonlinear; disrupting enemy lines of communication; or destroying their command, control, support, or indirect fire positions can achieve outsized effects and reduce the effectiveness of their attack. Counterattacks should be considered in every defense in depth.

Step 7. Pass remaining enemy forces on to subsequent forces. In a large-scale operation, it is likely the enemy will have large numbers of forces in multiple echelons. Though a single maneuver squadron may successfully halt an enemy's attack or even trigger a withdrawal temporarily, defeating the enemy in one engagement is unlikely. Once the squadron's position is compromised, the relative advantage decreases. The squadron must disengage before the enemy can target the position directly with additional forces in echelon or indirectly with mortars, artillery, or missiles. Disengagement can take multiple forms. The same squadron can disengage and move to subsequent positions. The regiment can defend with squadrons in depth and hand the enemy from one maneuver squadron to the next. The fight could be handed over to more heavily armored combined arms battalions or brigades that have established defensive positions in other areas.

Implications

When combined with the tactical approach above, the firepower upgrades of 2018 have significantly expanded the threats against which the 2nd Cavalry Regiment can effectively fight and win. Stryker units have always excelled against dismounted threats. The mobility, firepower, and sustainment resident in any Stryker battalion already overmatch any such adversary. In 2CR, however, the Stryker infantry squadron now has the firepower to effectively fight armored, mobile threats. It enjoys overmatch against light-armored reconnaissance forces. With the right tactics, 2CR is also well matched against medium-armored assault forces or mechanized infantry forces equipped with earlier-generation armored vehicles. That said, 2CR infantry squadrons are still challenged to defeat vehicles equipped with longer-range, faster-firing main weapons systems and protected by modern reactive armor. While 2CR can effectively delay these modernized armored and mechanized units, it is difficult for 2CR to defeat these forces.

Therefore, 2CR can effectively deploy to a crisis and then establish a defense in depth to either defeat or delay a wide variety of armored threats. This capability is essential in the European theater, as 2CR is the most responsive and operationally mobile ground force on the continent. In the event of a crisis, especially one where threat integrated air defense systems deny access to aerial platforms, 2CR can alert, marshal, and deploy faster than any other NATO force. Once in the crisis area, 2CR can gain and maintain contact with the enemy while establishing an area defense in depth. Against mechanized airborne or assault forces, this kind of a defense can defeat their attack. Against more heavily armored forces, 2CR can delay the enemy's advance, buying space and time for U.S. and NATO armored forces to arrive in the region and enter the fight.

Going forward, these tactics and procedures should inform 2CR training in theater. The current training glide path of the regiment fully supports the further development of these tactics and preparation for their employment in theater. U.S. and German training areas facilitate building these skills at the squad, platoon, and troop levels, while the major theater exercises (e.g., Saber Guardian, Saber Strike, Defender 2020, Noble Partner) provide opportunities for squadrons to apply these tactics in a crisis scenario. Furthermore, partnerships and exercises should be leveraged toward interoperability with allied nations that possess similar experience and weapons platforms such as the Boxer armored fighting vehicles of Germany and the United Kingdom, the BTR armored personnel carriers in Eastern Europe, or the Polish army's Rosomak wheeled armored vehicles. Combat training center rotations to the Joint Multinational Readiness Center validate the regiment's ability to employ maneuver squadrons using these tactics in a regimental-level operation.

Despite its suitability for Europe, the efficacy of 2CR's firepower upgrades, its new tactics, and the expanded effectiveness of the Stryker formation are not limited to this theater. These innovations enable Stryker units to fully realize the potential of the platform and to expand their utility for the Army. Increasing the firepower of the other Stryker brigade combat teams in the Army and further developing these tactics could create a more flexible force, blending both mounted and dismounted maneuver to achieve outsized effects against a wider range of threats. It would allow the Stryker to better fulfill its role as the U.S. Army's medium force.

Notes

1. Army Doctrine Publication (ADP) 3-0, *Operations* (Washington, DC: U.S. Government Publishing Office, July 2019), 4-1. The significance and role of positions of relative advantage and initiatives are introduced in ADP 3-0 on pages 1-9 and 1-11, respectively.

2. The 2nd Cavalry Regiment fielded the Infantry Carrier Vehicle–Dragoon and the Infantry Carrier Vehicle–Javelin, significantly upgrading its firepower. 3. ADP 3-90, Offense and Defense (Washington, DC: U.S. GPO, July 2019), 2-13.

4. This is in accordance with Army Techniques Publication 3-21.21, *SBCT Infantry Battalion* (Washington, DC: U.S. GPO, March 2016), chap. 5, sec. II.

5. Ibid., para. 5-78.