

Division Cavalry and Its Role in Army of 2030

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U.S. Army Forces Command tasked 1st Cavalry Division in September 2021 to execute a reconnaissance and security (R&S) pilot for the armored division (reinforced) in support of the Army 2030 Division Cavalry Force-Design Update (FDU). The division continues to collect data and lessons-learned to answer a fundamental question for the Army: Is the current division Cavalry FDU design correct, and does it have the capabilities required to properly enable the division in 2030 and beyond?

The following article provides an excellent primer for understanding why a heavy/armored division requires this critical enabling capability using historical examples, coupled with findings from the large-scale combat operations (LSCO) gap analysis. After 20 years of brigade combat team (BCT)-centric counterinsurgency (COIN) operations that have created what is described as “a case of collective amnesia for the Army regarding Cavalry operations,” this article helps reblue all of us on why we must have Cavalry formations and how we must adapt this formation to execute cross-domain Cavalry operations for divisions executing LSCO today, tomorrow, in 2030 and in 2040.

Finally, the 1st Cavalry Division pilot is not merely helping define the future of R&S for the reinforced armored divisions. I submit it is leading us to the conclusion that all armored divisions (1st Cavalry Division, 1st Armored Division, 3rd Infantry Division and 1st Infantry Division) require a cross-domain division Cavalry squadron. Division Cavalry provides the division with a critical shaping capability in LSCO. This article helps explain why.

-MG John B. Richardson IV, commanding general, 1st Cavalry Division

Cavalry has provided commanders throughout history with mobile forces well-suited to conduct reconnaissance operations, provide security to their own army and, when directed, fight to gain a position of relative advantage over the enemy. Like the nature of war, the purpose and function of Cavalry on the battlefield remains constant and has been an integral part of warfare for thousands of years. However, like the character of war (how it is fought), Cavalry operations have and will continue to evolve over time, adapting and changing with developments in technology, military doctrine and a multitude of other variables that affect how war is conducted.

As the Army looks to the future and considers how it will conduct multidomain operations (MDO) in 2030 and beyond, it has acknowledged the importance of Cavalry – particularly to divisions. Because no cross-domain R&S capability currently exists at the division level, division and corps Cavalry was identified as an LSCO gap (#9) in the current force structure.¹ To close the gap, FDUs are currently navigating the Total Army Analysis process to return Cavalry squadrons to Army of 2030 armored divisions (reinforced), improve those formations and integrate new enabling technologies. The Army’s ongoing transition to the division as the decisive tactical echelon and the associated division headquarters FDU support these efforts.

Historical perspective

According to Field Manual (FM) 3-98, **Reconnaissance and Security Operations**, armies have historically capitalized on Cavalry forces for their significant advantage in mobility to conduct R&S operations and, in the case of heavy Cavalry, penetrate, exploit and pursue an enemy force.² By employing all available resources, Cavalry squadrons answered the commander’s critical information requirements (CCIR) and secured positions of relative advantage on the battlefield to enable other forces to maneuver. Any student of military history can readily cite the Army’s use of BG John Buford’s cavalry during the American Civil War.



Figure 1. BG John Buford Jr., Union Army.

At Gettysburg, Buford’s 1st Division of the Cavalry Corps – in advance of the Union Army’s main body – secured key terrain and defended against Lee’s superior force to buy

time and space for the Union Army to achieve relative advantage over the Confederate Army. With the key terrain, the Union Army defeated Lee's attack; once the Union had regained the initiative, Buford's Cavalry "pursued and harassed the Confederates all the way back to the Potomac River."³

From a historical perspective, the best-organized Cavalry formations were those that could perform both R&S missions. History shows that Cavalry organizations oriented solely on the purpose of information collection struggled to meet the requirements of their operational environment and the needs of their formation commander. Essentially "one-trick ponies," they lacked versatility and adaptability, and they struggled to perform assigned missions.

In World War II, for example, division Cavalry doctrine and training focused on reconnaissance ("sneak and peek" doctrine). Once deployed, these formations were regularly employed in a much broader mission set that included security operations and sometimes entailed combat actions, which they were not manned, trained or equipped to perform. In the European Theater particularly, this role expanded to include the use of mechanized-Cavalry groups to maintain contact between adjacent units as they "tied in" the flanks of field armies, corps and divisions – a role division Cavalry is well-suited for on current and future battlefields.

This broader employment reflected command needs, and during the post-World War II after-action review (AAR) conducted at Fort Knox, KY, in the years after the war, the Army acknowledged and embraced the need to execute R&S and economy-of-force missions (ability to fight for information). These AARs resulted in the formation of armored-Cavalry regiments for corps and division Cavalry squadrons – force designs that reflected this need "tended to generate capable and adaptive units able to operate in a variety of operational environments, exemplified by the actions of division-Cavalry squadrons in Desert Storm."⁴

Cavalry formations proved highly effective during Operation Iraqi Freedom in 2003 in a chaotic operating environment amid limited intelligence regarding enemy activities.⁵ The 3rd Squadron, 7th Cavalry Regiment, 3rd Infantry Division's Cavalry squadron "performed the full range of recon, security and economy-of-force operations to include screen, guard, cover and blocking, and it seized critical objectives in advance of the division's main effort."⁶



Figure 2. Division Cavalry in the war on terror's march to Baghdad.

During the last 20 years, however, operations in Iraq and Afghanistan have resulted in a case of collective amnesia for the Army regarding Cavalry operations.⁷ "The enduring value of a robust, versatile Cavalry organization was lost amid the need to reorient the Army toward long-term COIN operations," said Dr. Robert S. Cameron, the Armor Branch's historian.

During the “war on terrorism,” many Cavalry scouts conducted dismounted patrols and manned checkpoints. More to the point, COIN focused mainly at the BCT level, not the division level, and “[Cavalry formations] performed information collection and surveillance rather than R&S and economy-of-force missions.”⁸ As a result, the division commander did not rely on the Cavalry formation to conduct reconnaissance and surveillance operations, so eventually the division Cavalry squadrons were absorbed into the modular BCTs. This collective amnesia has the potential to lead us back to the faulty assumptions made prior to World War II and the “sneak and peek” doctrine that indicated Cavalry units should only conduct reconnaissance and surveillance.

The realities of the 2030 battlefield drive us to one inescapable conclusion: Cavalry squadrons cannot be the Swiss Army knife of maneuver formations, nor can their functions be performed by other maneuver formations. Given the renewed focus on division-level operations in the Army of 2030, it is time to return Cavalry to its primary functions and purpose, using proven principles of operations for Cavalry formations while introducing new and emerging technologies to enhance those principles.

Why Cavalry formations are required

Traditionally, Cavalry has provided commanders with a mobile formation that can conduct reconnaissance, provide security and fight when directed. Cavalry missions include reconnaissance, security, attack, defend, movement-to-contact, guard, delay, pursuit and exploitation. This range of operations allows the commander to make timely decisions, shape subsequent fights and seize, retain and exploit the initiative while preserving combat power (the BCTs) for the decisive point. In addition, the ability of division Cavalry to execute economy-of-force operations for the commander facilitates the concentration of combat power at the decisive time and place.

Because of its mobility, special organization, training and unique capabilities, Cavalry squadrons can execute reconnaissance operations on a specific objective or across a broad front. Moreover, they can feed previously unconfirmed or unknown information to commanders such as river speed or bridge strength and stability to support a wet-gap crossing operation. Also, due to its heavy armament relative to the size of the formation, the Cavalry squadron can execute security operations allowing maneuver space and reaction time for the protected formation.

Cavalry initially conducts reconnaissance in advance of the main body and, as required, provides security for lead BCTs. As contact becomes imminent, the Cavalry can destroy the enemy’s recon, force the enemy to deploy early and then pass forward a BCT or move to the division’s flanks, transitioning into a security role that monitors the subsequent action while providing flank security. Upon conclusion of the action, the Cavalry again moves forward to conduct reconnaissance or to execute pursuit and exploitation operations.

The Cavalry squadron’s armament and mobility enable it to support operations that are difficult for other combat formations to support. Its forward position on the battlefield, coupled with its mobility, enables it to seize critical objectives in advance of the main body if necessary. It can also conduct pursuit and isolation operations after the enemy’s tactical defeat. In short, the Cavalry squadron sets the conditions for the protected force’s success. Its unique design and varied capabilities can confirm and refine courses of action, preserve commander decision options, disrupt enemy spoiling attacks and pursue the enemy if required.

Unlike formations exclusively reliant on robots and other autonomous systems, Cavalry squadrons are the original all-weather sensor. They can conduct 24-hour, all-weather operations while operating in a semi-independent status. While they leverage the latest technologies in the execution of their missions, they are manned by Soldiers (armored reconnaissance specialist (19D) or “Cavalry scouts”) trained to perform Cavalry functions. Cavalry squadrons represent the optimal use of human talent (Cavalry scouts) and advanced technologies. More importantly, our adversaries cannot easily offset their capabilities.

We need only to look back two decades at the Army’s failed experiment with the battlefield surveillance brigades that were based on the unfounded assumption that sensors could completely replace the Cavalry scout and that technology alone would allow commanders to see first, understand first and act first. Cavalry operations are, strictly speaking, a human endeavor, and technology can enhance, but not replace, the value of the scout.

Division Cavalry's role in MDO, Army of 2030

In LSCO, the corps most commonly maneuvers divisions, setting conditions for them across a corps' area of operations not just with joint fires and intelligence but with other divisions as well. The corps maneuvers subordinate formations to set up an armored division (reinforced) for penetration and exploitation of a prepared enemy defense. The armored division, executing cross-domain maneuver, "penetrates and begins neutralizing enemy long-range air defenses, neutralizes and dis-integrates key elements of long-range fires, contests enemy forces, and maneuvers from operational and strategic distances."⁹

In terms of executing MDO, it will be up to the joint task force (JTF) or other theater-level command to create the window of opportunity at the operational level through which the division then creates and exploits at the tactical level in conjunction with the division Cavalry, division artillery and intelligence and the electronic-warfare battalion. Corps shaping efforts and joint dis-integration and dislocation effects are also essential to the division's success. Thinking through this type of operation provides a framework for discussing the idea of convergence at the tactical level. For example, consider the critical friendly zone (CFZ), a designated area wherein enemy fires immediately receive counterfire from any available friendly-fires asset.

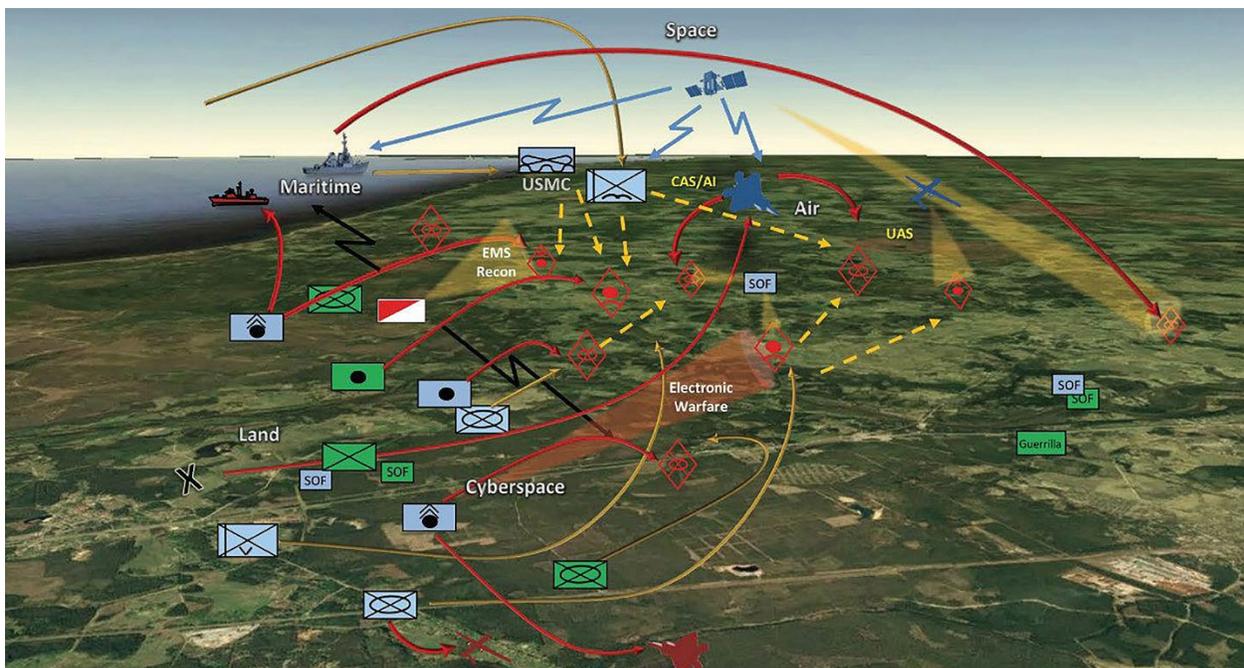


Figure 3. Army and joint MDO.

Convergence in MDO takes the idea of a CFZ and expands it significantly. Theater army, JTF or corps assets, exceeding the range of any division asset, execute multidomain fires to prevent interference with the penetration within what is described as a "critical convergence zone." The critical convergence zone is where the Army of 2030 division Cavalry squadron will operate.

The division Cavalry squadron will provide the link between the higher-echelon capabilities, such as those residing in the multidomain task force (MDTF), the corps and the division. In MDO, it is also essential to understand the division Cavalry squadron will not operate in isolation. Instead, it will operate as part of a division – commanded and controlled by a corps, JTF or theater army. This is an important concept in terms of the future of Cavalry operations because many of the assets, authorities and capabilities associated with those operations reside at echelons above division.

In 2030, division Cavalry squadrons will be called upon to pursue a broad range of activities. They will address the division commander's information requirements, but they will also perform other functions, enabled by advanced technologies traditionally associated with Cavalry. The squadron's actions will nest with those of the MDTF and other corps or JTF R&S assets. This interaction ensures the division Cavalry squadron will benefit from the actions

of these higher-echelon assets, including the operational fires command and information advantage element, and at times work directly with them.

Still, it is possible the division will not be supported by an MDTF at the JTF or corps level. Responsibility in this case will again fall to the division Cavalry to meet the commander's information requirements, shape the fight at the tactical level and present multiple dilemmas to adversaries. Therefore, it must be manned, trained and equipped to perform these functions to fight for information inside the enemy's security zone and survive under all forms of contact. The division headquarters must be similarly trained to properly organize, employ and support the division cavalry in LSCO, including providing reconnaissance guidance and objectives in the form of CCIR.¹⁰

What division Cavalry squadron does for division

In MDO, the division Cavalry squadron conducts cross-domain reconnaissance oriented to answer the division commander's information requirements, and it then enables the division to make contact with the smallest element and against the enemy on terms favorable to the division.

From a reconnaissance perspective, the division Cavalry employs multiple forms of contact to fulfill the division commander's priority information requirements, typically oriented on named areas of interest and decision points. It uses direct, indirect and multidomain effects to trigger enemy action and expose hidden capabilities. The enemy's reaction is then exploited by echelon-above-brigade collection and targeting assets.

But the division Cavalry squadron offers much more to the division than intelligence collection. It does more than simply answer the division commander's information requirements in reconnaissance operations. In MDO, regardless of the squadron's mission, the task-organized division Cavalry squadron provides the division commander with the means to employ all forms of contact and most forms of collection forward of the division's BCTs.

The ability to conduct security operations is just one example of Cavalry's versatility and represents a mission for which it is optimally suited. The division Cavalry has the high-volume firepower, training, concentration and adaptability to properly execute a security operation. The squadron employs multiple forms of collection to detect threats and provide early warning to the division (screen). It also protects the division by fighting to gain time while denying enemy observation and direct fire against the main body (guard).

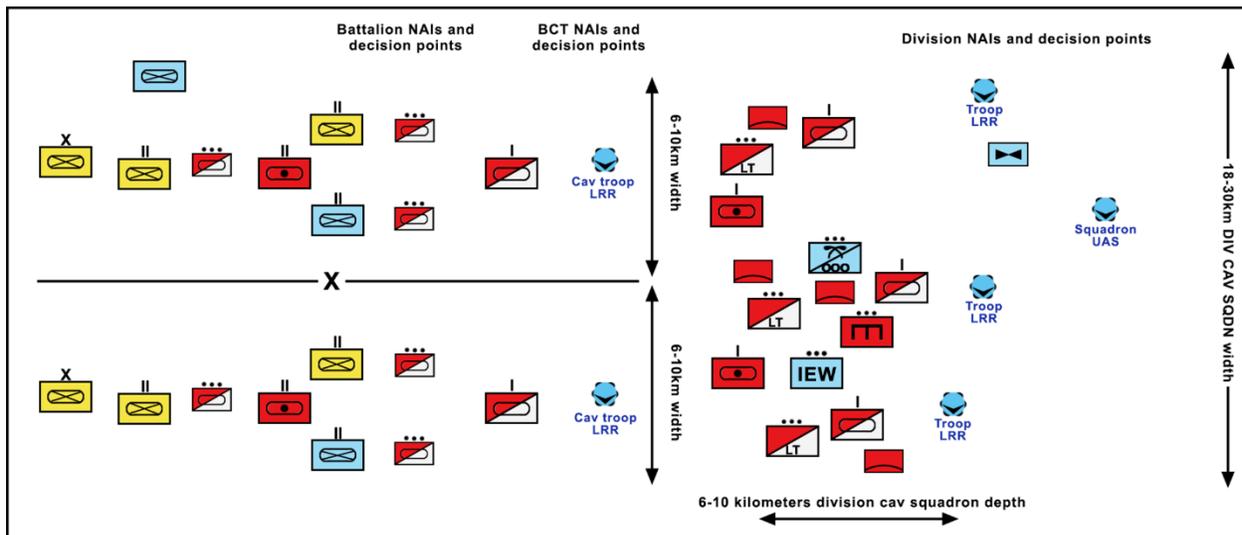


Figure 4. The division Cavalry squadron typically operates on a frontage of 18-30 kilometers, but it can leverage its multidomain capabilities to screen up to 60 kilometers in breadth.

Beyond security operations, the squadron can function in an economy-of-force role, capable of attacking, defending and performing a delay mission to focus the division's BCTs on the division's decisive point and enabling its main effort.¹¹ On the 2030 battlefield, it is likely the armored division (reinforced) commander could task the

squadron to guard the division flank as it moves forward after a penetration or to conduct an economy-of-force mission to allow the commander to mass combat power at the decisive point.

In a 2030 scenario, the squadron enhances its ability to perform R&S and economy-of-force operations by employing advanced and emerging technologies like robotics, autonomous systems and loitering munitions. With these future organic capabilities, it will have an extended range, thus enabling it to cover more avenues of approach and influence the enemy farther out. The squadron can identify enemy formations using its organic and attached assets, such as medium and long-range unmanned aerial systems (UAS) and attached long-range fires. Once the squadron identifies an enemy formation, it can target it with enough firepower from advanced robotics and precision fires assets to destroy an enemy company in a small-scale mass precision attack. Employing loitering munitions at troop and squadron level will achieve this effect if appropriately used. This “pre-contact” loss of combat power can spoil an enemy operation and force him/her to change courses of action.



Figure 5. Robotic Combat Vehicle-Medium prototype.

Such a scenario illustrates Cavalry’s ability to perform R&S and economy-of-force operations consistent with its historic role. Technology merely supercharges that ability by leveraging the improved range and lethality of autonomous systems. Advanced technologies enhance principles of Cavalry operations. The difference between Cavalry formations of the past and those of the 2030 force lies in how these principles are applied with new technology, organizations and related skillsets – in short, the integration of humans and machines.

Way forward

Irrespective of advanced technologies employed on the future battlefield, the role of division Cavalry remains immutable, especially given the Army’s shift toward multidomain LSCO and the division as the decisive tactical echelon. The squadron first and foremost will conduct reconnaissance focused on the division commander’s CCIR, provide security and fight when directed. Though technology-enabled, the squadron is a tactical, close-fight combat formation that will still fulfill the division commander’s information requirements, provide him/her with decision space and help preserve the combat power of the division’s BCTs.

A fully task-organized, well-trained and equipped division Cavalry squadron will confirm or deny the division commander’s decisions points, protect the main body, support targeting efforts and, when needed, attack, delay and defend. The division Cavalry squadron of 2030 is not your father’s division Cavalry, however. Advanced technologies, including air and ground robotics and a variety of sensors operating at extended ranges, will enable and improve the proven principles of operation for Cavalry formations. Division Cavalry squadrons quite simply will

perform Cavalry functions better. Without a doubt, as we address LSCO Gap 9 and reintroduce Cavalry formations to the divisions, it is imperative we return to Cavalry's critical roles and functions to enable the division to be decisive at the tactical echelon.

Further discussion and experimentation around the employment of the division as the decisive tactical echelon with its organic Cavalry will enable us to refine the role of division Cavalry in the Army of 2030. Simulations, warfighter exercises and division Cavalry participation during National Training Center rotations will also enable all stakeholders to better understand the squadron's required capabilities in MDO and LSCO, as well as the human-machine interface between Cavalry scouts and advanced technologies.

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Notes

¹ The Combined Arms Center (CAC) LSCO gap study of 2017 identified 300-plus operational and tactical gaps associated with the Army's ability to win in LSCO. Of these gaps, 17 were deemed critical, with ongoing efforts to mitigate through resourcing materiel and non-materiel solutions. Thirteen of the 17 LSCO gaps directly support division-centric operations. Source: "Division as the Unit of Action in Large-Scale Combat Operations," operations and organization concept paper, CAC, Aug. 3, 2021.

² Paraphrased from FM 3-98.

³ "John Buford," American Battlefield Trust, <https://www.battlefields.org/learn/biographies/john-buford>.

⁴ Dr. Robert S. Cameron, *Division Cavalry from World War II to Modularity*, U.S. Army Armor School, MCoE, Fort Moore, GA.

⁵ Ibid.

⁶ Ibid.

⁷ Ibid.

⁸ Ibid.

⁹ MG John Richardson, paraphrased from "The Penetration Division and The Division Cavalry Squadron," Maneuver Warfighter Conference slide presentation, MCoE, Sept. 13, 2022.

¹⁰ Paraphrased from Richardson.

¹¹ Ibid.

Acronym Quick-Scan

AAR – after-action review

ABCT – armored brigade combat team

BCT – brigade combat team
CAC – Combined Arms Center
CCIR – commander’s critical information requirements
CFZ – critical friendly zone
CGSOC – Command and General Staff Officer’s Course
COIN – counterinsurgency
FDU – force-design update
FM – field manual
JTF – joint task force
LRR – long-range requirement
LSCO – large-scale combat operations
MCCC – Maneuver Captain’s Career Course
MCoE – Maneuver Center of Excellence
MDO – multidomain- operations
MDTF – multidomain task force
NAI – named area of interest
R&S – reconnaissance and security
RoK – Republic of Korea
UAS – unmanned aerial systems
USARCENT – U.S. Army Central