



Members of the Royal Canadian Armoured Corps and 4 other countries (Poland, Chile, Denmark, New-Zealand) participate in Exercise WORTHINGTON CHALLENGE 2019 at 5th Canadian Division Support Base Gagetown, 22-26 September 2019.

## The Role of Armoured Reconnaissance Within the Canadian Army

by Vladimir Kessia

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(This article was researched and written in 2019-2020. Since then, the Royal Canadian Armoured Corps School has spearheaded an ongoing change to a cavalry model for the Royal Canadian Armoured Corps' medium armoured forces.)

### Introduction

The Royal Canadian Armoured Corps (RCAC) is divided into two streams; tanks and armoured reconnaissance, with approximately 30% of personnel specializing in the former and 70% in the latter. Recently, the role of those in armoured reconnaissance has come under scrutiny. The acquisition of the Textron Tactical Armoured Patrol Vehicle (TAPV) prompted this re-evaluation as it quickly became evident to many within the RCAC that the TAPV's armament and turretless configu-

ration made it too different from its predecessor, the Coyote, to simply replace it without changing tactics, techniques or procedures. The TAPV is fine for its original purpose, namely replacing the G-Wagon. However, its adoption as the RCAC's primary vehicle highlighted the fact that the RCAC does not have a clear vision as to how to organize, employ, train and equip its armoured reconnaissance forces for combat against peer forces.

One of the main reasons for the RCAC's issues is that its present employment concept is built on a series of institutional compromises rather than lessons learned in combat. During World War 2, reconnaissance within the RCAC was conducted by four vehicle troops in tanks.<sup>1</sup> Recce units differed from combat units primarily in assigned task, not composition. Not long after WW2, Canada's focus became centered on a possible conflict between First and Second World nations, but gradually peacekeeping missions in the developing world also gained importance and in time came to be closely associated with the Canadian Armed Forces (CAF).<sup>2</sup> The CAF had to compromise to fulfill multiple roles. For example, the two car patrol found in modern reconnaissance troops was initially used to permit more ground to be covered for a peacekeeping mission during the Suez crisis in 1956 using

ferret scout cars.<sup>3</sup> It was not a configuration ever used against a near peer force but was kept once that mission was over. This is only one example of many, and individually the impact might well have been minimal, but together they have made the RCAC drift from what makes a medium armoured force effective.

This article will focus its analysis on NATO allies and potential foes. The CAF can realistically send up to a brigade in an expeditionary role; therefore, armoured forces within a brigade context will be used as a basis of comparison.

### The Purpose and Method of Reconnaissance

The purpose of reconnaissance can be summarily defined as: “to provide information to the commander so that he may make informed decisions.” Information is a resource; therefore, enemy commanders seek to deny its acquisition to friendly troops where they can, particularly with regards to enemy capabilities and disposition. Armoured reconnaissance units have to decide how aggressively they are willing to seek out this information and how detailed it needs to be. Reconnaissance can therefore be seen as being on a scale with “find” and “define” at its two ends. Higher definition of enemy forces requires an acceptance of higher risk because the unit conducting the reconnaissance needs to get closer and possibly even come into contact with the enemy. Higher risk requires higher risk mitigation which, for an armoured force, generally means more weight for weapons and armour. This is represented in the weight to definition chart (Figure 1).

Lighter forces are better fit to find whereas heavier forces are better suited to define. Main battle tanks (MBTs) may seem an oddity on this chart as they are not generally used as reconnaissance vehicles. However, the highest definition is usually gained during contact with enemy forces and MBTs are best at engaging enemy forces directly. More weight is not the only risk mitigation strategy. Stealth tactics or better optical instruments can aid, but more weight is the typical choice for armour as stealth will always be limited in a multi-ton vehicle. When adding weight, the limiting factor is sustainment, as the act of find-

ing the enemy does require covering large amounts of terrain. Balancing vehicle weight with reconnaissance requirements is no easy task.

On the offensive, the traditional solution for a brigade has been a light scouting force up front to find the enemy followed by a heavier covering force that defines the enemy and even shapes the enemy with direct fire for eventual destruction by the brigade’s main body of troops. The front scouts could be part of the brigade itself, but are also often part of a larger divisional reconnaissance unit. Additional tactical reconnaissance can also be attached to units within the brigade to provide even more definition under direct control at lower levels. This is represented in the echelons chart (Figure 2).

The doctrinal terms above were chosen to draw a link between battle rhythm and relevancy of reconnaissance, although terms can vary widely between military forces.

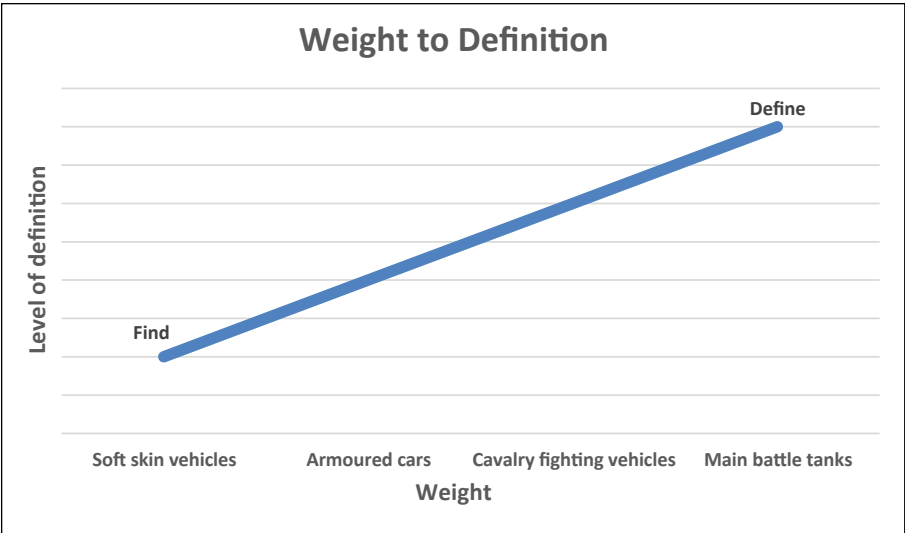


Figure 1: Weight to Definition Chart.

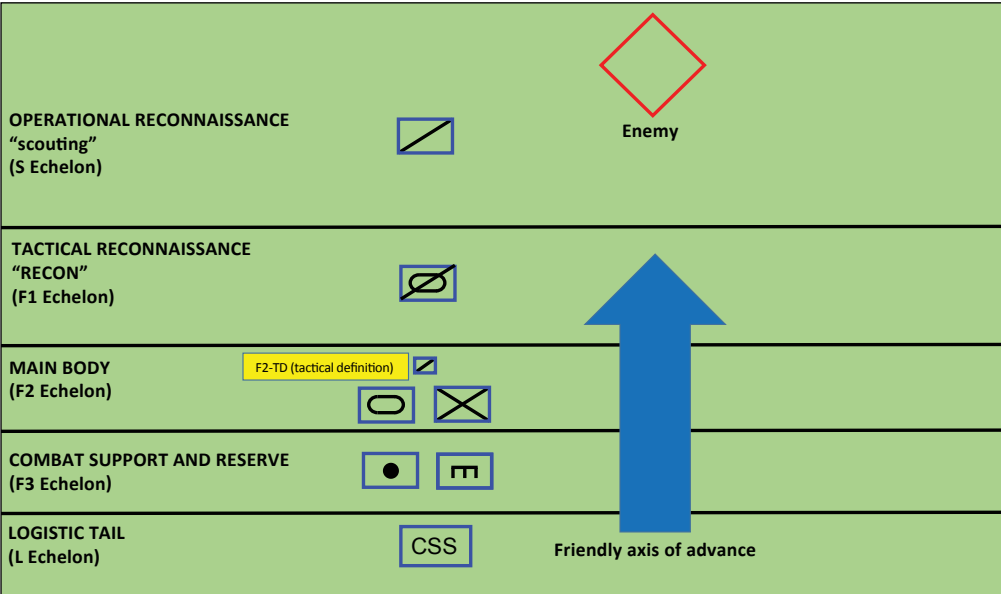


Figure 2: Echelons Chart.



A GAZ Tigr infantry mobility vehicle takes part in large-scale tactical drills in the Grodno area in western Belarus, 30 August 2020.

Operational reconnaissance (S echelon) is performed in front of the brigade. It is seeking information without fire, sneak and peek, screening, scouting, etc. These forces are launched during the brigade's operational planning cycle, when the brigade's main body of troops is still preparing for operations. There is no need yet to provide a high level of definition at this phase as the unit commanders of the main body cannot act on this information and it might no longer be relevant by the time they can. Why then, should armoured reconnaissance be risked? France and Russia do not use anything heavier than an armoured car in this echelon (the VBL,<sup>4</sup> and the GAZ Tigr,<sup>5</sup> respectively). The US Army relies more on non-armour assets in this role although it does have cavalry squadrons in their battlefield surveillance brigades (known as military intelligence brigades since 2015). The UK uses a cavalry fighting vehicle (Scimitar<sup>6</sup>), although in a manner so aggressive that it is arguably not scouting at all. Canada uses the Coyote, which is being phased out in favour of the LAV 6 and TAPV. The TAPV has the distinction of being heavier and larger than a Coyote with an armament that can only reach targets half as far away.

Behind this is the tactical reconnaissance (F1 echelon). Equipped with heavier vehicles, this echelon fights for information and acts on information acquired by the S echelon. Because of the requirement for contact, this echelon is generally equipped with heavier vehicles. Used properly, this echelon shapes the enemy and sends information that leads to decisive action by the main body.

Units in the main body (F2 echelon) are primarily infantry or tanks and can have tactical reconnaissance detachments attached

directly to them. Definition at this level is very detail oriented and uses stealth as the primary risk mitigation strategy.

### Reconnaissance Units Other Than Armour

**A**rmoured forces are only one element of a modern force's reconnaissance options. Aircraft, dismounted patrols and electronic warfare (EW) can all be used as sources of information.

#### Aircraft

Fixed wing aircraft first began being used for reconnaissance in WW1 although hot air balloons had been used as far back as the battle of Fleurus in 1794.<sup>7</sup> They replaced cavalry on the western front, which, after the

opening weeks of the war, had devolved into trench warfare (although, contrary to popular myth, trench warfare was not the norm in all theaters of war). Aerial reconnaissance provided the same advantages then that it provides now. It is far more difficult to shoot at an aerial scout than a ground-based one. It is also possible to quickly gain information over a wide area of land very quickly from the air, however, this information will tend to lack definition. Aerial reconnaissance, particularly smaller unmanned aerial vehicles, can also have limited endurance and are highly susceptible to bad weather.

#### Dismounted Patrols

Dismounted patrols are stealthy but inherently slow. Their ability to bring a set of human eyes close to a target makes them the best option for definition on a small target, but depends on a commander's foresight to send the patrols in time to affect operations. Due to the speed with which a mechanized force advances, a commander cannot solely rely on them. Dismounted patrols often provide the tactical definition role for infantry forces.

#### Electronic Warfare

Electronic Warfare's (EW) contribution to reconnaissance is the capacity to listen to and decrypt enemy communications. It is underutilized in many western states, especially considering how important decryption of enemy communications has been historically.<sup>8</sup> EW does not fit into any one echelon described above, but can be used to enhance all of them. The Russian military has made



extensive use of EW to great effect in the recent Donbass conflict.<sup>9</sup>

### ***Summation of ISTAR***

These reconnaissance assets, including others that have not been mentioned, such as human intelligence, all enhance the information available to a commander but are insufficient for the tactical reconnaissance role. A ground maneuver element conducting tactical reconnaissance needs to be able to fight for information if it is to provide the level of detail required by the main body. Only a medium-weight armoured force is suitable for this. Any force without a proper tactical reconnaissance element will be at an intelligence disadvantage versus forces that do have them.

### **Allies' Armoured Reconnaissance Forces**

This section analyses the reconnaissance forces of the United States of America, the United Kingdom and France through the reconnaissance model described above. Terminology from other nations often does not match Canadian terminology. To facilitate comparison, Canadian terminology will be used throughout.

#### ***The United States of America***

In the S echelon, the US employs elements of their expeditionary military intelligence brigade, which conducts military intelligence acquisition and analysis. The acquisition side includes human intelligence, aerial signals, ground signals and aviation assets. There is no dedicated armoured force to conduct reconnaissance above the brigade level although armoured forces can be part of military intelligence brigades.

In the F1 echelon, the US army has several variants. The US army is organized into regimental combat teams (RCT), which is the equivalent of a Canadian mechanized brigade group (CMBG), although smaller in size. There are three types of RCTs in the US army: the infantry brigade combat team (IBCT), Stryker brigade combat teams (SBCT) and armoured brigade combat teams (ABCT)—each built around units of their namesake type. The SBCT is most comparable to a CMBG, as the primary combat troops for both are mechanized infantry. The SBCT has a reconnaissance regiment that has 3x squadrons of 2x troops of 6x vehicles.<sup>10</sup> With the added command vehicles, a regiment has a total of 44 vehicles<sup>11</sup> in the F1 echelon to cover the frontage of the SBCT. For comparison, a Canadian reconnaissance squadron has only 24 F1 echelon vehicles, commanded by approximately



A M2A2 Bradley Fighting Vehicle kicks up plumes of dust as it leaves Forward Operating Base MacKenzie in Iraq for a mission, 30 October 2004.

American Photo Archive / Alamy Stock Photo

only 1/3 the number of officers. An SBCT also has, doctrinally 4,413 soldiers while a CMBG has just under 7,000; therefore, the ratio of armoured reconnaissance to main body troops is significantly lower for Canada.

“US Cav is equipped for and expected to fight for information, and operate for extended periods of time without explicit direction or orders”.<sup>12</sup> This is most evident when looking at the Bradley vehicle. Equipped with tracks and a TOW missile, the Bradley is an effective F1 vehicle, able to take on most reconnaissance forces it will encounter and even shape the battle against forces found in the enemy main body. The US Army also uses dismounted scouts but primarily in a tactical definition role; therefore, they can be seen as amalgamating the tactical reconnaissance and tactical definition functions into one element, rather than dispersing the tactical definition task to troops attached to the main body.

#### ***The United Kingdom***

In the S echelon, the British army has permanent division-level armour reconnaissance conducted by an armoured regiment<sup>13</sup> as well as brigade-level armour reconnaissance, which is squadron sized.<sup>14</sup> They use four car troops, presently equipped with the Scimitar (soon to be replaced by the Ajax), which is a tracked vehicle with a 30 mm cannon. The UK also has the Jackal, an armoured car with good counter-mine protection, but this is kept more as an option to be used in specific situations rather than a go-to vehicle.<sup>15</sup> Most recently, the UK used operational reconnaissance effectively during the 2003 invasion of Iraq, in Operation TELIC. Most of the UK ground forces fell under the command of 7<sup>th</sup> Armoured Brigade, 1<sup>st</sup> Armoured Division, which had battlegroups composed of Challenger 2 tanks and Warrior infantry fighting vehicles. The 1<sup>st</sup> The Queen's Dragoon Guards formed part of the formation reconnaissance, but after the invasion phase were quickly re-assigned to security tasks.<sup>16</sup> Division

REUTERS / Alamy Stock Photo



British Commander of Scimitar Tank from Queen's Dragoon Guards 3 Commando waits behind enemy lines for US Air Strikes in Iraq, 26 March 2003.

reconnaissance is not intended to fight for information, but the speed of the invasion cannot be ignored. It took 19 days from the beginning of the advance to the capitulation of Baghdad,<sup>17</sup> an average rate of advance of 35 km per day, which is far faster than what can be achieved by armoured forces conducting simply scouting. The UK is unique in having armoured forces that are expected to operate far behind enemy lines, and there is acknowledgment by some of its personnel that this presents logistical issues.<sup>18</sup> Like other militaries, the UK relies primarily on non-armoured assets to conduct the find function.

In the F1 role, the UK brigade reconnaissance is equipped with the same Scimitar vehicle as division reconnaissance, but provides further definition and is kept closer to the brigade. They can do aggressive reconnaissance, but do not see that as their primary role. UK brigades will often combine armour and infantry into combat teams to fill the F1 role. In theory, it may seem that the UK has a lot of armour dedicated to reconnaissance, but in practice, much of the armour in the reconnaissance role ends up fighting for information as well and acts far more as an F1 echelon than an S echelon.

### France

In the S echelon, France differs in its approach to reconnaissance, using the light armoured vehicle, the VBL (Véhicule blindé léger), as part of its reconnaissance and intervention squadron,

there can be up to four ERIs in a brigade, which means that a French battlegroup will generally have its own scouts in the form of an ERI.<sup>21</sup> It is evident from reading French doctrine that COIN operations in Africa have greatly influenced the French military. For example, French doctrine was the only one that made allusion to armoured soldiers talking with the civilians to gain information, a staple tactic of COIN ops.<sup>22</sup>

In the F1 echelon, French doctrine is flexible, but typically employs a cavalry-based combat team, be it Leclerc tanks or AMX10-RCs, as part of the battlegroup. This combat team has the task of reconnaissance, but French reconnaissance would be more akin to Canadian recon in force as the ERIs do the scouting (éclairage). Behind the reconnaissance combat team, another combat team will be in support.<sup>23</sup> Although French soldiers



French soldiers prepare VBL armoured vehicles before departing in a convoy on a mission during Operation EAGLE in Sarobi, Afghanistan, 20 October 2008.

US Navy Photo / Alamy Stock Photo



train at the brigade level, all recent operations have been at the battlegroup level.

French doctrine emphasizes inter-arms groupings. It is rare to see them not operate as battlegroups or combat teams. Even the ERIs are far more inter-arms than equivalent reconnaissance squadrons in other nations. For example, engineers are always grouped with reconnaissance units on the advance, as this permits the rapid remediation of damaged infrastructure. In Canada, while engineers are often grouped with reconnaissance squadrons, this is generally considered a “nice to have” not a “must have.” Compared to a French troop leader, a Canadian troop leader graduates the RCAC with very little hands-on experience working with other trades.

### *Summation of Allied Reconnaissance Forces*

The nations examined primarily employ armour as part of a mix of reconnaissance assets. They generally have a higher ratio of armoured forces to non-armoured forces than the CAF and within those, there is a divide between those who primarily scout and those who have to define and be ready for more aggressive tasks. Even when in a nominal scouting role, all three nations tend to use medium armoured forces very aggressively in practice. The rule of echeloning lighter vehicles followed by heavier vehicles is generally followed, with the notable exception of the British Scimitar and the acknowledgement that this poses certain unanswered logistical questions. All of these nations have an AT capability, in both the S and the F1 echelon.

### **Canadian Reality**

The Canadian Armed Forces are designed to be expeditionary and part of a coalition. Canada can send one CMBG, which, despite the name, does have 72 tanks in it per Canadian doctrine.<sup>24</sup> Canada can realistically field one tank squadron per brigade and so an F1 force does not have to be faster than the CAF’s primary infantry fighting vehicle, the LAV 6.

In the S echelon, CMBGs presently employ a single armoured reconnaissance squadron composed of three 8vehicle medium armour troops and one 8vehicle light armour troop, at least doctrinally.<sup>25</sup> The vehicles used, up until recently, were the Coyote and the G-Wagon. The Coyote was never truly adequate for an S echelon role. At 15 tons, it is too large and heavy to be a stealthy scout. Despite this, at the RCAC, “sneak and peek” tactics are taught while direct fire is often authorized for soft (not tanks) targets. This all leads to RCAC reconnaissance personnel practicing a form of “soft recon” that falls halfway between scouting and recon in force, on the fringe of the S and F1 echelons. The



Members of the Royal Canadian Dragoons work in muddy conditions with a Coyote Light Armoured Vehicle during Exercise MAPLE RESOLVE 17 at CFB Wainwright, Alberta, 23 May 2017.

Master Corporal Malcolm Byers / DND photo

addition of the TAPV has not made the situation better because despite increased weight, the TAPV has less firepower than a Coyote. The primary weapon of the TAPV, the 40 mm cannon, has a maximum range of 1,000 m compared to a Coyote’s 25 mm, which can fire up to 2,400 m.

A CMBG does not have a real F1 echelon, but battlefield realities tend to make a pseudoF1 echelon appear. Often, the single tank squadron of the brigade is grouped with an infantry battalion to form a battlegroup that, by virtue of being at the front, acts as the F1. This has several negative consequences.

A. The tanks in the F1 echelon are more mobile than the TAPV/LAV 6 of the S echelon or the infantry LAV 6’s of the F2 echelon but they cannot use their mobility to gain a battlefield advantage as they are bound to the infantry.

B. The tanks in the F1 echelon are placed such that they are likely to be among the first to come into heavy fighting. This means the CMBG risks losing its heaviest direct fire asset early on in the course of operations.

C. There are not enough tanks to provide an F1 echelon for the whole frontage of a CMBG. Most of the brigade is left only with “soft recon” screen provided by the reconnaissance squadron.

The LAV 6, with the addition of an AT capability such as a TOW missile, could effectively fulfill the F1 role for a CMBG. An effective F1 would mitigate the risk to the infantry to a degree that would allow them to be divorced from tanks. The lone tank squadron’s place in a CMBG should be to strike decisively, and it is best suited for this when placed on the flanks or in the reserve. This is not to say that inter-arms groupings are ineffective, there are simply not enough tanks for each infantry company or even battalion in a CMBG to have tanks attached to them in permanence.

### **Present Threats**

Strategic outlook is far beyond the scope of this article. Nevertheless, it is necessary to have a general idea of what the RCAC might be involved in to direct efforts. The author finds the two scenarios below to be the most likely contexts for future conflicts.

### *Most Likely – Insurgency*

Most war is not state-on-state warfare. Of the ongoing 45 armed conflicts at the time of writing, none have the characteristics of major combat.<sup>26</sup> It is, therefore, practical for the CAF to be prepared to act as an expeditionary counter-insurgency (COIN) force. The nature of the next insurgency is easier to predict than that of the next major war as there are only so many tactics an irregular force can effectively use.

The RCAC does not presently conduct COIN training. After the conclusion of CAF combat operations in Afghanistan, there was a major push to refocus training on near-peer threats and COIN training fell by the wayside. This is a missed opportunity as the RCAC has all the tools to be a very effective COIN force. The TAPV is a patrol vehicle whose predecessor, the M1117 Guardian, was designed for the military police.<sup>27</sup> It provides overall superior protection to the crew from typical threats found in a COIN environment as compared to a Coyote or even a LAV 6. The 40 mm grenade launcher is also a good weapon for urban environments as it has a small beaten zone compared to a LAV's 25 mm chain gun, mitigating the risk to the civilian population while still being effective against dismounted personnel.

There are also similarities between armoured combat against a near-peer threat and any sort of combat against insurgents. Success

in both requires that decision-making be delegated to lower levels as the situations encountered do not lend themselves to lengthy planning by higher echelons. An armoured recce sergeant is expected to lead a two-vehicle patrol out of the line of sight of their troop leader, which means they are often making tactical decisions with the same level of independence as a platoon commander.

Much of the hard-learned lessons in Afghanistan are slowly being eroded from the RCAC's collective knowledge base. There is a prevailing attitude within the CAF that major combat operations are more difficult than COIN ops; therefore, if a unit can do one, they can do the other. Although major combat operations are certainly more costly, the skills needed in COIN, such as interaction with local leaders, are very rarely practiced in regular training.

### *Most Dangerous – Limited War*

Major combat is unlikely to take the form of total war due to states' interdependence, and it would likely be limited in nature. The proof is in the numbers. Russia endured a financial crisis from 2014 to 2017 that saw its GDP go from US\$2.297 trillion in 2013 to US\$1.283 trillion in 2016. There were two major reasons for this. The first was the boom in American shale oil production that dropped the price of oil (Russia's main export) worldwide. The second was the Russian invasion of the Crimean Peninsula and support of separatist action in the Donbass region.<sup>28</sup>

The drop in Russian GDP shows that total war is counter-productive, but Russia has shown the willingness to make use of limited war. The 2014 invasion of Crimea and subsequent war in Donbass is an excellent case study of Russia's cultural strategy. Although there are other countries that have geopolitical goals

that run contrary to Canada's, Russia has shown the most willingness to use armed force in the last 30 years.

### *Objectives and Tactics*

Russia has historically expanded until it hit a natural physical barrier. Where no such barrier can be secured, Russia has created political ones and it can be argued that the destabilization of Ukraine by Russia fits this *modus operandi*.<sup>29</sup> Russia used a combination of old and new tactics in Ukraine that must be understood by all CAF personnel.

### *Blackmail (Kompromat)*

Russian handlers identified key personnel on the



A Tactical Armoured Patrol Vehicle (TAPV) travels along a road during Exercise MAPLE RESOLVE 2018 at CFB Wainwright, Alberta, 19 May 2018.

Master Corporal Malcolm Byers / DND photo



ground and used blackmail and threats to delay or stop them from reacting. Civilian and military officials in Ukraine experienced everything from bribes to having their children kidnapped and threatened. Ukrainian soldiers reported getting death threats on their personal cell phones while fighting in Donbass.<sup>30</sup> NATO commanders are likely targets. Other than strict no-cellphone directives while on operation, RCAC junior leaders must also learn to operate several days on end without further instructions from leaders. This is a dramatic shift from the current norm where situation reports are generally expected from troop leaders every 15 minutes.

### ***Unmanned Aerial Vehicles (UAV), EW and the 10-10-10 Rule***

Russian UAV tactics follow the same philosophy as all Russian weaponry—quantity has a quality of its own. Russians used multiple layers of UAV screens to direct artillery, often MLRS, unto Ukrainian forces. EW was used in conjunction with UAVs to acquire the targets. Ukrainians found that Russians were able to track and jam all of their communications. Once a target was acquired, Russians adhered to the 10-10-10 rule. 10 minutes from target acquisition to fire, 10 minutes of fire, and 10 minutes to relocate and be ready to fire again.<sup>31</sup> This invalidates many of the tactics currently used by the RCAC as they require vehicles to be static for more than 10 minutes. High emissions electronic entities such headquarters and the Light Armoured Vehicle Reconnaissance Surveillance System (LRSS) need to be kept far away from the front line as they are very visible high value targets. Security drills that are conducted upon encountering obstacles need to be rapid and mounted as opposed to the current norm of dismounting crewmen to scout. Ideally an RCAC squadron would advance at least one kilometer every 10 minutes. Though such a rapid pace carries risks of its own, a slow advance opens up the risk of annihilation by rocket artillery. Famously, in 2014, such an attack on a Ukrainian mechanized battalion in Zelenopillya caused between 100 and 150 casualties in the space of a few minutes, rendering it ineffective.<sup>32</sup>

### ***Communications***

If a unit conducting reconnaissance cannot communicate, it is neutralized. Currently, information gained by reconnaissance forces would likely not be transmittable back to headquarters due to extensive EW jamming.<sup>33</sup> Communications jamming also means that command and control methods need to be changed (although the particular military *franglais* spoken in some 12 RBC squadrons might just be the best crypto available). Reconnaissance squadrons are notoriously chatty and too reliant on radios, out



A Leopard 2A4 tank from Lord Strathcona's Horse (Royal Canadians) travels on the Black Route of the 3rd Canadian Division Support Base Garrison Wainwright Training Centre in preparation for Exercise MAPLE RESOLVE 21, 30 April 2021.

Seller First Class Camden Scott / Canadian Armed Forces photo

of convenience, often forgoing more discrete communications such as hand signals.

### ***Massed Anti-Air***

Russia is keenly aware of NATO air superiority and as a result has integrated anti-air from strategic weapons down to the lowest level. Russian AA systems presently cover over half of Poland<sup>34</sup> and this means that RCAC forces will have to be far more self-reliant, not only for close air support, but also for resupply and casualty evacuations.

### ***Tanks and Reactive Armour***

Russia has been described as an artillery army with lots of tanks. In the past few years, Russia has begun installing reactive armour and new fire control systems on its older T series tanks, making them once again relevant on modern battlefields.<sup>35</sup> Despite all the attention the T-14 received, thousands of T-72s, T-80s and T-90s are still the primary threat. The use of enemy armour accentuates the lack of Canadian armour. The reality is that the best anti-tank weapon is a better tank, which Canada does have in the Leopard 2, just not in sufficient quantities due to budgetary constraints.

### ***Politics***

The war in Afghanistan took the lives of 158 Canadian soldiers. The Canadian public's reaction to this loss shows a complete unwillingness to take any casualties in armed conflict. It is not the purpose of this article to debate the morality of unlimited liability. However, the unwillingness to risk casualties does have an effect on the employment of the RCAC, particularly as armoured reconnaissance has historically been one of the more dangerous jobs on the battlefield. Bluntly, a brigade can expect to take more than 158 casual-



ties on a single day of major combat and there will likely be a strong reaction from the Canadian public and its political representatives; therefore, action taken by the CAF must be decisive in the beginning of any conflict, as war weariness sets in very quickly for Canadians. High risk/high payoff tactics might be the only path to operational success in a conflict where political losses dictate strategy far quicker than battlefield losses.

### Counter Tactics – Colonel Zabrodskyi's Raid

The previous paragraphs may give the impression that NATO forces are outmatched, but that is not the case. Russia and most militaries from authoritative cultures possess several weaknesses. They are often very hierarchical, and decision-making power is concentrated at the upper levels. They also have large groups of conscripts or poorly trained soldiers, and while they do have elite regulars, these are not in large numbers. This means that the Russian army is most dangerous at the tip. This fact was exploited by Col (later Major-General) Mykhailo Zabrodskyi when he was commander of the Ukrainian 95th Air Assault Brigade. From 19 July to 10 August 2014, the 95th, with elements from other mechanized and air assault brigades conducted a 470 km raid to relieve forces trapped at the border.<sup>36</sup> They moved rapidly and used captured enemy armor and supplies to great effect, destroying three hostile enemy checkpoints on the way. The speed at which they advanced neutralized much of the Russian advantages as they were unable to react quickly to forces operating behind them. In the end, the 95th air assault brigade was able to create a corridor that permitted the evacuation of 3,000 personnel and 250 pieces of equipment, while destroying numerous Russian checkpoints.<sup>37</sup>

Col Zabrodskyi's method of warfare can be adapted by the RCAC. Reconnaissance squadrons, upgraded with an AT capability can form highly mobile raiding units that strike deep into enemy territory to take out key objectives. The LAV 6 is well suited for this, as the back of the vehicle can be used to store supplies to increase the amount of time that reconnaissance troops can act independently of their logistics echelons. A rapid counter-attack is the best option to swing the momentum of battle in a limited war where NATO forces are likely to start on the defensive. This method seems riskier at first glance, but the riskiest place to be is



A Light Armoured Vehicle (LAV 6) travels along a road during Exercise MAPLE RESOLVE 2018 (EX MR 18) at CFB Wainwright, Alberta on May 19, 2018.

Master Corporal Malcolm Byers / DND photo

at the tip of the Russian spear. It is far better to accept a lack of logistics support than to be constantly under the threat of enemy observation and artillery fire.

### Conclusion

The RCAC personnel must gain a better understanding of reconnaissance and, in particular, must understand where armoured reconnaissance forces fit on a modern battlefield. They must understand the difference between “finding” and “defining” the enemy and that these two tasks cannot simply be amalgamated into a catch-all reconnaissance task. Other NATO forces use their medium armoured forces in a markedly more aggressive manner and the RCAC must emulate this if it is to be an effective contributor in a NATO force.

The RCAC has the potential to be an extremely effective fighting force with relatively cheap modifications. Better camouflage, an anti-armour capacity and a focus on rapid aggressive recon and raids, as opposed to slow “soft recon,” would make RCAC reconnaissance squadrons significantly more effective in a limited war against an opponent such as Russia. The RCAC must also be ready for COIN operations, and the TAPV and current tactics are quite well suited for this. If the RCAC can unify behind the idea that it is primarily an aggressive tactical reconnaissance force, the tendency to saddle it with the wrong equipment, training, and ultimately employment, may well be reversed.



## NOTES

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