Enabling the Division in 2030: Evolving Division Reconnaissance and Security Capabilities

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New technology and operational environments force armies to evolve. Combat-ready units must consistently adopt new ways of thinking, operating and employing emerging technologies to maintain dominance on the contemporary battlefield.

A division and its Cavalry are no exception. Over the last century, Cavalry has departed from its horses, adopted armored vehicles, integrated aviation and acquired a range of other advanced technologies to perform vital reconnaissance and security (R&S) tasks for divisions and higher.

Cavalry has historically equipped divisions with the necessary information, reaction time and maneuver space to fight and win on the battlefield of the time. However, global contingency operations during the last 20 years forced the U.S. Army to transition from a division-centric force to one centered on the brigade combat team (BCT). This transition pushed what used to be division-level capabilities like Cavalry down to the BCTs, where they still reside.

Today the division and the Cavalry are on the cusp of the next evolutionary transition with the Army 2030 initiative. More powerful sensors, unmanned systems in both the air and on the ground, and innovations in communications technology have enhanced R&S capabilities to a degree that was not possible the last time the division was the unit of action.

Within the Army 2030 framework, divisions are once again the Army's decisive tactical echelon. As the decisive tactical echelon, divisions will require dedicated cross-domain R&S capabilities to fight and win in large-scale combat operations (LSCO).¹ The Army 2030 initiative offers an opportunity to evolve our divisions, building a dedicated and cohesive cross-domain R&S capability that is agile enough to rapidly integrate new technologies and capabilities while also enhancing the division's ability to sense, shape and fight peer adversaries in LSCO with existing materiel solutions until those new technologies become widely available.

Background

The Army's Combined Arms Center (CAC) LSCO study from 2018-2019 was intended to reorient that Army away from contingency operations and focus on how it would organize, resource and train for LSCO.² The study identified 17 high-risk capability gaps in the force, most of which were oriented on re-enabling divisions, corps and theater armies to operate and fight as combat formations.³ One of those gaps (#9) specifically identified a lack of organic multidomain R&S capability at the corps or division level.

Army 2030 represents a major force-design effort intended to modernize and transform the Army into a divisioncentric force capable of operating in a multidomain environment under LSCO conditions.⁴ As Army 2030 evolves how divisions fight, it is placing particular emphasis on the proposed armored division (reinforced), consolidating certain capabilities like ground reconnaissance (gap #9) and fires back at the division level to enable divisions to operate and shape the battlefield with greater effect.

In October 2022, U.S. Army Forces Command tasked 1st Cavalry Division to execute a two-year R&S pilot for the armored division (reinforced) in support of the Army 2030 Force-Design Update development. And while 1st Cavalry Division's R&S pilot initially focused on forming a dedicated and purpose-built armored division-Cavalry squadron (ADCS), 1st Cavalry Division leveraged this opportunity to experiment with building and testing a broader division-level, cross-domain R&S capability it called the division cross-domain task force (D-CDTF).

Concept: cross-domain R&S at division level

In the summer of 2022, 1st Cavalry Division began forming its D-CDTF. Anchored on an ADCS, D-CDTF has integrated complementary effects from an intelligence and electronic warfare (IEW) battalion and an air-Cavalry squadron (ACS) to re-enable the division with organic cross-domain R&S capabilities. Grounded in Field Manual (FM) 3-0, *Operations*, "multidomain operations imperatives," and FM 3-98, *Reconnaissance and Security Operations*, "roles of Cavalry," 1st Cavalry Division's D-CDTF is developing into a very diverse, agile and cohesive

team capable of enabling division operations, fighting for information, providing reaction time and maneuver space, and operating combined arms in LSCO. Simply put, the D-CDTF concept is proving to be an effective framework for reintroducing Cavalry and its evolving R&S capabilities to the division level and enabling it to better seek, sense, shape and fight a peer adversary in LSCO on the 2030 battlefield.

Observations from 1st Cav's D-CDTF concept

D-CDTF fills division's R&S gap in LSCO. With D-CDTF providing its enhanced R&S capabilities, the armored division (reinforced) is a more capable formation and better suited for the Army of 2030 and LSCO. Anchored on a robust ADCS, D-CDTF leverages the unique and synergistic effects of the IEW battalion and ACS into a layered system of R&S capabilities that have been largely absent from the division level for some time. Each of these three formations introduces a niche and specialized R&S capability that, when employed together, meets the demands of Army 2030 by enabling the division to conduct R&S in the land, air, space and cyber domains while engaging with the enemy through multiple forms of contact.

ADCS. ADCS is the anchor point of D-CDTF. It provides robust and lethal all-weather R&S capabilities to the division. From a reconnaissance perspective, ADCS provides a division commander the ability to fight for information, helping to answer priority intelligence requirements and developing the situation without committing a BCT or other resources. ADCS has the armor, mobility and firepower to perform a multitude of critical reconnaissance tasks farther forward on the battlefield. ADCS can influence a division's axis of advance far earlier by fighting up to and assessing key river-crossing sites or by validating bridge suitability well in advance of the division's main body. ADCS can also conduct a deeper reconnaissance of enemy obstacles and defenses, identifying seams and gaps, recommending points of penetration for BCTs – all of which is providing a division commander more options and decision space earlier in the fight.

From a security perspective, ADCS has the punch to provide the division with far greater reaction time and maneuver space. ADCS can extend the division's reach while protecting the BCTs from unwanted or unnecessary decisive engagement, effectively preserving BCT combat power for the decisive point of an operation. By extending the division's reach/security zone, ADCS also enables the division to push fires, air defense and aviation assets farther forward because it can secure them, effectively extending relative ranges and weapons effects while providing greater protection to the division. All this allows a division to reach and shape farther out – a much-needed capability on the 2030 battlefield.

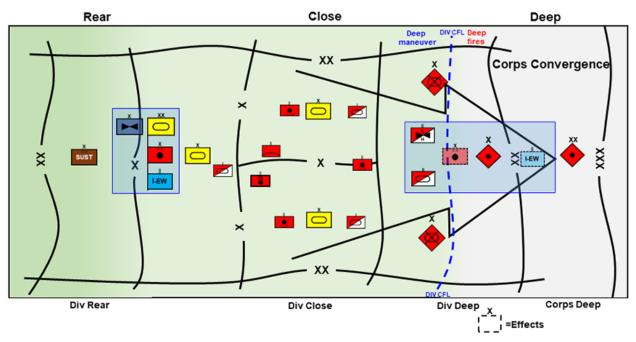


Figure 1. Proposed battlespace.

Finally, ADCS offers a division commander an economy-of-force option, achieving the greatest combat effects without consuming or committing BCT combat power. ADCS is fully capable of conducting an attack or a defense, and it can perform a multitude of tactical tasks like destroy, delay, secure, etc. Coupled with the IEW battalion's deep-sensing capabilities and ACS flying in support, ADCS offers the division a lethal capability to rapidly exploit an enemy weakness or mistake on the battlefield without having to commit or divert a larger force away from the decisive point.

IEW battalion. The IEW battalion provides seeking and sensing capability in the division deep area and beyond, effectively conducting reconnaissance through the space and cyber domains. The IEW battalion leverages data from joint and national sensors to provide division commanders with enhanced situation awareness and understanding, as well as targeting support. With that being said, the IEW battalion (or ACS, for that matter), cannot hold terrain or fight for information, and it can be susceptible to adverse weather and other types of interference. Taken alone, the IEW battalion's capabilities only answer part of the question; when incorporated into a broad and diverse R&S capability at the division level, it can be used to greater effect.

ACS. The ACS provides rotary-wing R&S capability in the division close and deep areas. With the ability to seek, sense and shape targets across the entire division battlefield, ACS can eliminate enemy sanctuary areas and exponentially increase the amount of reaction time and maneuver space available to the division. ACS's organic Shadow unmanned aerial system (UAS) allows D-CDTF to position sensors and conduct reconnaissance forward of ground elements for long periods of time, weather permitting.

This decreases the amount of time and level of coordination needed to generate timely and accurate reports to ADCS. The ACS's organic AH-64E Apaches employed in an air-cavalry role enhance a division commander's understanding of the enemy and environment, while simultaneously providing responsive and highly mobile attack-aviation support to increase the relative lethality of ADCS. Employment of the Shadows, together with the AH-64Es as a team, significantly increases aircraft survivability in a rapidly evolving threat environment.

By integrating the capabilities of ADCS, IEW battalion and ACS, supported by the combat-aviation brigade and division artillery, D-CDTF allows division commanders to combine arms in the R&S fight to seek targets, sense targets, shape targets and enable their destruction, while securing the division throughout the entire depth of the battlefield. Furthermore, D-CDTF better enables the division to gain a position of relative advantage by allowing it to operate earlier, faster, deeper and with less signature and risk. D-CDTF has considerable potential, addresses the cross-domain R&S capability gaps identified by CAC and the Army 2030 initiative, and it represents a much-needed evolutionary step in enabling divisions to fight in LSCO, 2030 and beyond.

D-CDTF is effective "landing spot" for new technology, capabilities. The concept of re-enabling the division with dedicated R&S capabilities is grounded in an idea and not a particular materiel solution. While D-CDTF employs the materiel available to a division today, 1st Cavalry Division intended D-CDTF to be an agile and innovative team, able to experiment with new ideas, capabilities and ways of operating to best conduct R&S and fulfill the roles of the Cavalry at the division level. This agile and innovative approach to R&S is coded into the D-CDTF's DNA, and thus makes it an optimal landing spot for the new and emerging technology and capabilities tied to Army 2030 and Army 2040 initiatives.⁵

Maximum effect. Because D-CDTF resides at the division level, its current R&S capabilities can be used to maximum effect on behalf of the division. This underpins the idea behind consolidating all fires assets at the division level. The division can easily control and mass a finite resource – its artillery – at a time and place of its choosing to achieve maximum effect for the division. In a resource-constrained environment, new and emerging technology and capabilities can quickly be integrated into whichever formation within D-CDTF makes most sense and yields the greatest effect for the division.

If, for example, a limited number of new robotics platforms were integrated into ADCS, they would likely be employed to have maximum effect for the division. If, however, pushed down to a BCT Cavalry squadron, they may only provide local benefit to a single BCT – a fraction of the greater division. New technology and R&S-oriented capabilities will likely have maximum impact and effect for the division when integrated into a D-CDTF.

Maximum support. An advantage of operating at the division level is direct access to the division command, its staff support and resources. There is naturally a gulf between division and BCT staff and resource capability and

capacity given the size differentials between echelons. The 1st Cavalry Division has 23,000 Soldiers and a robust division staff with the maturity, experience and broad range of expertise to render support and concentrate resources on D-CDTF. This will be particularly useful when integrating and employing emerging technology and capabilities into D-CDTF. Because D-CDTF already benefits from close and habitual working relationships at the division level, elements of D-CDTF can quickly galvanize support and expertise directly from the division's pool of signals, intelligence, aviation, fires experts and resources, as well as that of its subordinate brigades.

We're already doing it. ADCS is a good example of being an appropriate landing spot for new technologies and capabilities. Part of the ADCS task-organization is a cross-domain troop, a company-sized element already designed to receive, integrate and employ new technology and equipment during ADCS missions. As of March 2023, the ADCS executed a Soldier touchpoint for Army Futures Command (AFC), employing an array of experimental autonomous vehicles, robots and UAS.

Furthermore, ADCS spent 75 days at the National Training Center in support of Project Convergence-22 (PC-22), the largest joint and multinational experiment ever conducted by AFC replicating the 2030 battlefield. As ADCS received and tested the new technologies and capabilities at PC-22, it was directly supported by the division command and staff and the wealth of expertise they brought to maximize the experiment.

ADCS is only one example of being an optimal landing spot for the Army 2030 initiatives pushing new technology and capabilities to the division for employment. ACS will continue to evolve its ability to conduct mannedunmanned teaming and incorporate new and advanced air-launched effects. The IEW battalion will receive several new capabilities as part of the Army 2030 initiative. D-CDTF is a good landing spot for these advancements because they can be quickly and effectively integrated given its access to the division command and, staff and its resources, and then employed to yield maximum effect as part of a broader division purpose.

More effective than ad hoc task organization

D-CDTF internal. The Army is a people business, and relationships matter. D-CDTF can more effectively execute R&S for the division as a cohesive and well-trained team than they could as an *ad hoc* set of capabilities quickly task-organized prior to or during an operation.

ADCS and ACS are prime examples of how organizations benefit from very close and habitual working relationships. ADCS and ACS partner in most aspects and echelons of their training. These two organizations plan and maneuver together from platoon- through division-level training, building combined experiences and efficiencies that only come from time training together and reps and sets.

D-CDTF is more than just a collection of unique R&S capabilities grouped together and working for the division; it's intended to be a synergistic team that capitalizes on the people aspect of the Army profession and the consistent and close working relationships that help form strong and highly trained teams able to perform a complex mission in a complex operating environment (OE).

Working with the division. Beyond the close internal cooperation and relationships developing within D-CDTF, its relationships with the division also matter. D-CDTF is integrated in the division-headquarters operations process. Elements of D-CDTF collaborate with the division staff during mission planning, closely tying in with division processes to plan and synchronize intelligence collection, fire support and movement and maneuver. D-CDTF has seats at the division table and benefits from frequent interaction with the division commander and leadership, enabling all stakeholders to build mutual trust and understanding as well as develop close and more effective working relationships – again, through training time, reps and sets.

All this is not to say that units who establish *ad hoc* task organizations cannot accomplish their mission – it is meant to say that units who task-organize in an *ad hoc* manner are probably less effective than organizations that benefit from close and habitual ties that come through formal support relationships. What is important to recognize and is clearly identified in Army doctrine like FM 3-0 is that task-organization changes place burdens on subordinate units, no matter how agile they may be. Therefore leaders should consider less disruptive and more effective options.⁶ D-CDTF is an effective option in enabling the division with trained and dedicated cross-domain R&S capabilities in LSCO.

Conclusion

The Army 2030 initiative has reestablished the division as the unit of action – the decisive tactical echelon needed to fight and win in LSCO. This initiated the first step of the Army's next transformation by acknowledging the need to reconsolidate certain resources at the division level to have maximum effect on both the 2030 battlefield and on today's potential battlefields.

The Cavalry and the R&S capabilities it brings are a critical component of that reconsolidation, given the uncertainty associated with future OEs. Divisions, especially the proposed armored division (reinforced), need a dedicated, well-trained and cohesive cross-domain R&S capability that can rapidly integrate and employ new technologies and capabilities while enabling divisions to better seek, sense, shape and fight peer adversaries in LSCO today. Advances in sensors, communications, autonomous ground vehicles and UAS provide an ideal opportunity to evolve how we enable divisions with R&S capabilities.

D-CDTF is an effective initial solution for division cross-domain R&S capability gaps and meets the division-centric demands of Army 2030. D-CDTF remains based on a concept and employs the materiel that divisions have available today. But as new technology and capabilities become available, it must remain agile to quickly evolve. We don't have to get D-CDTF, or even its ADCS, entirely right, just close enough to adjust once better capabilities are accessible and our understanding of the future OE improves with the passage of time. Ultimately, our goal is to drive effective change in our formations, forcing our enemies to react to our innovations in how we fight instead of the opposite.

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MAJ John Pelham is the deputy G-5, 1st Cavalry Division, Fort Cavazos. His previous assignments include team leader, Combat Adviser Team 1, Company B, 1st Battalion, 3rd Security Force Assistance Brigade (SFAB); commander, Company B, 1st Battalion, 3rd SFAB; commander, Headquarters and Headquarters Troop, 6th Squadron, 9th Cavalry Regiment, 3rd ABCT, 1st Cavalry Division; commander, Company A, 1st Battalion, 12th Cavalry Regiment, 3rd ABCT, 1st Cavalry Division; and platoon leader, Reconnaissance, Surveillance, and Target Acquisition Platoon, Company B, 5th Squadron, 1st Cavalry Regiment, 1st Stryker BCT, 25th Infantry Division. MAJ Pelham's military schools include the Advanced Military Studies Program (School of Advanced Military Studies), CGSOC; Survival, Evasion, Resistance and Escape School; Pathfinder School; Combat Adviser Training Academy; Cavalry Leader's Course (CLC); Air-Assault School; MCCC; Cold Weather Leader's Course; Army Reconnaissance Course; Armor Basic Officer Leader Course; and Airborne School. MAJ Pelham has a bachelor's of arts degree in history from Tennessee Technological University; a master's of science degree in organizational leadership from Columbus State University; a master's of military arts and science degree in military operations from CGSC (School of Advanced Military Studies). MAJ Pelham's awards include the Bronze Star Medal and the Meritorious Service Medal with two OLCs.

LTC Bobby Sickler commands 7th Squadron, 17th Air Cavalry Squadron, Fort Cavazos. His previous assignments include chief, Concepts and Innovation Branch, G-5-Plans, U.S. Army Europe-Africa, Wiesbaden, Germany; fellow, advanced strategic-planning and policy, Arizona State University; executive officer, 25th Combat Aviation Brigade (CAB), 25th Infantry Division; S-3, 25th CAB, 25th Infantry Division; and executive officer, 2nd Battalion, 25th Aviation Regiment, 25th CAB. LTC Sickler's military schools include the Aviation Captain's Career Course and the Command and Staff Course, U.S. Marine Corps University. He has a bachelor's of science degree in mechanical engineering from the U.S. Military Academy and a master's of arts degree in military studies from Marine Corps University. LTC Sickler also has a doctorate from the School for the Future of Innovation in Society at Arizona State University in the human and social dimensions of science and technology – with a graduate certificate in complex adaptive systems science. His awards include the Distinguished Flying Cross and Purple Heart.

LTC Brennan Speakes commands 1st Squadron, 7th Cavalry Regiment, Fort Cavazos. His previous assignments include executive officer to the commanding general, Combined Joint Task Force – Operation Inherent Resolve, Baghdad, Iraq; chief, U.S. Army Armor School Commandant's Initiatives Group, Fort Benning, GA; operations officer (S-3), 1st SFAB, Fort Benning; and executive officer, 1st ABCT, 3rd Infantry Division, Fort Stewart, GA. LTC Speakes' military schools include CLC, CGSC, interagency fellow, Scout Leader's Course, MCCC, AOBC and Air-Assault School. He has a bachelor's of science degree in business administration from Texas A&M and a master's degree in business administration from Columbus State University. His awards include the Bronze Star Medal with two OLCs, Defense Meritorious Service Medal with one OLC and the Meritorious Service Medal, three OLCs.

LTC William (Bill) Frederick commands 163rd IEW Battalion, Fort Cavazos, TX, where he is transitioning 163rd from a downward-reinforcing expeditionary military-intelligence brigade (EMIB) to an upward-integrating IEW battalion. His other assignments include deep-sensing and targeting subject-matter expert/adviser to the Department of the Army G-2; Army Intelligence, Surveillance and Reconnaissance Task Force; staff officer, DA G-2, Pentagon; S-3 officer, 201st EMIB, Joint Base Lewis-McChord, WA; and Joint Certified Targeting instructor/operations officer/Collateral Damage Estimation (CDE) Course Manager, Joint Targeting School, Dam Neck, VA. LTC Frederick's military schools include the Joint Targeting School (CDE/battle-damage assessment/weaponeering/joint targeting cycle). He has a bachelor's of arts degree in political science from the University of Wisconsin at Stevens Point and a master's of arts degree in strategy and national security from U.S. Naval War College. LTC Frederick's awards include the Bronze Star Medal with one OLC, Defense Meritorious Service Medal and Meritorious Service Medal with two OLCs. LTC Frederick has prior enlisted service as an M-1 Abrams tank crewman, military-occupation specialty (MOS) 19K, and as a Cavalry scout, MOS 19D.

Notes

¹ LTC Kevin Hadley, MAJ Savannah Spencer and MAJ Justin Martens, *How the Army 2030 Divisions Fight (formerly known as WayPoint 2028)* [whitepaper] Version 3.5; U.S. Army Training and Doctrine Command (TRADOC) Proponent Office – Echelons Above Brigade, CAC, TRADOC, 2023.

² Ibid.

³ Paraphrased from LTG Michael D. Lundy, "Meeting the Challenge of Large-Scale Combat Operations Today and Tomorrow," *Military Review*, September-October 2018. Accessed at https://www.armyupress.army.mil/Journals/Military-Review/English-Edition-Archives/September-October-2018/Lundy-LSCO.

⁴ How the Army 2030 Divisions Fight.

⁵ Ibid.

⁶ FM 3-0, *Operations*, Oct. 1, 2022.

Acronym Quick-Scan

ABCT – armored brigade combat team ACS – air-cavalry squadron AFC – Army Futures Command ADCS - armored division-cavalry squadron AOBC – Armor Officer Basic Course BCT – brigade combat team CAC – Combined Arms Center CDE - collateral-damage estimation CGSOC - Command and General Staff Officer's Course CGSC - Command and General Staff College **CLC** – Cavalry Leader's Course D-CDTF – division cross-domain task force **EMIB** – expeditionary military-intelligence brigade FM – field manual IEW – intelligence and electronic warfare LSCO – large-scale combat operations MCCC – Maneuver Captain's Career Course

MOS – military-occupation specialty OE – operating environment OLC – oak-leaf cluster PC-22 – Project Convergence-22 R&S – reconnaissance and security SFAB – Security Force Assistance Brigade TRADOC – (U.S. Army) Training and Doctrine Command UAS – unmanned aerial system