The 120mm Smoothbore in the Recon Fight: How the New Cavalry Squadron Structure is Performing at the Joint Multinational Readiness Center

by MAJ Brett T. Wright and CPT Jordan L. Woodburn

The Army's most recent addition to the cavalry squadron, the M1 Abrams, provides reconnaissance forces with a long-range, direct-fire capability. This capability enables the cavalry squadron to conduct aggressive reconnaissance, survive chance contact, protect the main body and more effectively destroy enemy reconnaissance forces.

At the Joint Multinational Readiness Center (JMRC) in Hohenfels, Germany, observers/coaches/trainers (O/C/Ts) observed firsthand how this implementation affected the cavalry squadron during decisive-action training environment rotations. These observations shaped the following recommendations in the areas of doctrine and training – specifically an update to the mission-essential task list (METL) and more emphasis on crewmember fundamentals.

Observations at JMRC

In a recent JMRC rotation, the squadron commander initially task-organized the tank company with two tank platoons and one scout platoon, consisting of the scout Bradley modified table of organization and equipment (MTOE), six Bradleys and 36 dismounts. The company then task-organized internally with one organic tank platoon and two platoons that consisted of a section of tanks and a section of Bradleys in a "hunter-killer" formation (see Figure 1). When employed, the tank company saw success destroying armored reconnaissance threats and preventing penetration of the friendly screen.

The concept, though seeming to accomplish the intent of the MTOE conversion covered in the ***Cavalry Squadron Organizational and Operational Concept***,[1] still has a few issues that need correction before the company's implementation is fully successful.

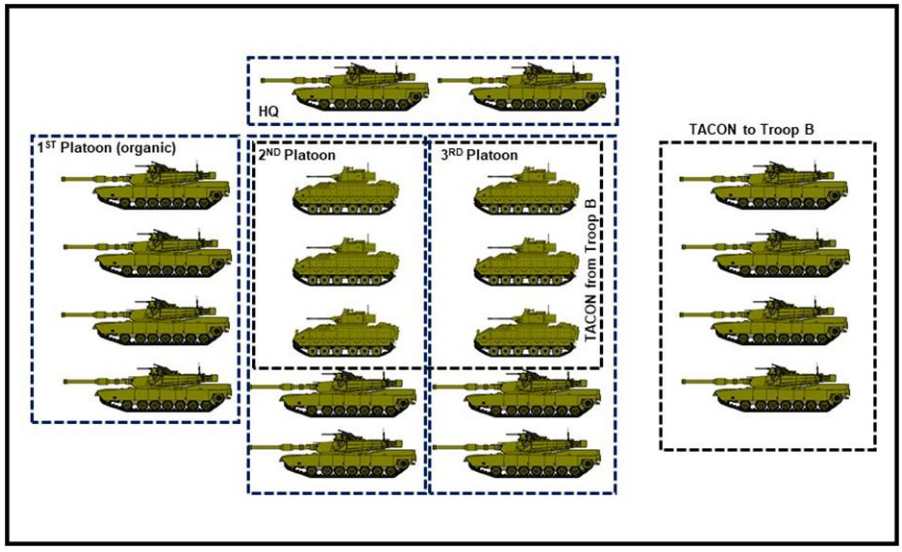

Figure 1. Commonly observed tank-company task organization in the cavalry squadron. The working relationships among these formations must begin early. *(Graphic by CPT Jordan Woodburn)*

While the role of the military-occupation specialty (MOS) 19K crewmember does not change drastically among formations, the reconnaissance skillset must be fostered in the leadership of the tank platoon to unleash the tank organization's potential. At JMRC specifically, the ability to train with multinational allies and partners is unique

and tests a cavalry organization's ability. Here these organizations are expected to be able to comfortably operate along, and own, the forward-line-of-troops (FLoT).

This presents new dilemmas to the 19Ks who find themselves in somewhat new territory. Now they are not only expected to master and apply careful, calculated gunnery techniques, but also to rapidly identify enemy and friendly vehicles, conduct adjacent-unit coordination more frequently and potentially conduct reconnaissance for follow-on forces.

As a member of the cavalry squadron, the tank company is now assigned the task to confirm or deny priority intelligence requirements (PIR). These PIR usually involve identifying the composition and disposition of enemy forces to allow commanders at echelon to make effective and timely decisions. With this in mind, the role of the tank company becomes not only to destroy enemy reconnaissance forces but also to conduct specific reconnaissance tasks.

When task-organized, a tank-platoon leader or platoon will find himself/itself leading cavalry scouts and being assigned reconnaissance and security (R&S) missions. Unless that leader has attended the Army Reconnaissance Course (ARC) or has had some informal training in reconnaissance tasks, he isn't properly prepared to conduct unique reconnaissance tasks. These observations point to a more important issue that currently resides in the tank company of the cavalry squadron: the lack of distinction in the METL between it and the tank company in the combined-arms battalion (CAB).

Reasons for change

After analyzing the composition of the enemy division tactical group (DTG), brigade tactical group (BTG) and advance-guard reconnaissance forces of the opposition forces (OPFOR) threat-model template, and comparing these to that of the traditional cavalry squadron, the need for an asset that provides more mobile firepower is apparent. The advance guard often consists of more than 30 *Boyeva Mashina Pekhoty* 2 (BMPs) and 10 T-72 tanks, which highlights the gap in combat power that exists between it and the cavalry squadron without the M1 Abrams.

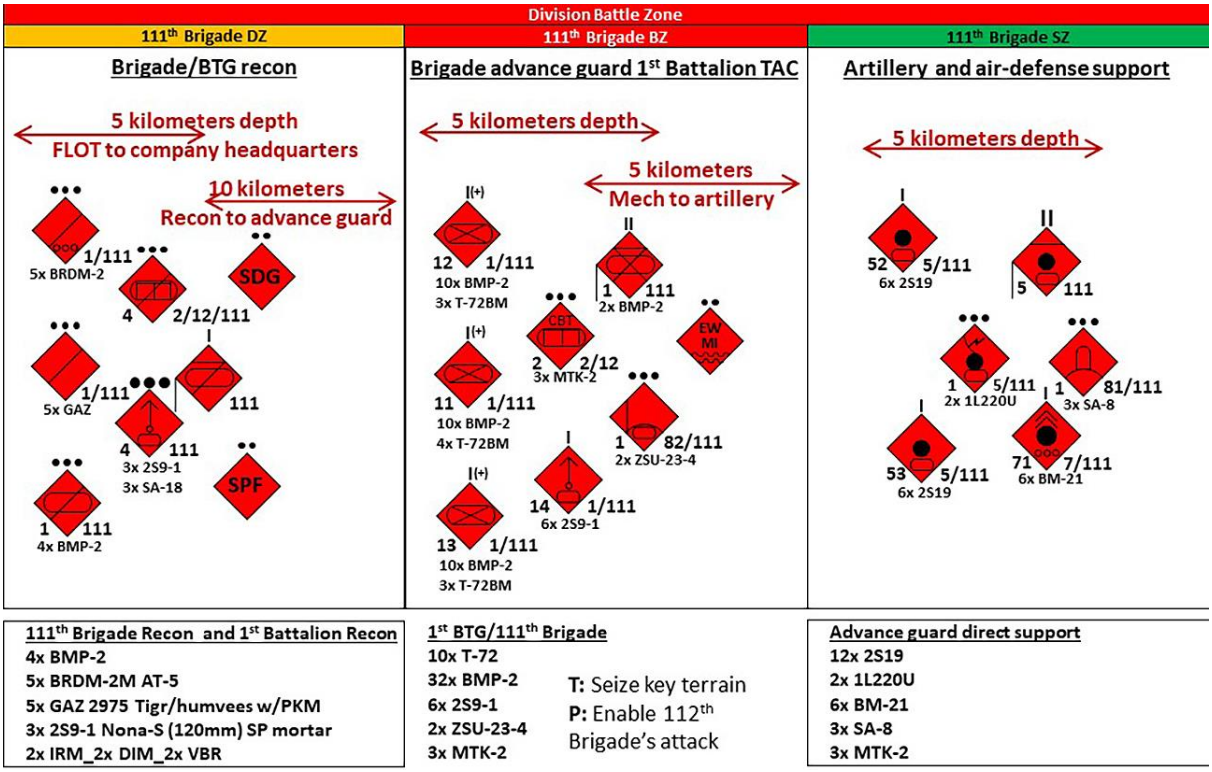

Figure 2. JMRC threat template for 111th Brigade reconnaissance and the advance-guard battalion. *(Source: JMRC S-2)*

To assess where the enemy main body will attack, the cavalry squadron must be prepared to identify, and potentially attrit, elements of the advance guard. With the addition of the tank company, it is more feasible for the cavalry-squadron commander to mobilize firepower to degrade the enemy armor threat to the endstate directed in the commander's security guidance. This gives the cavalry squadron a greater capacity to destroy enemy reconnaissance assets, which is frequently a secondary key task for cavalry squadrons at JMRC.

When employed in depth and with appropriate target handovers, the Abrams is very effective at destroying most types of enemy armor. Armed with more survivability and firepower at its fingertips, the cavalry squadron is then better suited to answer questions and develop the situation for higher headquarters as the formation fights for information.

At JMRC, units that conducted force-on-force operations with this MTOE had a higher destruction rate of OPFOR vehicles as they attempted to penetrate the rotational-unit screen. In fact, the task-organized tank company destroyed four tracked OPFOR vehicles for every one friendly tracked vehicle lost during direct-fire engagements. This enabled the cavalry squadron to provide more reaction time and maneuver space to the brigade, which enabled effective decision-making.

The tanks were used most effectively by placing dismounts forward and using the tanks in depth, where they would receive targets to facilitate the destruction of identified enemy vehicles. Also, when elements at the FLoT identified a significant armored threat, the commander had the option to rapidly reposition the mobile firepower of the Abrams and defend against it.

Opportunities for improvement

We saw a few areas where tank companies in cavalry squadrons can improve: armed-forces vehicle identification (AFVID), adjacent-unit coordination and vehicle camouflage.

The first trend is not unique to this specific formation but to tank companies in general. **AFVID** is part of the gunnery-skills test, and it requires tank crewmembers to correctly identify enemy and friendly vehicles. Most units only train this skill during the weeks before a gunnery density. This amount of training for a skill that is not only crucial but perishable is insufficient for tankers in the cavalry squadron and across the Army.

Figure 3. An M1A2 Abrams tank assigned to 1st Battalion, 8th Cavalry Regiment, 2nd ABCT, 1st Cavalry Division, secures its fighting position during training exercise Combined Resolve XIII at JMRC in Hohenfels, Germany, Jan. 29, 2020. *(U.S. Army National Guard photo by SSG Gregory Stevens)*

To correct this problem, commanders need to emphasize AFVID and use available whitespace to conduct more training. This training requires little resourcing and can take place in small or large time blocks.

In addition to implementing more frequent vehicle-identification baseline training, commanders can direct that instructor/operators of the Advanced Gunnery Training Simulator implement shoot/don't shoot scenarios into the simulation and as part of Gunnery Table II. These scenarios help refine tank commanders' and gunners' abilities to identify friendly vehicles. In environments such as JMRC, where the enemy and friendly forces may share common vehicle types and variants, this skill is indispensable to the tanker in the cavalry squadron.

The misidentification of vehicles can have additional, compounding consequences for the cavalry squadron. Specific vehicle types and amounts define and represent different enemy parent organizations, which may drive certain decision points for adjacent battalions and the brigade in which the cavalry squadron works.

For example, the misidentification of a BMP or lightly tracked vehicle as a tank may lead the observer and commanders to believe they are observing the advance guard when in reality, it may be lead elements of the enemy BTG reconnaissance.

Adjacent-unit coordination is another area in which the tank company must improve. Frequently, elements of the tank company encounter friendly forces operating within its area of operations (AO). Without proper far and near signaling methods, this can trigger confusion and friendly-fire incidents.

Commanders develop standing operating procedures (SOPs) that define how the unit communicates with an unconfirmed force, and then they rehearse the SOP. In addition, commanders should know, and clearly brief to the lowest level, where adjacent units are located, who is responsible for coordination with them and what the link-up method will be.

This is established and synchronized at the company level and can be discussed among company commanders at events such as the brigade or squadron combined-arms rehearsal. Coordination with adjacent units should be continuous and annotated on the company's common operating picture, an important resource for every member of the reconnaissance squadron.

A well-defined day and night vehicle-marking SOP that is properly disseminated to allies and partners in the formation facilitates effective close-range identification and coordination.

Figure 4. An M1A2 tank as seen by a 1st Battalion, 4th Infantry Regiment, quadcopter. *(U.S. Army photo by CPT Adam Wojciechowski)*

Vehicle camouflage is important when operating in heavily forested areas such as the European theater of operations. Effective camouflage provides friendly vehicles enhanced survivability and affords the element of surprise.

Scouts who emplace their vehicles into hide positions should train to become masters of this craft and know how to do it in a timely manner in differing terrain. Tank companies can train this specific task using vehicle-camouflage classes, preparing camouflage nets for quick employment and developing SOPs for using foliage. Combined training with engineer assets within the brigade during field exercises builds familiarity with dig assets, dig time available and how to prepare friendly positions in time-constrained environments.

Lastly, to minimize the OPFOR's ability to compromise essential command and support platforms, company trains' personnel should also train in these tasks. This is magnified at JMRC, where the OPFOR has a robust aerial reconnaissance and special-purpose-forces capability.

METL

While the tank company is a recent addition to the cavalry squadron, the Army is now multiple years into the transition. However, the Headquarters Department of the Army-directed METL for the company remains the same as a tank company in a CAB. This forces units to either deliberately ignore their METL and focus on tasks associated with missions they are prone to execute, or to train and maintain a proficiency in tasks that are likely to be unrelated to their mission.

This is not a decision that needs to rest with company and squadron commanders. Operational requirements currently send armored brigade combat teams (ABCTs) to Europe, Korea and Kuwait, with each deployment preceded by rotations to a combat-training center (CTC). This provides plenty of feedback on ways to make updates. Until the METL is more aligned with mission requirements, the companies will continue to be forced to conform, never fully reaching their full potential.

The employment of the tank company in the cavalry squadron is different depending on the unit, varying from performing duties as the brigade reserve to habitually task-organized hunter-killer teams with their sister reconnaissance troops.

As a unit directly assigned to the brigade's reconnaissance organization, the cavalry squadron, the tank company is now undoubtedly a reconnaissance asset. To designate it as the brigade reserve is in direct violation of the fundamentals of reconnaissance, which states not to keep reconnaissance assets in reserve. As such, using the task to perform duties as the brigade reserve to preserve an antiquated METL is not valid.

Task-organization in hunter-killer teams pushes more lethality down, potentially to the platoon-level, but it is not a ready-made solution. All attempts to task-organize across the squadron present the problem of having a limited number of MOS 91As (M1 Abrams systems maintainers) to go around. Task-organizing one tank platoon to each of the reconnaissance troops is a solution, but it marginalizes the command team's impact within the tank company, as well as possibly sidelining the subject-matter experts on the platform. Any other combination of tank and reconnaissance platoons requires deliberate decision-making on the purpose and composition of each troop.

The company can bridge the gap between what the cavalry squadron traditionally is comfortable engaging and having to conduct a battle handover (BHO) with a CAB. Its ability to strongpoint likely avenues of approach or vulnerable areas in the screen can greatly expand the squadron's capability. By training on the same reconnaissance tasks as the scouts, the tank company can perform these missions and task-organize as needed when the mission requires.

From observations at JMRC, recommended changes to the tank company METL (specific to only the tank company in the cavalry squadron) are to add the tasks "conduct an area reconnaissance" (17-TRP-4011) and "conduct a screen" (17-TRP-9225). These tasks would replace "conduct an area defense" (17-CO-1030) and "conduct an attack" (17-CO-1094).

Current tank-company METL
Conduct area security (07-CO-1272)
Conduct an area defense (17-CO-1030)
Conduct a movement-to-contact (17-CO-1074)
Conduct an attack (17-CO-1094)
Conduct expeditionary deployment operations in support of the offense, defense, stability and defense support of civil authorities (DSCA) (55-CO-4830)
Proposed tank-company METL (cavalry squadron)
Conduct area security (07-CO-1272)
Conduct a screen (17-TRP-9225)
Conduct a movement-to-contact (17-CO-1074)
Conduct area reconnaissance (17-TRP-4011)
Conduct expeditionary deployment operations in support of the offense, defense, stability and defense support of civil authorities (DSCA) (55-CO-4830)

Table 1. Proposed changes to the tank company (cavalry squadron) METL.

Justification for METL changes

O/C/Ts assigned to the JMRC Grizzly Team (reconnaissance and cavalry trainers) point to one major key to success during screening operations for the cavalry squadron: engagement-area development (EA DEV). During the screen, reconnaissance forces must conduct EA DEV to be successful in identifying likely avenues of approach, emplacing key weapon systems, and identifying and mitigating deadspace.

For this reason, the tank company in the cavalry squadron (with the recommended METL changes in Table 1), while not deliberately training the area defense, will still be proficient in the fundamentals associated with it. Thus 19Ks in the cavalry squadron will still receive training in these areas, since performing tasks such as the sector sketch and developing a plan for movement to alternate, subsequent and supplementary positions are necessary in both of the overarching tasks.

While the tank company may be task-organized and separated throughout the cavalry squadron, and therefore the FLoT, all efforts must be made to prioritize the identification of gaps in the screen and enemy forces attempting to penetrate. The major difference between the screen and the area defense is setting conditions for the reconnaissance handover (RHO) or BHO and the fact that, at some point, the screen will transition into the next phase of the operation. This involves a more specific emphasis on reconnaissance-specific tasks such as RHO/BHO rehearsals, forward- or rearward-passage-of-lines supporting graphics, reconnaissance and security.

The tank company must be proficient in all these to best serve the needs of its “reconnaissance customer.” The mechanisms associated with “conduct an area defense” are important for tankers to be proficient in, but the task itself is more suited to a formation that is supported by reconnaissance elements forward. It does not account for elements that are critical to the scout, such as R&S guidance, which defines when elements of the cavalry squadron are permitted to engage enemy forces, displace to a subsequent position or disengage an enemy force while maintaining contact.

Also, the 19K in the cavalry squadron must understand that, as a member of the cavalry squadron, his/her actions directly define the fight for the rest of the brigade (such as through the use of a targeted area of interest to illicit a certain enemy response). For this reason, tank-company personnel in the cavalry squadron must understand PIR and how they relate to decision points for commanders at all levels.

The emphasis on the intelligence-collection aspect in the “conduct a screen” Training and Evaluation Outline (T&EO) more accurately defines what this unique formation should be training. Moreover, the “conduct an area defense” T&EO focuses very heavily on the construction of deliberate obstacles to define enemy actions in the

engagement area. This is something that rarely applies to the tank company in the cavalry squadron due to limited time available before first contact and the fact that brigade engineer battalion vehicles seldom are committed as far forward as the FLoT.

Regardless if the tank company is filling gaps in the screen or serving as the brigade reserve, the actual use of the "conduct an area defense" T&EO is limited and does not place emphasis on the incorporation of R&S fundamentals.

While the recommended replacement of "conduct an attack" T&EO with the "conduct an area reconnaissance" T&EO is not as cut and dried, it is still relatively axiomatic. The tank company, while not designed to conduct reconnaissance tasks such slope and bridge classification, is more than capable of providing information to follow-on forces.

For example, during movement toward the screen, the tank company is suited to identify recommended battle positions for follow-on maneuver battalions, position areas for artillery and route trafficability (to name just a few). The nature of the platform and lack of dismounts lead to these tasks being conducted hastily and with only the information collected from the hatch or through optics, but they still place emphasis on the collection and dissemination of information.

Figure 5. A tank returns fire on enemy forces. *(U.S. Army photo by SGT Megan Zander)*

Currently the 19Ks in the cavalry squadron may struggle to understand the "tempo" of the reconnaissance mission assigned because nothing in their training curriculum requires them to practice it. Without a basic understanding of tempo and how it defines and dictates their movement, the tank company may not be within the commander's intent as it enters the screen. Incorporating an abbreviated area reconnaissance task assists the tank company in using the fundamentals of reconnaissance and prepares it to serve as another sensor for the cavalry squadron.

By retaining the "conduct a movement-to-contact" T&EO, the tank company is prepared to rapidly reposition to meet a significant armored threat. This enables the tank company to continue to train offensive tasks but to also focus on the cavalry squadron's information-collection responsibility.

Conclusion

The tank company's integration into the cavalry squadron enables the squadron to fight for information more effectively against armored enemy-reconnaissance assets. The ability for the commander to quickly maneuver firepower to different areas of the AO enables PIR collection and allows the squadron to accomplish a commonplace key task: destroying elements of the DTG and BTG reconnaissance forces.

To facilitate appropriate training guidance, the METL of this specific formation should reflect what the company is actually asked to do in the cavalry squadron. This includes the tasks of conducting a screen and conducting an area reconnaissance.

Lastly, commanders of these formations should focus on specific cavalry tasks to be successful at any CTC and during combat operations. These tasks include vehicle identification, adjacent-unit coordination and vehicle camouflage, all of which will continue to make the implementation of the 120mm smoothbore into the reconnaissance squadron a success.

MAJ Brett Wright is a student at the Command and General Staff College, Fort Leavenworth, KS. Previous assignments include O/C/T, Grizzly Team, JMRC; commander, Company D, 6th Squadron, 9th Cavalry Regiment, 3rd ABCT, 1st Cavalry Division, Fort Hood, TX; commander, Troop B, 2nd Squadron, 16th Cavalry Regiment, Armor Basic Officer Leader's Course, Fort Benning, GA; and tank-platoon leader, Company D, 1st Battalion, 22nd Infantry Regiment, 1st ABCT, 4th Infantry Division, Fort Carson, CO. His military schooling includes Maneuver Captain's Career Course (MCCC), Cavalry Leader's Course (CLC) and ARC. He holds a bachelor's of science degree in finance from Southern Illinois University and a master's of public administration degree from Columbus State University.

CPT Jordan Woodburn is a cavalry and reconnaissance O/C/T with the Grizzly Team at JMRC, Hohenfels, Germany. Previous assignments include commander, Company B, 3rd CAB, 67th Armor Regiment, 2nd ABCT, 3rd Infantry Division, Fort Stewart, GA; commander, Company D, 1st CAB, 64th Armor Regiment, 1st ABCT, 3rd Infantry Division, Fort Stewart; long-range surveillance-detachment leader, Company C, 3rd Battalion, 38th Cavalry Regiment, 201st Military Intelligence (MI) Brigade, Fort Lewis, WA; and cavalry-platoon leader, Company B, 3–38 Cav, 201st MI Brigade, Fort Lewis. His military schooling includes MCCC, CLC, ARC and Ranger, airborne, air-assault and Pathfinder schools. He holds a bachelor's of science degree in political science from The Citadel, Charleston, SC.

Notes

[1] Department of the Army, ***The Universal Brigade Combat Team Cavalry Squadron Organizational and Operational Concept, Vol. 1, Cavalry Squadron***, Fort Benning, GA: U.S. Army Maneuver Center of Excellence, Feb. 29, 2016.

Acronym Quick-Scan

ABCT – armored brigade combat team
AFVID – armed-forces vehicle identification
AO – area of operations
ARC – Army Reconnaissance Course
BHO – battle handover
BMP – *Boyeva Mashina Pekhoty* (Russian fighting vehicle)
BRDM -- *Boyevaya Razvedyvatelnaya Dozornaya Mashina*
BTG – brigade tactical group
BZ – battle zone (Figure 2)
CAB – combined-arms battalion
CLC – Cavalry Leader's Course
CTC – combat-training center
DIM – does not translate but represents a Russian mine-detecting reconnaissance vehicle (Figure 2)
DTG – division tactical group
DZ – disruption zone (Figure 2)
EA DEV – engagement-area development
EW – electronic warfare
FLoT – forward-line-of-troops
GAZ – *Gorkovsky Avtomobilny Zavod* – a Russian vehicle manufacturer that produces their equivalent of the humvee (Figure 2)
IRM – *Inzhenernaya Razvedyvatel'naya Mashina* – Russian engineer reconnaissance vehicle (Figure 2)
JMRC – Joint Multinational Readiness Center
MCCC – Maneuver Captain's Career Course
METL – mission-essential task list
MI – military intelligence
MOS – military-occupation specialty
MTOE – modified table of organization and equipment

O/C/T – observer/coach/trainer
OPFOR – opposition forces
PIR – priority intelligence requirement
PKM – acronym does not translate but is close to “Kalashnikov machinegun modernized” and represents the Russian equivalent of the M240B machine gun (Figure 2)
RHO – reconnaissance handover
SDG – scout division group (Figure 2)
SOP – standing operating procedure
SP – self-propelled (mortar)
SPF – special-purpose forces (Figure 2)
SZ – support zone (Figure 2)
T&EO – Training and Evaluation Outline
TAC – tactical control
TACON – tactical control
VBR – *vehicle blinde a roues* – armored reconnaissance vehicle (Figure 2)