

# On the Employment of Cavalry

by MAJ Amos C. Fox

COL Matthew Morton's fantastic treatise, Men on Iron Ponies: The Death and Rebirth of the Modern U.S. Cavalry, provides an instructive lesson on the evolution of the U.S. Army's cavalry over time. Morton argues that with the advent of the Armored Force in the 1930s and early 1940s, the U.S. Cavalry experienced a fundamental shift in its purpose, function and structure. Prior to the existence of the Armored Force, the U.S. Cavalry (like the cavalry of other armies) focused not only on reconnaissance and security (R&S) operations, but it was also responsible for rapid frontal and flank attacks, envelopments and rapid pursuits to scythe down a fleeing enemy.1 The U.S. Army's adoption of an Armored Force resulted in the cavalry's begrudging divestiture of the preponderance of its historic and traditional mission – attacks, envelopments and pursuit – to settle on R&S activities.

More poignantly, Morton states that the existence of the nascent Armored Force resulted in the U.S. Cavalry branch losing control of its destiny.<sup>2</sup>

From World War II to the Pentagon's "Transformation" period in the wake of the Sept. 11, 2001 attacks, the cavalry largely maintained its pedigree as a combined-arms force built to fight for information. Along the way, the cavalry experienced minor adjustments, including the addition of rotary-wing aviation capabilities, but by and large the cavalry experienced routine incremental change that reflected the technological and tactical evolutions of the period.

## Post-9/11 warfighting concepts

However, the U.S. Cavalry came under assault from the warfighting concepts of the post-9/11 environment. In essence, post-9/11 Information Age technology promised to put sensors and unmanned surveillance assets on the battlefield and more or less obviate the Army and joint force's need for ground-cavalry formations.3 To be sure, the now-debunked "revolution in military affairs" and "shock and awe" concepts of the post-9/11 era advanced this argument to the point of making it official policy.4 The effect was deleterious for the cavalry. Perhaps the most insidious and noticeable result of this hostile takeover was the deletion of armored-cavalry regiments (ACRs) and division-cavalry

76 ARMOR Winter 2022

squadrons from the U.S. Army's bench of capabilities and replacement of that formation with a variety of unproven concepts, sensors, systems and units.

Furthermore, as part of the Pentagon's transformation effort, the Army began shifting from specialization in pursuit of modularity. In doing so, it transitioned leadership in the U.S. Cavalry from armor officers to a situation in which either infantry or armor officers could lead and staff cavalry formations. The effect was that officers with little to no experience or formal education in cavalry operations were now leading those formations. In turn, this had a pernicious impact on the U.S. Cavalry because the organizations led by those officers were often improperly trained and employed, while Soldiers within those formations were improperly developed.

The impact of this ripples across the force today. It illuminates itself in combat-training center (CTC) rotations, command-post exercises (CPX), warfighter exercises, field-training exercises and deployments. In most cases, this manifests in one of two ways. First, at high echelons of command, leaders fail to identify the need for a dedicated formation to fulfill the purpose and function of R&S operations. For instance, in many division-level CPXs and warfighter exercises, divisions parry the need for a dedicated cavalry formation and instead push those requirements to one of its brigade combat teams, thereby forcing that brigade to answer the division commander's critical-information requirements while also fighting its assigned mission.<sup>5</sup>

Second, commanders and staffs use their assigned cavalry as another combined-arms or infantry battalion. In doing, so they mismanage their available forces, which in the case of mismanaged cavalry, equates to fighting with a blindfold strapped around one's eyes. All that is to say that in effect, the Pentagon's transformation effort of the post-9/11 period, fueled by a technocratic mindset on war and land warfare, all but neutered the U.S. Cavalry.

Yet for the U.S. Cavalry there is light at the end of the tunnel. Considering the



Figure 1. An M24 Chaffee light tank belonging to 106<sup>th</sup> Cavalry Group moves on the outskirts of Salzburg, Austria, in May 1945. The M24 was a johnny-come-lately to the war effort, but armored-division crews reported liking the Chaffee's improved off-road performance and reliability. However, they were most appreciative of the 75mm main gun, which was a vast improvement over the M5A1 Stuart tank's 37mm gun. In spite of the gun's upgrade, cavalry was still unable to perform its historic and traditional mission in Europe and the following conflict, Korea.

resurgence of land warfare, spurred by Russia's 2014 invasion of Ukraine and the ensuring five years of continued tank- and artillery-laden combat in Ukraine's Donbass region, the need for rugged ground-based cavalry is on the upswing. To be sure, Morton argues that "[a]t the squadron level and below, little has changed since World War II with respect to finding the enemy."6

## Pondering cavalry's role

In light of that fact, and as the U.S. Army looks again to large-scale combat operations (LSCO) as a potential answer in the new era of Great Power competition, it is necessary to ponder the cavalry's role. Balancing a historical perspective while maintaining a watchful eye on current and future armed conflict, a number of ideas or principles on the employment of cavalry come to the fore.

The principles listed following are not intended to parrot doctrine, but instead, they are a handful of foundational truths on the employment of cavalry. Furthermore, it is important to note that in many instances within

this article, non-doctrinal words and phrases are used to help define and explain these principles. This is done intentionally because the use of doctrine often carries impedimenta to new ideas and therefore obstructs open-mindedness. It is hence of utmost importance that the reader approaches the following principles dispassionately and not in a polemic manner to rebuff the suppositions for not aping doctrine.

This is important because, for all its virtue, doctrine merely describes how one wants to think and fight, and not necessarily how one should think and will have to fight. The student of war understands that the praxis of war, governed by the interaction between two or more unique belligerents, drives the conduct of war more than doctrine. Therefore, one must be mentally and physically prepared to fight in a variety of ways not necessarily captured in doctrine.

With the groundwork laid, it is time to examine a set of principles that should govern how to think about cavalry.

Principle 1: Cavalry allows a commander to manipulate time in battle.

It is instructive to note that many military theorists make the case that time, above all else, is the most important element of war. American military theorist Robert Leonhard suggests that the inability to effectively manipulate time is what most plagues military commanders.7 Continuing that line of logic, Leonhard contends that "[m]ilitary conflict - whether in wars. campaigns or battles - seeks to summon that failure (or delay it) and is, therefore, when reduced to its fundamentals, a contest for time."8 Meanwhile, British theorist J.F.C. Fuller offers that "[s]uperiority of time is so important a factor in war that it frequently becomes the governing condition."9 But perhaps no one captures time's salience more clearly than French general and statesman Napoleon Bonaparte. Bonaparte posits that "I might lose a battle, but I will never lose a minute."10

Yet, conversely, time is often overlooked, mismanaged and squandered in many tactical formations. For instance, units often fritter away time working through the military decision-making process (MDMP), which often becomes ponderous and unwieldy, and thus devours available time. In turn, this mismanaged time causes the formation to not get its cavalry force into the fight with enough time to positively influence and shape the environment.

Further, a common trope among commanders today is that virtue exists in waiting to the last possible moment to make a decision. However, this is illogical, especially when viewed in light of the importance the U.S. Army places on shaping the environment and on seizing initiative. To accomplish these goals, commanders must proactively make decisions and, in land warfare, timely decisions are enabled through felicitous employment of one's cavalry force. Thereby, it follows that for a commander to dictate the provisions of time on an opponent, the commander must proactively make decisions, and that decision-making process is driven by carefully considered and expeditiously employed cavalry.

On the other side of the coin, punting decisions down the road, allowing MDMP to monopolize available time,

and not thinking clearly about current and future decisions often results in squandering cavalry forces. Ineffective employment often renders the cavalry belatedly deployed, which in turn drives an unforeseen set of decisions to emerge for which the command is ill-prepared.

Principle 2: Cavalry shapes the environment and the situation of its supported force. Building on the previous point, British military theorist B.H. Liddell Hart, in his seminal treatise, "The Essence of War," argues that the apogee of land warfare is to attack along the line of least probable expectation, and to do so, one must follow the line of least resistance.11 American cavalryman GEN George S. Patton Jr. makes a similar argument, suggesting that one "[n]ever attack where the enemy expects you to come. It is better to go over difficult ground where you are not expected than it is over good ground where you are expected."12

If one gives credence to Liddell Hart's and Patton's theories, he or she will find that cavalry is decidedly important in enabling this activity. On that account, the cavalry is the pre-eminent shaping force in land warfare because, if it correctly executes its mission, it allows its supported force — whether that be tanks, infantry or a combination thereof — to attack along the line of least probable expectation by finding the line of least resistance.

#### Shields and swords

Fuller offers a penetrating framework to support Liddell Hart's and Patton's theses. Fuller suggests that the battlefield consists of entities possessing "shields" and "swords," or forces that enable and forces that attack.13 Fuller's shields do what they must to allow the possessor to position its sword to thrust at the enemy. Nevertheless, the "shield" protects the possessor and its sword, because without protection, the possessor and sword are prone to destruction. Accordingly, the cavalry, or Fuller's "shield," shapes the environment for its supported force in a number of ways, as it:

- Softens the target through indirect and direct fires;
- Deceives the enemy as to the whereabouts of the supported force;

- Misleads the enemy on the support forces' intended direction of advance;
- Facilitates the supported force's positioning, movement and maneuver on the battlefield;
- Deceives the enemy about what lies to its front and causing it to transition, or change its plan, ahead of schedule; and
- Augments the defense, both deliberate and hasty, providing an additional layer of protection, early warning and stand-off for the support force.

A commander must therefore thoughtfully employ his/her cavalry to proactively shape the environment for the supported force to allow it to operate along the line of least probable expectation and to follow. He/she must do so while meticulously accounting for the indomitable force of time during his/her planning effort.

Principle 3: Cavalry is a commander's tool and he/she must not be deprived of it. Cavalryman and pre-eminent American tanker GEN Creighton Abrams was noted for his uncanny ability to proactively sense the timing and pace of battle while possessing the acuity to advantageously use terrain during his command of 4th Armored Division's 37th Tank Battalion, and later Combat Command B, during World War II.14 Abrams' tactical acumen and battlefield success can be tied to training and education in the U.S. Cavalry, which allowed him to think and fight like an old horse cavalryman while employing his own reconnaissance assets during the war.15 Nonetheless, commanders should seek to emulate Abrams' ability to sense the timing and pace of battle, and the terrain's power and influence on the tactical action. A commander's cavalry is the tool that allows him/her to do so.

In a commander's hand, cavalry forces enable him/her to improve understanding on the current situation, develop the picture for future tactical activities and shape the future. Therefore, it is paramount that commanders retain control of their respective cavalry formations. All too often today, senior commanders confiscate the

cavalry formations of their subordinate commanders to augment their own cavalry force. For example, when brigade commanders strip the scout platoons from their combined-arms or infantry battalions to reinforce their cavalry squadron, it neutralizes a battalion commander's ability to proactively shape and gain an understanding on his/her respective area of operation. Or, as frequently happens in digital division-level exercises, the division headquarters robs a brigade combat team of its cavalry squadron, thus leaving the brigade commander

blind and understrength.

To make headway on this verity – that in land warfare, cavalry is the commander's tool for proactively shaping the environment – senior commanders must not take the cavalry force of their subordinate commander(s). Doing so undermines the subordinate commander's tactical success, thereby increasing, not decreasing, the problems for the senior commander.

Further, in light of the attention placed on LSCO, commanders at all levels of command, from the battalion to the field army, need a degree of organic cavalry. As the Army looks at modernization efforts that seek to address the challenges of Great Power competition and LSCO, it should invest in sinew ground-cavalry formations so that field commanders are better able to succeed on the battlefield.

Principle 4: Cavalry operations build the framework for the employment of a commander's reserve. The commitment of one's reserve should not be an off-the-cuff, reactionary endeavor. If done properly, the commitment

## LEGENDS OF ARMOR





79



"ABE"
CREIGHTON W. ABRAMS
COMMANDER, 37TH TANK BATTALION
RELIEF OF BASTOGNE
CLOCHIMONT HILL BELGIUM

CLOCHIMONT HILL, BELGIUM
26 DECEMBER 1944
AWARDED THE DISTINGUISHED SERVICE CROSS

CHIEF OF STAFF, UNITED STATES ARMY 1972-1974





ARMOR 🛰 Winter 2022

of a reserve should be tied to a decision point developed during thorough and detailed planning. In most situations the employment of one's reserve should be tied to one of three conditions:

- Tactical success;
- Failure to accomplish the mission or to attain an objective; or
- A previously identified transition.

Four primary transitions come to the fore when planning to employ a reserve. The transitions include 1) transition from an attack to a defense; 2) transitioning from a defense to an attack; 3) transitioning from an existing form of warfare to a pursuit; and 4) transitioning from one form of warfare to a retrograde or withdrawal.

Having identified the aforementioned conditions and transitions during the planning process, commanders should orient their cavalry force on seeking information that supports, answers and informs the decisions for each of those points. Doing so better enables commanders to appropriately employ their reserve.

Principle 5: The use of cavalry must be purposeful and not be anchored on vacuous jargon. If used effectively, a cavalry force enhances the mission of the headquarters it supports. If used ineffectively – hastily employed without enough thought given to its focus, objective or sustainment – cavalry forces become a burden for the command they support and thus begin to work against that command.

In the U.S. Army, the idea of "kicking out the cavalry squadron" or "kicking out the scout platoon" as early as possible has taken on near dogmatic proportions. However, the lens of history notes that this heuristic is not new. To be sure, this problem has plagued commanders for centuries. Namely, Prussian army Chief of Staff Helmuth von Moltke noted a similar problem in the Prussian army during the 19th Century's wars of German unification. He reflects, "Premature deployment [of cavalry forces] is disadvantageous because long lines are unwieldy in movement, easily miss the correct direction and come apart. They find cover difficult to obtain in open terrain and

cannot easily escape the enemy's view and fire."16

The haste in which many commanders deploy their cavalry force in training results in the cavalry's becoming more vulnerable to counter-reconnaissance, surveillance, indirect-fire attacks and destruction. This in large part is why one often sees cavalry formations die a quick death during CTC rotations and in digital training exercises.

## Hasty vs. timely employment

While in training this can be chalked up to learning, the mindset and perspective on cavalry cannot be allowed to calcify. To be sure, as the Army reinvests in LSCO, commanders must realize that if a cavalry force is quickly destroyed, it will not be rapidly reconstituted or regenerated like it is at the National Training Center or during a CPX. Instead, a commander must purposefully employ his/her cavalry formation. The cavalry-force employment must be timely and adequately resourced to boot. Otherwise, the potential cost of a hasty employment outweighs the benefit of a rapidly committed, but quickly destroyed, cavalry force.

Principle 6: Cavalry builds the framework for exploitation. History suggests that the preponderance of casualties in war are brought about through exploiting tactical success by pursuing a beaten enemy and driving them down as they abscond toward safety. Bonaparte echoes this verity in stating that "[t]he secret of war is to march 12 leagues, fight a battle and march 12 more in pursuit."17 Yet far too often, Army plans posit that "consolidation and reorganization" come on the end of a tactical operation. This planning paradigm suggests that the commander foresees failure or at least a zero-sum situation at the battle's conclusion. For if a commander sees success and not ruin on the far side of his/her plan, he/she would then speak of exploitation or transitions.

The cavalry plays a major role in this decision space by gathering the information necessary to enable a combined-arms or infantry battalion's pursuit of a defeated enemy. It does so by working throughout an ongoing

operation to fill the tenuous gaps between known and unknowns to provide the commander the information needed to craft a plan for pursuit.

Therefore, the supported commander must proactively task the cavalry to look for the answers to drive those transition decisions. Commanders must not wait for the conclusion of an existing operation to think about where and how to employ the cavalry. Instead, they must build upon the existing decision-support matrix by using the existing tactical situation to gain insight to opportunities, gaps and weaknesses to exploit.

Principle 7: Cavalry leaders are forward-thinkers, problem-solvers, independent spirits and decisive operators. Given the fluidity and temporal aspects of cavalry operations, cavalry formations require a certain type of leader. The character of cavalry operations demand that leaders of cavalry formations be forward-thinking. Cavalry leaders must always think about what is next, how their operations support higher headquarters and what should they see or find that they were not necessarily instructed to find.

#### Problem-solvers

Next, cavalry leaders must be independent problem-solvers capable of operating beyond the confines of mission command. Recalling Principle 3's focus on sensing time and the pace of battle, as well as the physical and temporal effects of terrain, cavalry leaders must intuitively act in a decisive manner based on fleeting environmental factors to capitalize on the temporal, environmental and spatial factors of engagements and battle.

To be sure, cavalry leaders must not be doctrinaires but must able to think, speak and operate beyond the narrow confines of U.S. Army doctrine. Army doctrine, focused solely on how the U.S. Army seeks to fight as part of the joint force, is a cognitive box that narrowly directs how to operate at the tactical level, thereby also limiting the number of mental models available for leaders to effectively make sense of what's unfolding before them. However, the problems faced at the tip of the spear rarely fall into the simplistic, maneuver-centric tactical concepts cap-



Figure 2. Ukrainian troops during the Battle of Debaltseve, Feb. 5, 2015.

tured in U.S. Army doctrine.

For example, Russian operations in eastern Ukraine highlight this point. The Battle of Zelenopillya – more a slaughter than a battle – presented a tactical situation in which Russian reconnaissance and its nascent reconnaissance-strike model rapidly overwhelmed several Ukrainian combat brigades, resulting in hundreds of casualties and the destruction of three Ukrainian armored brigades.<sup>18</sup>

The battles for Luhansk airport, Donetsk airport and Debal'tseve were all positional battles of attrition, or sieges, in which the Russians, taking advantage of the Ukrainians' willingness to seize the initiative, lured them into terrain that put them at a severe tactical disadvantage. <sup>19</sup> In each case, Russia bludgeoned the Ukrainian forces and won tactical victories that rippled at strategic and policy levels.

Yet, U.S. Army doctrine is devoid of tactical and operational frameworks that illustrate much beyond the maneuveristic method of how it wants to fight. Because of this, cavalry leaders must be able to understand operations beyond the myopic confines of doctrine. Failure to do so can result in Debal'tseve-eque situations in which cavalry leaders guide their supported unit into a trap.

#### Conclusion

Harkening back to the beginning, Morton reminds the student of war, "Then, as now, war remains a human endeavor. Until the army develops a remote sensor capable of divining intentions

and reading minds, there will be a need to close with the enemy to determine his plans."<sup>20</sup> Current events continue to reinforce this assertion. A resurgent Russia, waging a land-based campaign in eastern Ukraine – dominated by the ground combat fought by tanks, infantry and artillery – demands that U.S. Army land forces understand how to effectively employ cavalry forces. Further, this dynamic demands that the U.S. Army re-examine the need for cavalry forces at the division, corps and field-army level.

U.S. Army Europe's upcoming Defender 2020 exercise might help bring the need for ground-cavalry forces at the division, corps and field army to the fore.21 The Defender 2020 exercise is also likely to highlight the need for forward-deployed ground-cavalry forces in middle and eastern Europe. To be sure, Defender 2020 and smaller rapid-force-deployment exercises, such as the deployment of a task force from 2<sup>nd</sup> Armored Brigade Combat Team, 1<sup>st</sup> Armored Division, in April to May 2019 to Drawsko Poromorski, Poland, do not take place in a contested environment in which movement into the theater via air and sea are denied or obstructed.<sup>22</sup> An aggressive adversary patrolling the waters of the Atlantic, and the sky above it, could prove problematic if the need arose to expeditiously invest Europe with U.S. Army forces.

Moreover, cavalry's bright future demands a clear understanding of its employment. The U.S. Army must also shake free of the faulty Information Age concepts that denuded the U.S.

Cavalry in the early days of the post-9/11 period. Some of these concepts include the idea that rugged ground cavalry is no longer needed and that sensors and surveillance equipment can do the job cavalry once did. Further, the idea that any combat-arms leader was suitable to develop, coordinate and lead cavalry formations has proven false.

Inquisitive students of war find that a basic set of principles permeate cavalry operations if they challenge themselves to look beyond the confines of U.S. Army doctrine.

- Principle 1: Cavalry allows a commander to manipulate time in battle.
- **Principle 2:** Cavalry shapes the environment and the situation of its supported force.
- Principle 3: Cavalry is a commander's tool, and he or she must not be deprived of it.
- Principle 4: Cavalry operations build the framework for the employment of a commander's reserve.
- Principle 5: The use of cavalry must be purposeful and not be anchored on vacuous jargon.
- **Principle 6:** Cavalry builds the framework for exploitation.
- Principle 7: Cavalry leaders are forward-thinkers, problem-solvers, independent spirits and decisive operators.

These principles are not meant to be a checklist but rather a guide to help Soldiers assigned to cavalry formations better understand the purpose and function of the formation to which they are assigned. For as Fuller reminds the Soldier, "We must liberate our thoughts from customs, traditions and shibboleths, and learn to think freely, not imitatively. When anything appeals to us or displeases us, we must not accept it on its face value, but examine it, criticize it, and discover its meaning and inner worth. Remember that every student has much more to unlearn than to learn, and that he cannot learn freely until he has hoed the weeds of irrational thought out of his head."23

These principles are focused on generating thought and debate among

U.S. Army Cavalry practitioners – akin to that which marked the coda of the U.S. Army's horse cavalry, the birth of the U.S. Armored Force and the complementary rise of mechanized cavalry – in hope of improving the cavalry force and its leaders, and making it more effective on the battlefield.

MAJ Amos Fox is the executive officer. 3<sup>rd</sup> Squadron, 4<sup>th</sup> Security Force Assistance Brigade, Fort Carson, CO. Previous assignments include executive officer, 1st Squadron, 35th Armor Regiment, 2<sup>nd</sup> Brigade, 1<sup>st</sup> Armored Division, Fort Bliss, TX; operations officer, 1-35 Armor, 2/1 Armored Division, Fort Bliss; plans officer, 1st Armored Division, Fort Bliss; plans officer, Combined Joint Forces Land Component Command-Operation Inherent Resolve, Baghdad, Iraq; commander, Troop L, 2<sup>nd</sup> Squadron, 16<sup>th</sup> Cavalry Regiment, 199<sup>th</sup> Infantry Brigade, Fort Benning, GA; commander, Company D, 1<sup>st</sup> Squadron, 11<sup>th</sup> ACR, Fort Irwin, CA; assistant operations officer, 1st Squadron, 11th ACR, Fort Irwin; and commander, Headquarters and Headquarters Troop, 1<sup>st</sup> Squadron, 10<sup>th</sup> Cavalry Regiment, 2<sup>nd</sup> Brigade, 4<sup>th</sup> Infantry Division, Fort Carson. MAJ Fox's military education includes School of Advanced Military Studies, Command and General Staff College, Airborne School, Maneuver Captain's Career Course, Cavalry Leader's Course, Bradley Fire Support Vehicle Course and Field Artillery Officer Basic Course. He holds a bachelor's of science degree in secondary education from Indiana University-Purdue University at Indianapolis; a master's of arts degree in secondary education from Ball State University; and a master's of military arts and science degree in theater operations from the School of Advanced Military Studies. MAJ Fox's awards include the Tom Felts Leadership Award; the Draper Armor Leadership Award, Fiscal Year 2013; member of 11th ACR's

honorary rolls; and the Order of St. George (Bronze). He is also a recipient of Silver Spurs.

### **Notes**

- <sup>1</sup> Matthew Morton, *Men on Iron Ponies: The Death and Rebirth of the Modern U.S. Cavalry*, DeKalb, IL: North Illinois Press, 2019.
- <sup>2</sup> Ibid.
- <sup>3</sup> Harlan Ullman, James Wade Jr., Frederick Franks, Charles Horner, Jonathon Howe and Keith Brendley, *Shock and Awe: Achieving Rapid Dominance*, Washington, DC: National Defense University, 1996.
- <sup>4</sup> Donald Rumsfeld, "Transforming the Military," *Foreign Affairs*, May/June 2019, https://www.foreignaffairs.com/articles/2002-05-01/transforming-military; accessed Oct. 19, 2019.
- <sup>5</sup> Author's notes from personal observations of multiple command post and warfighter exercises.
- <sup>6</sup> Morton.
- <sup>7</sup>Robert R. Leonhard, *Fighting by Min-utes: Time and the Art of War*, Westport, CT: Praeger, 1994.
- 8 Ibid.
- <sup>9</sup> J.F.C. Fuller, *The Foundations of the Science of War*, London, United Kingdom: Hutchinson, 1926; reprint, Fort Leavenworth, KS: Combat Studies Institute, 1993.
- <sup>10</sup> David Chandler, *The Campaigns of Napoleon*, London, England: Weidenfeld and Nicolson Limited, 1973.
- <sup>11</sup> B.H. Liddell Hart, "The Essence of War," *Royal United Services Institute*, Vol. LXXV, 1930.
- <sup>12</sup> GEN George S. Patton Jr., *War as I Knew It*, New York, NY: Houghton Mifflin, 1995.
- 13 Fuller.
- <sup>14</sup> Lewis Sorley, *Thunderbolt: General Creighton Abrams and the Army of His Times*, Bloomington, IN: Indiana University Press, 1992.
- 15 Ibid.
- <sup>16</sup> Helmuth von Moltke in Harry Bell and

- Daniel Hughes' translation, *Moltke on the Art of War: Selected Writings*, Novato, CA: Presidio Press, 1993.
- <sup>17</sup> W.D. Bird, *The Direction of War: A Study and Illustration of Strategy*, Cambridge: Cambridge University Press, 1925.
- <sup>18</sup> Shawn Woodford, "The Artillery Strike That Spooked the U.S. Army," *The DuPuy Institute*, March 29, 2017, http://www.dupuyinstitute.org/blog/2017/03/29/the-russian-artillery-strike-that-spooked-the-u-s-army/; accessed Nov. 9, 2019.
- <sup>19</sup> MAJ Amos Fox, "Cyborgs at Little Stalingrad: A Brief History of the Battles of the Donetsk Airport May 26, 2014, to Jan. 21, 2015," Institute of Land Warfare, Land Warfare Paper 125, May 2019; MAJ Amos Fox, "Battle of Debal'tseve: the Conventional Line of Effort in Russia's Hybrid War in Ukraine," *ARMOR*, Winter 2017.
- <sup>20</sup> Morton.
- <sup>21</sup> Jen Judson, "Reforger Redux? Defender 2020 to be the 3<sup>rd</sup> Largest Exercise in Europe Since Cold War," *Defense News*, Oct. 7, 2019, https://www.defensenews.com/land/2019/10/07/reforger-redux-defender-2020-exercise-to-be-3rd-larg-est-exercise-in-europe-since-cold-war/; accessed Oct. 27, 2019.
- <sup>22</sup> Todd South, "Rapid Deployment of Fort Bliss Soldiers to Poland Tests Army's Force Flexibility," *Army Times*, March 21, 2019, https://www.armytimes.com/ news/your-army/2019/03/21/rapid-deployment-of-fort-bliss-soldiers-to-polandtests-armys-force-flexibility/; accessed Oct. 27, 2019.
- <sup>23</sup> Fuller.

### **ACRONYM QUICK-SCAN**

**ACR** – armored cavalry regiment

CPX - command-post exercise

**CTC** – combat-training center

**LSCO** – large-scale combat operations

**MDMP** – military decision-making process

**R&S** – reconnaissance and security

Reprinted from Winter 2020 ARMOR

82 ARMOR X Winter 2022