

# Armored Reconnaissance Squadron in Decisive Action: Forging Cavalry for the Armored Brigade Combat Team

**by LTC Geoffrey A. Norman**

During National Training Center (NTC) Rotation 13-02, 1<sup>st</sup> Armored Brigade Combat Team (ABCT), 4<sup>th</sup> Infantry Division, demonstrated how an armored reconnaissance squadron (ARS) could transform into a cavalry squadron capable of taking the fight to the complex, hybrid threat in the decisive-action training environment (DATE). The transformation of 7<sup>th</sup> Squadron, 10<sup>th</sup> Cavalry Regiment, from a reconnaissance-focused organization to a "fighting cavalry" outfit centered around three key issues:

- The role of the ARS within the “Raider” ABCT’s way of fighting;
- Optimizing the ARS’ organization to meet the new role; and
- “Fighting big” by focusing on five objectives in every engagement.

Our experiences, both positive and negative, may contribute to the ongoing discussions about the ARS within the ABCT of Army 2020 as well as provide other ARS leaders with food for thought as they attack the decisive-action (DA) fight.

**Context: NTC 13-02**  
**DA rotation**

The 1<sup>st</sup> ABCT deployed to NTC for Rotation 13-02 Oct. 18-Nov. 18, 2012. Our brigade conducted NTC's second DA rotation – the first was 3<sup>rd</sup> Brigade Combat Team (BCT), 3<sup>rd</sup> Infantry Division, in March 2012 during Rotation 12-05.

We conducted reception, staging, onward movement and integration for four days, then deployed the line troops, forward-support troop and squadron tactical command post to the northern live-fire area for three days of live-fire.

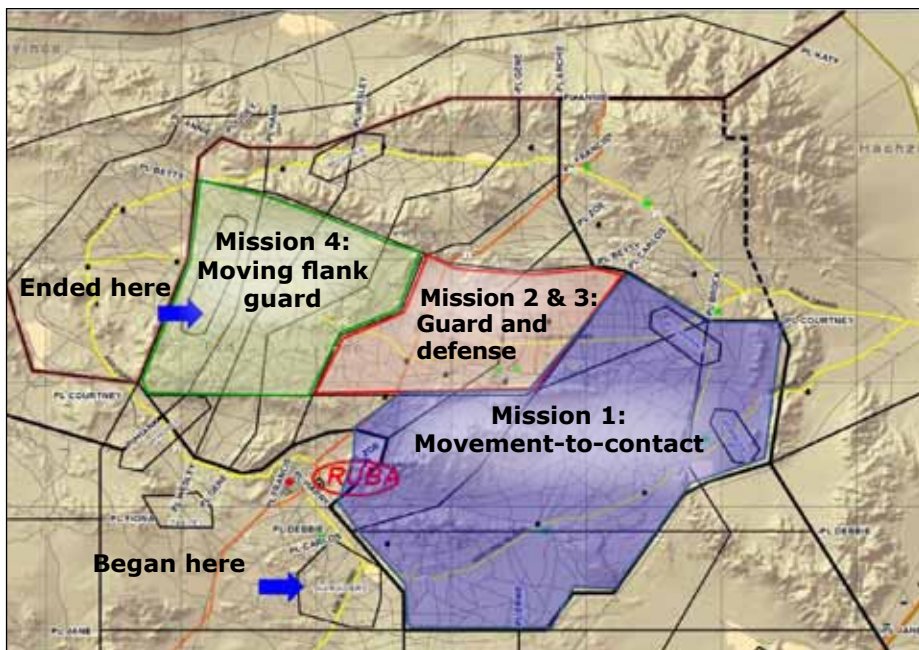
The squadron then transitioned and conducted four days of troop-level situational training exercises (STXs) facilitated by NTC's Cobra Team observer-controller/trainers.

The brigade executed seven days of continuous force-on-force training against NTC's contemporary-operating-environment force. The force-on-force training included movement-to-contact (MTC); guard and defense; moving flank guard; and hasty attack. Geographically, the rotation crossed terrain as shown in Figure 1.

## Issue 1: ARS' role within ABCT

Early in our train-up for NTC, the brigade commander clearly stated that he envisioned an expanded role for the ARS. Although Field Manual (FM) 3-20.96 defines the fundamental role of the squadron as “conducting reconnaissance **or** security missions in support of the higher headquarters,” our commander expected the ARS to conduct reconnaissance **and** security missions in support of the brigade.

This signaled a deliberate expansion of our role, which at times included significant economy-of-force operations and shaping operations. If asked whether our role was



**Figure 1. NTC Rotation 13-02 overview (force-on-force, Nov. 2-9, 2012).**

to “answer the boss’ priority intelligence requirements (PIR)” or “fight like cavalry,” our resounding answer would be “fight like cavalry.” More appropriately, the brigade commander saw his ARS “fighting like cavalry to answer PIR and develop the situation for the brigade.”

This evolved into the ARS assuming missions and roles such as fighting for information and destroying enemy reconnaissance in MTC; seizing key terrain in limited-objective attacks; and providing security for the brigade by conducting guard operations. Our squadron did not conduct the familiar zone reconnaissance across the brigade’s front at the doctrinal rate of one kilometer-per-hour, as was the case in years past. Instead, we were either force-oriented or terrain-oriented and not encumbered with all the associated subtasks for doctrinal zone-recon operations.

These roles and missions represent an acknowledgement that the DATE demands the employment of the ARS differently from how current squadron doctrine describes it. FM 3-20.96 (March 2010) states, “The placement of dedicated reconnaissance units in the modular force takes into account their inherent direct-combat vulnerabilities or capabilities and demands employment in accordance with those defined capabilities. This understanding also requires abstaining from employing them in missions and roles for which they were **not** created or resourced. When reconnaissance units are assigned close-combat missions or become decisively engaged, **reconnaissance ceases**. When reconnaissance ceases, the potential for achieving and capitalizing upon information dominance is lost.” (FM 3-20.96, Page 1-3, Paragraph 1-10)

The realities of the DATE and the complex, hybrid threat demand an ARS that can survive close combat and first contact with improvised explosive devices (IEDs), rocket-propelled grenades (RPGs), BMPs and tanks. It also demands an ARS that can continue to provide its higher headquarters with reconnaissance information even when it is assigned a close-combat mission or when some of its forces are decisively engaged.

According to FM 3-20.96, Figure 1-1, the missions of MTC and guard exceed ARS’ capabilities outside permissive mission,

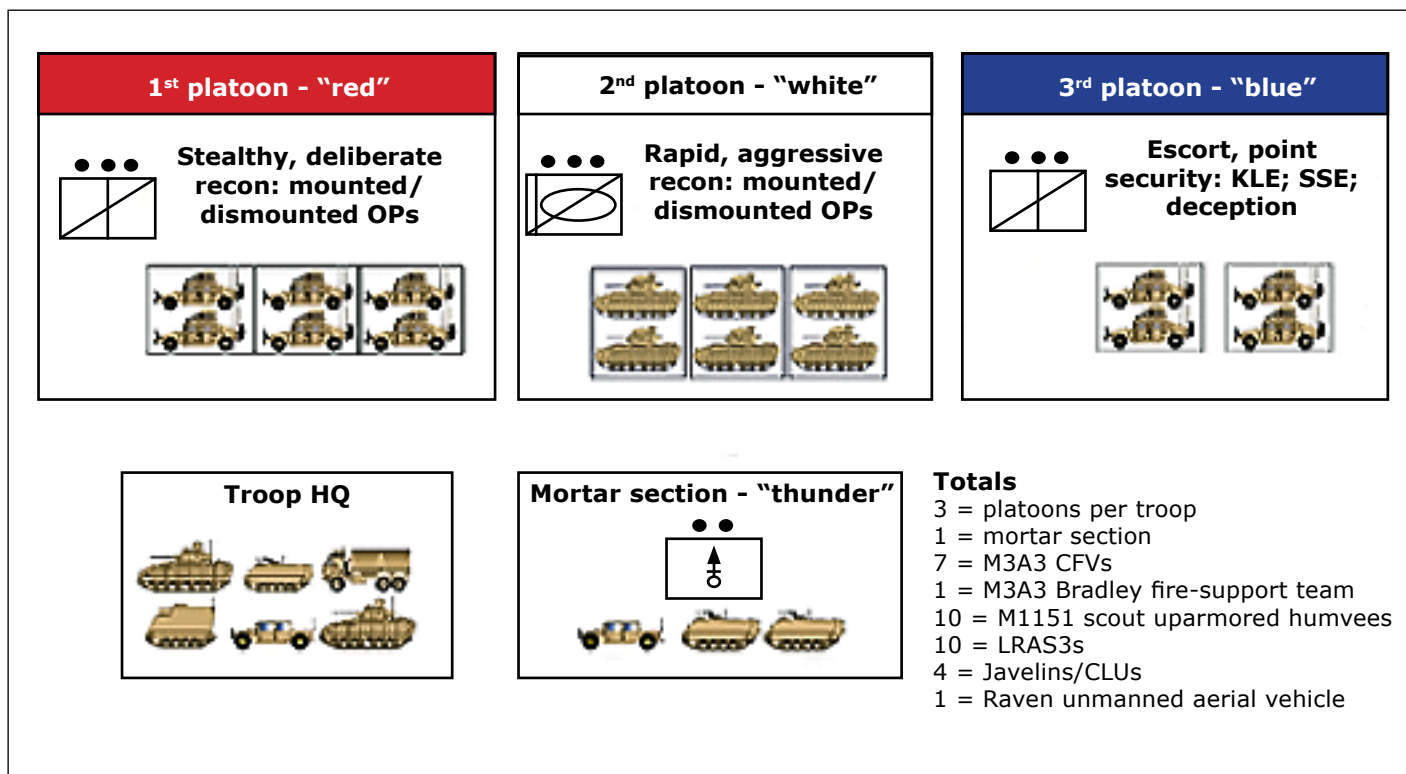
enemy, terrain, troops available, time and civil (METT-TC) considerations. The NTC 13-02 scenario presented a very non-permissive METT-TC environment. As a result, the brigade commander made organizational decisions to enable the ARS to succeed in these missions.

## Issue 2: optimizing ARS’ task organization

The squadron redeployed from Afghanistan in July 2011, where it fought in Regional Command-West, largely dismounted or mounted in mine-resistant, ambush-protected (MRAP) vehicles and MRAP all-terrain vehicles (MATVs). The last time the squadron conducted Bradley Fighting Vehicle (BFV) gunnery was 2009, and we lacked extensive Bradley expertise as we began our NTC train-up in 2012. Coming out of reset, the squadron organized doctrinally with three Bradleys and five M1151 humvees per platoon.

During our first gunnery, our Bradley scores far exceeded our humvee scores. This surprising outcome was due primarily to our emphasis on Bradley gunnery preparation, which resulted in great scores. However, we over-relied on in-theater unstabilized-gunnery habits, and those did not equate to competence for our humvee crews. Overall, mastering the gunnery skills required for Bradleys as well as M1151s with M2 heavy machineguns and MK-19 automatic grenade launchers was beyond the scope of the leaders in a single platoon. Our solution after gunnery was to make our platoons “pure” – all Bradleys or all humvees. This enabled our leaders at the platoon level to focus on single platforms and their associated weapons systems.

The outcome during our second gunnery validated the pure-platoon concept as scores improved across the board. We maintained pure platoons during our maneuver training, which allowed our platoon leadership to master the employment of single platforms and “re-green” themselves on cross-country, force-on-force maneuver with just Bradleys or trucks. We found that competent crews and sections could effectively task-organize into competent hunter-killer formations with mixed vehicles as METT-TC required.



**Figure 2. Reconnaissance troop organization (pure platoons with blue platoons).**

The ARS' modified table of organization and equipment (MTOE) limits the maneuver and mission-command options for troop commanders to two platoons each and for squadron commanders to six maneuver platoons. Many missions assigned to the ARS required more than six maneuver units, so we developed "blue" platoons to add a third maneuver unit for each troop. We envisioned the "blue" platoons as economy-of-force elements, which focused on tasks such as tactical-site exploitation, radio-transmissions (RETRANS) security, convoy security, command-post security, key-leader engagements (KLEs) and deception operations. We took senior staff sergeants and lieutenants from the staff to lead these platoons. The platoons were equipped with four humvees with the Long-Range Advanced Scout Surveillance System (LRAS3) as well as Javelins, RETRANS and deception equipment.

The "pure" platoons and "blue" platoons at troop level resulted in the baseline task organization in Figure 2. A "red" platoon equaled six humvees; a "white" platoon consisted of six M3A3 BFVs; and a "blue" platoon comprised four humvees. We employed this task organization during live-fire and STXs during NTC 13-02.

The brigade significantly augmented the squadron as we transitioned to force-on-force operations. The brigade commander wanted the squadron to have the necessary

assets to perform economy-of-force missions, reconnaissance missions and security missions as well as traditional cavalry missions like guard and MTC. We received attachment of a tank company with its associated maintenance, refuel-and-rearm cargo trucks, and tracked ambulances. We also received attachment of a sapper platoon with breaching capabilities from the Special Troops Battalion (STB). The STB also operationally controlled (OPCON) or tactically controlled (TACON) to our squadron Prophet and low-level voice-intercept (LLVI) signals intelligence (SIGINT), as well as combat observation and laser teams (COLTs), to accomplish BCT and squadron recon and surveillance tasks.

During the early phases of operations and between major engagements, the squadron benefited from direct support from scout weapons teams (SWTs) with OH-58D Kiowa Warriors and priority of fires from the brigade's fires battalion. These enablers allowed the squadron to execute MTC and guard tasks assigned by the brigade that exceeded the capabilities of an ARS' organic assets.

**MTC.** The squadron developed a unique organization for MTC. The task organization employed one troop as a "recon" troop to execute rapid and stealthy recon and to move to the key terrain of the Siberian Ridge to establish a screen (Figure 3). The



"recon" troop organization included three-humvee "red" platoons and a four-humvee "blue" platoon. We tailored this mostly wheeled formation for rapid, stealthy movement across permissive terrain to outmaneuver the enemy's brigade tactical group (BTG) reconnaissance forces before they could reach key terrain or observation posts (OPs).

A "counter-recon" troop followed the "recon" troop by two hours. The counter-recon troop consisted of two six-M3A3 "white" platoons and a four-humvee "blue" platoon. We optimized this troop to gain contact with and destroy enemy BTG recon elements between the brigade's line of departure (LD) and ground limit of advance (LOA).

These two troops developed the situation for the brigade and answered PIR in the east of the BCT area of operations along the axis of advance for the two combined-arms battalions (CABs) following from Whale Gap to the central corridor.

In the west around the Shelf and Bicycle Lake Pass, the squadron executed an economy-of-force operation with one tank-company team and a "strike troop." The tank-company team, organized with engineers, breached an opposing-force obstacle in the pass and attacked toward Brigade Hill to fix an enemy fixing- or assault-force template to attack into the brigade's flank through Bicycle Lake Pass and Valley of Death. The squadron's "strike" troop consisted of a six-M3A3 "white" platoon, a

mechanized infantry platoon, a four-humvee "blue" platoon and a deception section with military information-support operations (MISO) broadcast trucks. The strike troop was tasked to follow and support the tank-company team in the west as they breached the Bike Lake Pass obstacle or to follow and support the counter-recon troop in the east, completing the destruction of the BTG recon forces.

This MTC-adapted task organization (Figure 4) departed significantly from doctrinal organizations as depicted in FM 3-20.96 but worked well. The humvees from the recon troop moved very quickly and quietly to key terrain. The counter-recon M3A3s effectively gained contact and defeated BTG recon in the east. These two troops benefited greatly from continuous support from three SWTs, who provided uninterrupted coverage throughout the operation.

In the west, the tank-company team and strike troop breached a tough field-artillery scatterable-munitions obstacle in difficult terrain and fixed an enemy mechanized-infantry company that was poised to exploit Bicycle Lake Pass had it been open. However, we learned there was too much separation in time between our recon and counter-recon troop; the recon troop was unable to retain several of their humvee-mounted and dismounted OPs from significant attacks by BTG recon elements with BMPs and T-80s. The strike troop became decisively engaged in the west and could not reinforce in the east to complete the destruction of identified BTG recon elements.

In retrospect, the optimal task organization would have been a lead troop with two- or three-humvee platoons and one M3A3 platoon. The trail troop should have consisted of two M3A3 platoons and a "blue" platoon. The organization of the economy-of-force elements was correct. Overall, our scouts' tenacity and lethality, coupled with our unique task organization, enabled the squadron to succeed in our first force-on-force mission.

**Guard and hasty defense.** The squadron's guard organization considered the challenges

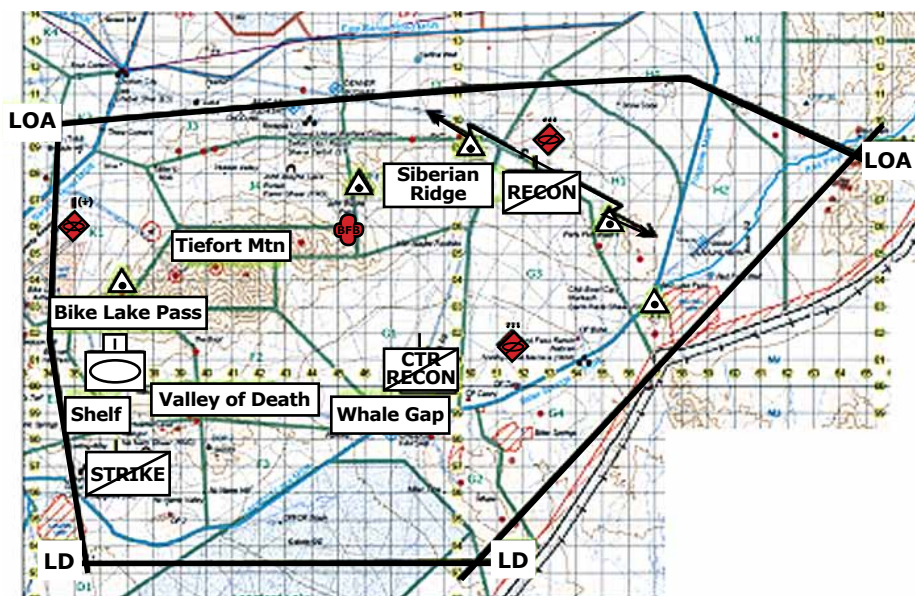
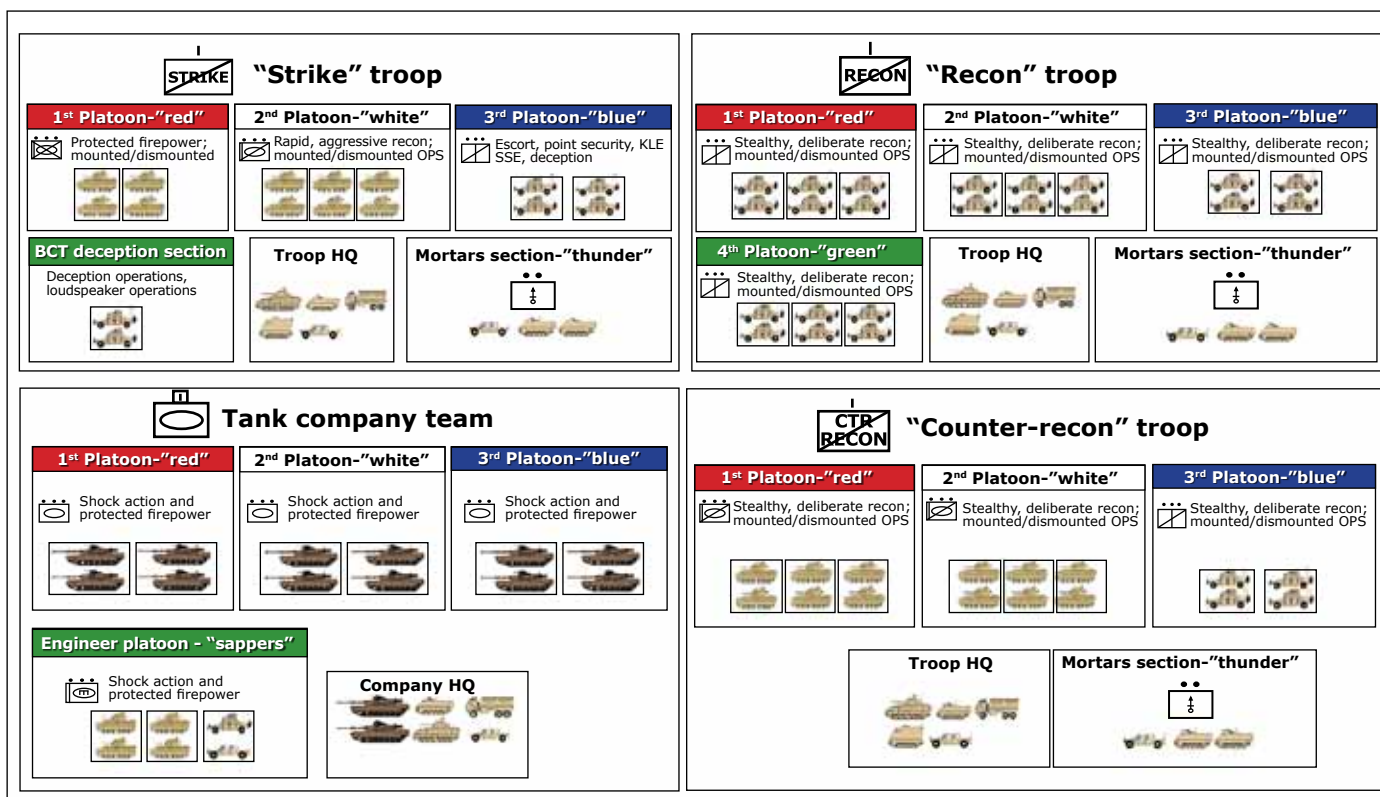


Figure 3. 7<sup>th</sup> Squadron, 10<sup>th</sup> Cavalry in BCT movement-to-contact.



**Figure 4. Squadron organization for movement-to-contact.**

associated with conducting simultaneous combined-arms maneuver (CAM) and wide-area security (WAS). We organized into two counter-recon troops with their organic platoons of red, white and blue, with one troop providing a blue platoon to secure BCT RE-TRANS.

The tank company remained pure, with three platoons defending key terrain and preventing the enemy's use of two key mobility corridors. These two troops and the tank company focused on the CAM task of guard to protect the brigade against enemy attacks from the west.

The third cavalry troop focused on the WAS task of isolating an urban area known as Ujen to prevent the enemy from using the village to influence the brigade's decisive operation occurring in the provincial capital of Razish. This troop also gained OPCON of a MISO and civil-affairs team in support of their planned KLEs. The squadron's task organization (Figure 5) sought to keep troops focused either on CAM or WAS – not both. The squadron must retain the ability to conduct CAM and WAS simultaneously, but the troops cannot do both at the same time. The squadron gained OPCON of another tank platoon and a mechanized-infantry company, minus its squads, for the main defense against the enemy's attack.

Overall, the squadron's task organization worked well for the guard and a subsequent hasty defense against a BTG counterattack. The squadron's biggest challenge was managing the multiple tasks of an ongoing guard operation with troops in direct-fire contact while simultaneously managing the tasks of an emerging stability operation in an urban area – all while employing engineers to develop engagement areas for the main defense. In reality, the squadron fought the guard fight well and set conditions to hand off the urban area to a CAB with infantry. We did not effectively maximize the engineer effort in support of engagement-area development. However, that shortcoming was overcome by the exceptional direct-fire lethality of the three recon troops and the attached tank and mechanized infantry companies, which prevented any enemy penetration of the main defense.

**Moving flank guard.** The squadron's last force-on-force fight offered us an opportunity to execute what may be the most demanding cavalry mission: the moving flank guard. Our BCT's mission was to attack from east to west through the central corridor and secure an objective on the west side of the passes near Crash Hill to re-establish the international boundary. In broad

terms, the brigade commander intended for one CAB to conduct a feint in the north near Brown Pass to fix the defending enemy while the reinforced ARS conducted a moving flank guard in the south through the Colorado Wadi and Washboard area. The ARS would protect the brigade's main effort, another CAB, which would pass to the south and west of the ARS through the Washboard and then attack north to secure the BCT's objective near Crash Hill (Figure 6).

We organized the ARS into four maneuver elements for this engagement (Figure 7). The first troop was a "fixing troop" tasked to retain a piece of key terrain dominating the entrance to the Colorado Wadi known as Hill 910. This force consisted of its six-humvee "red" platoon, a six-M3A3 "white" platoon and a four-humvee "blue" platoon.

The "infiltration troop" consisted of a six-humvee "red" platoon, its six-M3A3 "white" platoon and multiple COLTs and LLVI teams. Its task was to cross the LD early and infiltrate to OPs overlooking key terrain and the BCT's objective.

The "strike troop," consisting of its "red" and "white" platoons, crossed the LD just before first light to lead the BCT attack. It

was trailed by a tank company reinforced with engineers to follow and support the strike troop and continue the attack west while protecting the brigade's main-effort CAB.

The last two elements maneuvered together to ensure we maintained momentum as we fought through the difficult terrain of the Colorado Wadi and Washboard. The strike troop successfully advanced more than 10 kilometers deep into the Washboard and fixed the enemy's anti-tank (AT) systems poised to destroy the follow-on CAB from the Matterhorn Hill complex to the north and west. The tank company successfully passed behind the strike troop and continued the moving guard to the west, rapidly breaching a situational obstacle in the Washboard. This enabled the CAB to pass forward of the ARS and on to its objective without becoming fixed by enemy defenses.

In the final analysis, the ARS successfully retained Hill 910 with the fixing troop, emplaced the deep OPs with the infiltration troop and protected the main-effort CAB with the strike troop and tank company. This mission allowed us to employ another unique task organization against a

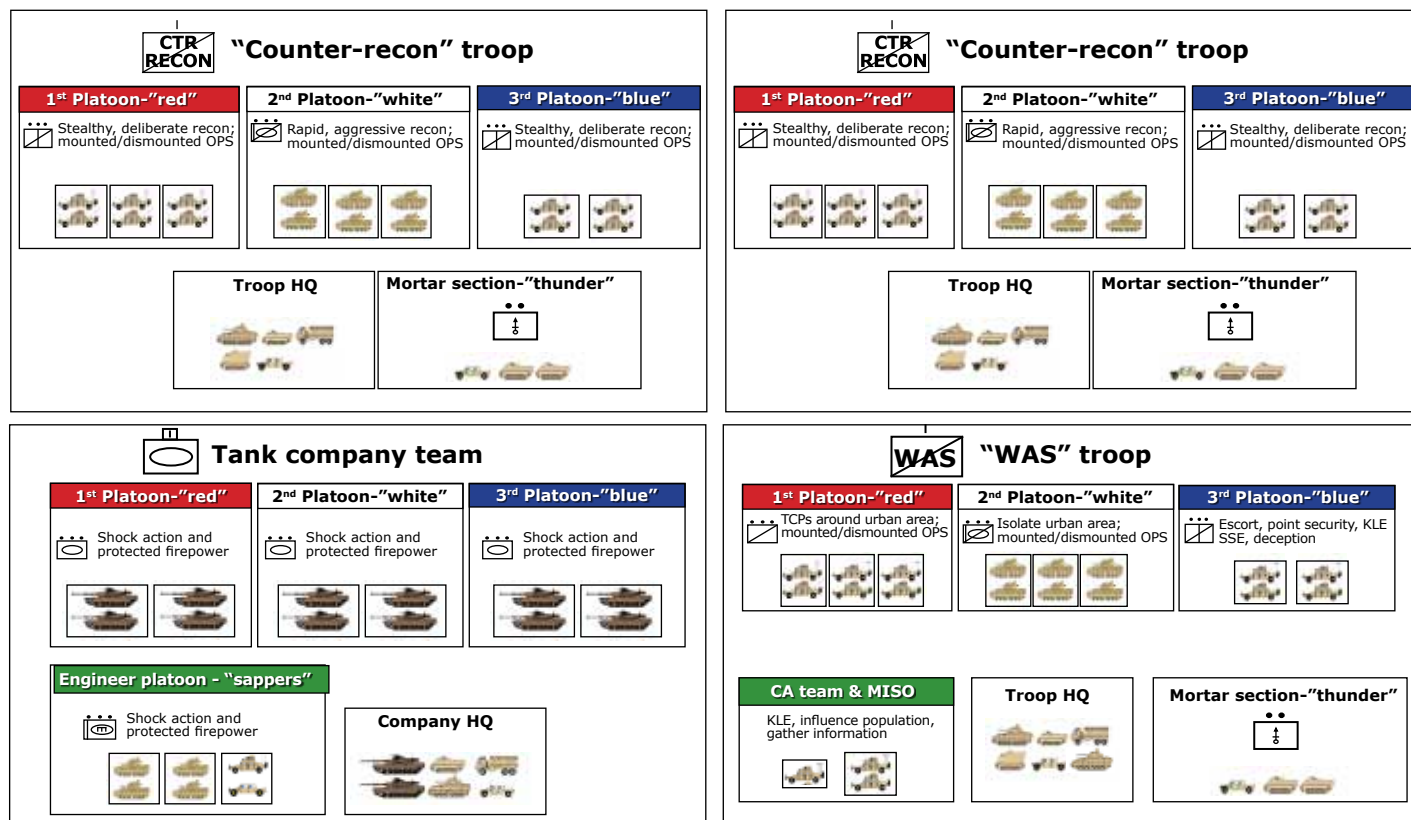


Figure 5. Squadron organization for movement-to-contact.



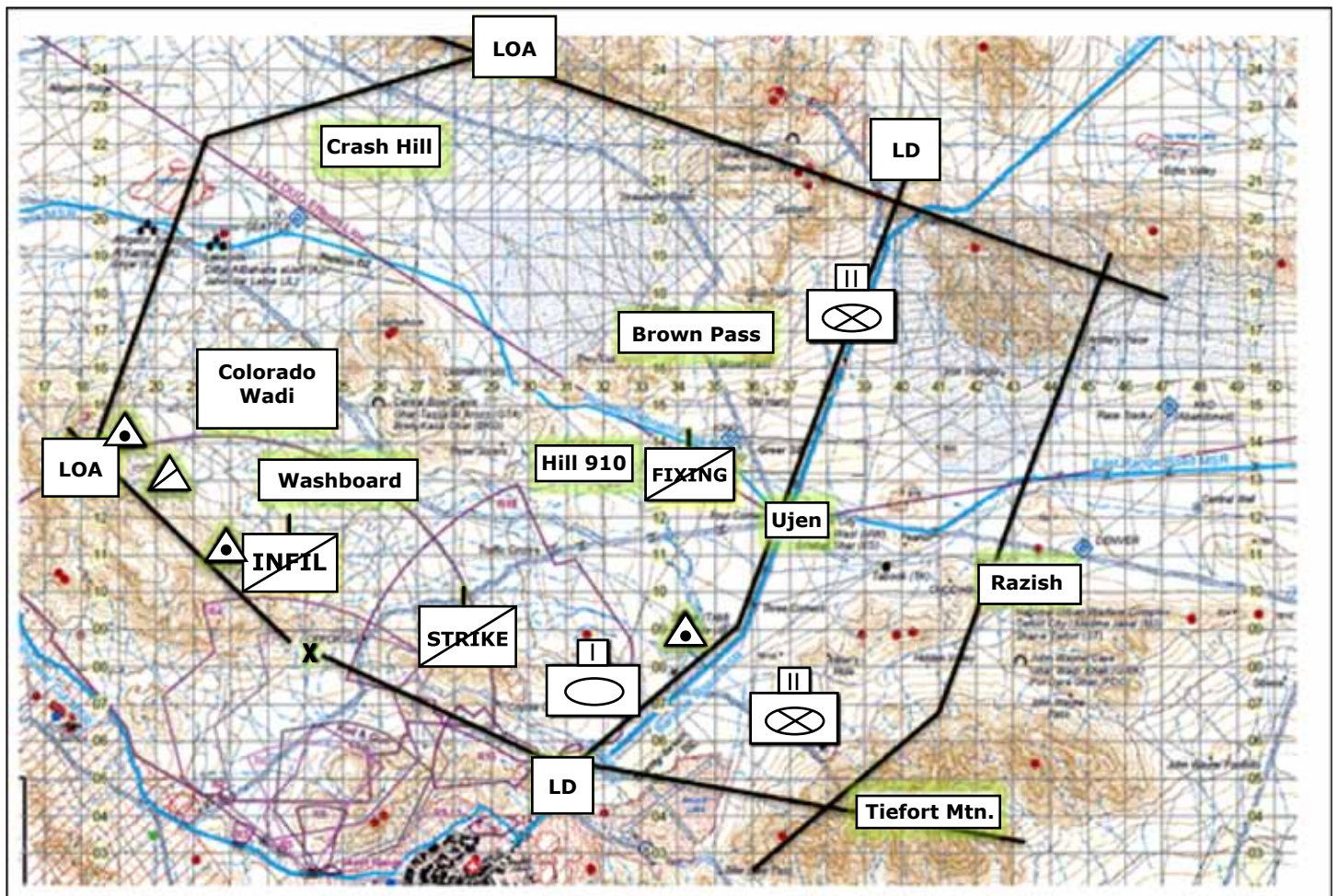


Figure 6. 7<sup>th</sup> Squadron, 10<sup>th</sup> Cavalry, moving flank guard.

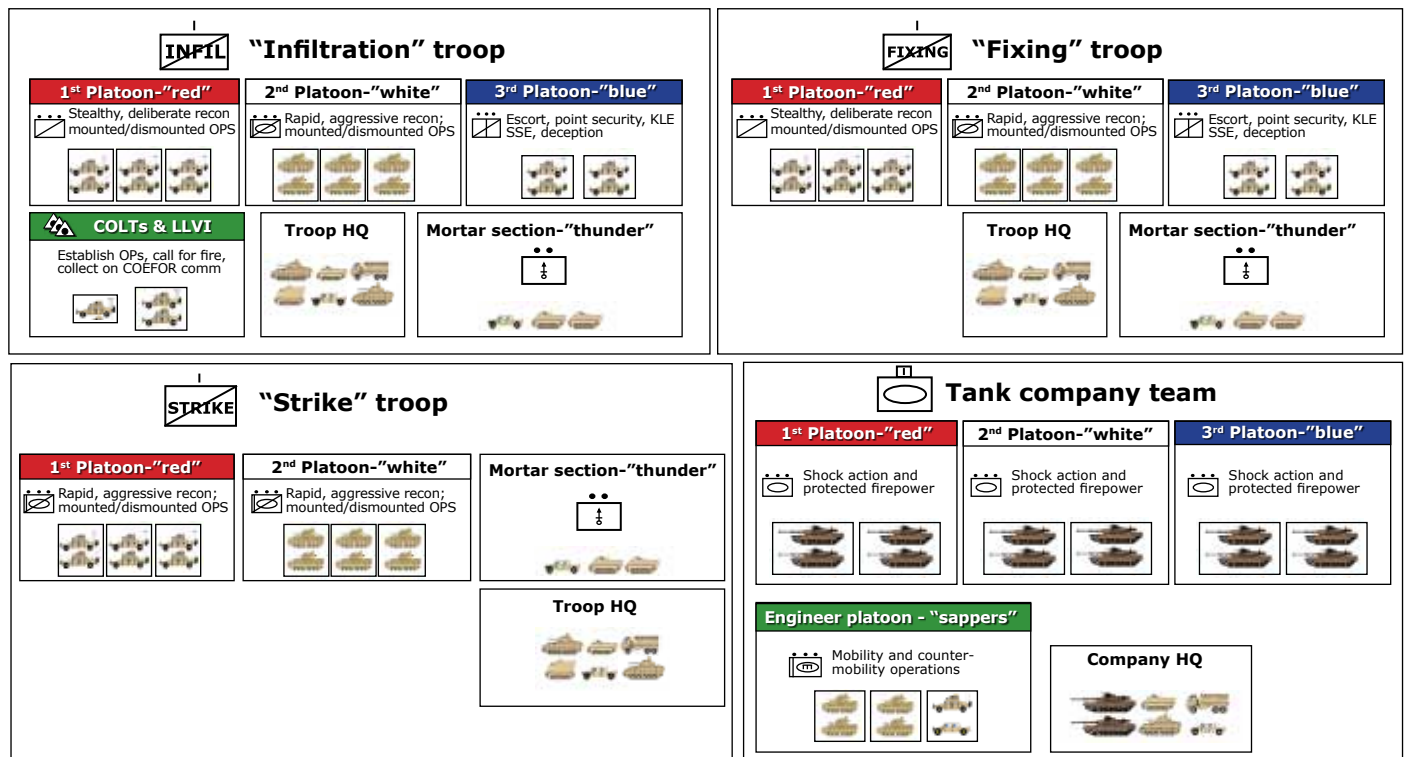


Figure 7. Squadron formation for moving flank guard.

determined enemy and see the benefits of months of training.

### Issue 3: 'fighting big'

The squadron focused on five essential objectives in each engagement during the rotation. We called these "fighting big" since they employed key systems or capabilities that allowed the squadron to extend our reach, improve responsiveness, rapidly respond and otherwise seem larger to the enemy than we actually were.

Our "fighting big 5" were:

1. **Employ mortars.** Organic mortars at the troop level provide the recon troop commander with an immediate indirect-fire capability that is the envy of his armor and mechanized-infantry commander brothers. Mortars are crucial in every fight and must be used against the appropriate targets.
2. **Kill with Javelins.** Our 12 Javelins and their associated command launch units (CLUs) provide recon teams with an unmatched ability to kill armored vehicles out to 2,000-plus meters. These systems are only effective if scouts get them out of the backs of their Bradleys and trucks. Javelins in OPs and AT ambushes can make a big difference in an engagement's outcome.
3. **Employ Ravens.** The squadron's five Ravens can provide the troops and squadron with a very effective aerial-surveillance tool. Ravens must get into every engagement but can be particularly effective during times other than the main battle. Ravens have a valuable deterrent effect and can buy the troop some additional standoff during assembly-area operations, logistics package (LOGPAC) and other times when the unit may not be at Readiness Condition I. Employing Ravens during these times reduces challenges associated with restricted-operating-zone approval since other fire-support control measures may not be active during those periods.
4. **Long-range tube-launched, optically tracked, wire-guided (TOW) missile kills.** Bradley crews must be able to kill with TOWs at ranges between 2,500-3,000 meters. This is a real challenge with Multiple Integrated Laser Engagement System (MILES) XXI. However, MILES is the weapon system in the com-

bat training centers' DATE. Crews who acknowledge this fact and master their weapons systems can turn the tide during an engagement.

5. **Communicate over long ranges.** The ARS and its troops are likely to spread beyond the maximum range of line-of-sight frequency-modulation (FM) communications. We must master the employment of FM re-transmissions and build the capability to RETRANS at troop level. Our squadron did not master the use of amplitude modulation or high-frequency radios since we lacked enough systems to employ an effective network. Our squadron required the capability to RETRANS the brigade command and administrative and logistics (A&L) nets as well as squadron command, fires, voice and A&L nets. The RETRANS efforts were part of a larger brigade-wide RETRANS plan but still exceeded the ARS' MTOE capability.

### Implications and conclusions

**Doctrine and organization.** The complex, hybrid threat faced by rotational units at NTC during DA rotations demands an expanded role for the ARS and the squadron's organization, including tanks and other key enablers. The squadron also required more maneuver platoons than the MTOE authorizes; the increase from six platoons to nine yielded tangible benefits. The squadron was consistently engaged in "fights between the fights" or continuous contact even when most of the brigade was planning or preparing for the next engagement. As a result, the squadron required the attachment, OPCON or TACON of key enablers like a tank company, COLTs, SIGINT, SWT and more LOGPAC to remain self-sufficient and agile enough to respond quickly to emerging situations between the brigade's major engagements.

**Materiel.** The ARS' current fleet of reconnaissance platforms (M1151 with LRAS3 and M3A3 Cavalry Fighting Vehicles (CFVs)) are inadequate for the DA fight. Our CFVs have a significant smoke and noise signature and are too large to allow rapid concealment in OPs. Our M1151s with LRAS3 lack the ability to conduct observation or stabilized direct-fire engagements on the move.

Both vehicles are too lightly armored to protect scouts from IEDs or direct fires from



BMPs or RPGs. They also lack cross-country mobility due to excessive demands on their tires in rocky terrain. We attempted to use the M1240 MATV as a substitute for M1151 in some formations, but the windows are too small for scouts to see out, and they do not allow rapid ingress or egress.

The shortcomings with our current M3A3s, M1151s and MRAPs demand the fielding of an alternate reconnaissance platform for ARS. The essential requirements include the ability to survive first contact against BMPs, RPGs and IEDs; cross-country mobility in soft sand and rocky terrain; long-range, stabilized observation on the move with third-generation forward-looking infrared; and a small enough footprint that the vehicle can operate in narrow urban streets and conceal quickly in OPs using microterrain. The best solution from existing platforms may be the M1127 Stryker Reconnaissance Vehicle with upgraded optics.

The ARS adds value to the ABCT by providing timely combat information that enables the higher commander to see, understand and act more quickly and with better information. DA training at the NTC provided an exceptional opportunity to transform Ghost Squadron from a reconnaissance-focused outfit into a fighting cavalry formation that conducted recon and security as the situation required. Our NTC rotation also highlighted some shortcomings in doctrine, or-

ganization and materiel that warrant resolution as we build to Army 2020.



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## ACRONYM QUICK-SCAN

**A&L** – administrative and logistics  
**ABCT** – armored brigade combat team  
**ARS** – armored reconnaissance squadron  
**AT** – anti-tank  
**BCT** – brigade combat team  
**BFV** – Bradley Fighting Vehicle  
**BMP** – Boyeva Mashina Pekhoty (Russian infantry fighting vehicle)  
**BTG** – brigade tactical group  
**CAB** – combined-arms battalion  
**CAM** – combined-arms maneuver  
**CFV** – Cavalry Fighting Vehicle  
**CLU** – command launch unit  
**COLT** – combat observation and laser team  
**DA** – decisive action  
**DATE** – decisive-action training environment  
**FM** – field manual

**FM** – frequency modulation  
**IED** – improvised explosive device  
**KLE** – key-leader engagement  
**LD** – line of departure  
**LOA** – limit of advance  
**LLVI** – low-level voice intercept  
**LOGPAC** – logistics package  
**LRAS3** – Long-Range Advanced Scout Surveillance System  
**MATV** – mine-resistant, ambush-protected all-terrain vehicle  
**METT-TC** – mission, enemy, terrain, troops available, time, civil considerations  
**MILES** – Multiple Integrated Laser Engagement System  
**MISO** – military information-support operations  
**MRAP** – mine-resistant, ambush-protected (vehicle)

**MTC** – movement-to-contact  
**MTOE** – modified table of organization and equipment  
**NTC** – National Training Center  
**OP** – observation post  
**OPCON** – operational control  
**PIR** – priority intelligence requirement  
**RETRANS** – (re-) radio retransmission  
**RPG** – rocket-propelled grenade  
**SIGINT** – signals intelligence  
**SSE** – secure-site exploitation  
**STB** – Special Troops Battalion  
**STX** – situational-training exercise  
**SWT** – scout weapons team  
**TACON** – tactical control  
**TOW** – tube-launched, optically tracked, wire-guided (missile)  
**WAS** – wide-area security