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Armour Bulletin

Employment of Coyote

Canada

Bulletin

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Author's Guide

The Armour Bulletin, as a forum for debate and discussion, welcomes the submission of articles of a technical, tactical or historical nature.

The following guidelines apply:

a. it would be appreciated if all articles could be typewritten on 8-1/2 x 11 paper, double spaced on one side and be accompanied by a 3.5 inch disk copy;

b. articles should not exceed 2,000 words (much smaller articles are also welcome, ie, a page or two);

c. black and white photographs and illustrations should accompany the article. Photographs cut out of magazines are not acceptable as they are an infringement of copyright laws. Photographs and or illustrations add to the possibility of publishing;

d. only material of an unclassified nature should be submitted;

e. authors should include a very brief description of their current position, location and photo.

The Editor reserves the right to reject and to edit articles or letters submitted for publication. Authors should not submit articles which have either already been submitted for consideration to another publication or have already been published.

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About the Cover:

Coyote engaging a head-on BMP-2 at 1500m with frangible ammunition. The crew achieved 5 hits with two, three round burst.

(Photo: Cpl Carter)

Next topic and issue submission deadline:
Debating the Future Corps ACV
Vol. 33 no. 2 1 September 2000

Colonel Commandant's Foreword

After more than forty years of service in the Strathcona's, Hussars, Dragoons and 12e RBC, and having held key appointments including commanding officer, brigade commander, UN force commander, Director of Armour, Staff College Commandant, Colonel of the Regiment, I now find myself Colonel Commandant of the Corps with the opportunity to write this foreword to the Armour Bulletin – the first in the new century. Amongst the many things I have learned over the years is that soldiers, both old and new, are seldom at a loss for words, and are never reluctant to voice their opinions, particularly armour soldiers, and that is what I will be doing in the next several Bulletins. I also intend to visit as many of our troops as I can in garrison, during field training and on operations to check on their well-being and get their opinions on all of those issues that seem to trouble us on a never ending basis.

It seems to me that armies, and not just ours, have always had problems preparing for the future, and our army's situation now seems more complicated due to the lack of a clear national role in world affairs. The ever changing security environment, either real or perceived, has presented complex challenges in terms of structuring, equipping and training our soldiers for what may be required of them.

One constant throughout my career has been the requirement of senior leadership and army staff to have a structured, disciplined approach to their endeavours. The main advantage being, of course, the continuity of the progress, despite changes in key appointments. Other advantages being a common understanding of the leadership intent by staff officers who produce the concepts, organisation, doctrine, equipment requirements and training, according to a clearly defined harmonious process. Admittedly, senior leadership must give up the total flexibility of being able to do anything anytime, because change is managed. Not a bad thing in my view.

Let us consider where we are today. Articles in this bulletin have officers proposing the adoption of armour cavalry tactics, the assault troops in a "medium" reconnaissance squadron, and a "new" armoured regiment with the Coyote doing two or more different roles. These, together with many other ideas and attempts to improve the situation, well meaning though they may be, lead me to think that the process is off track if not broken, and has been for some time. Why? The reasons are many and varied, but most likely centreing on the end of the Cold War and having to do more with less. However, I take

comfort in knowing that staff officers are working hard to reinstate a development process. Senior leadership must sign on, and be a part of this process trained and educated in the need for it.

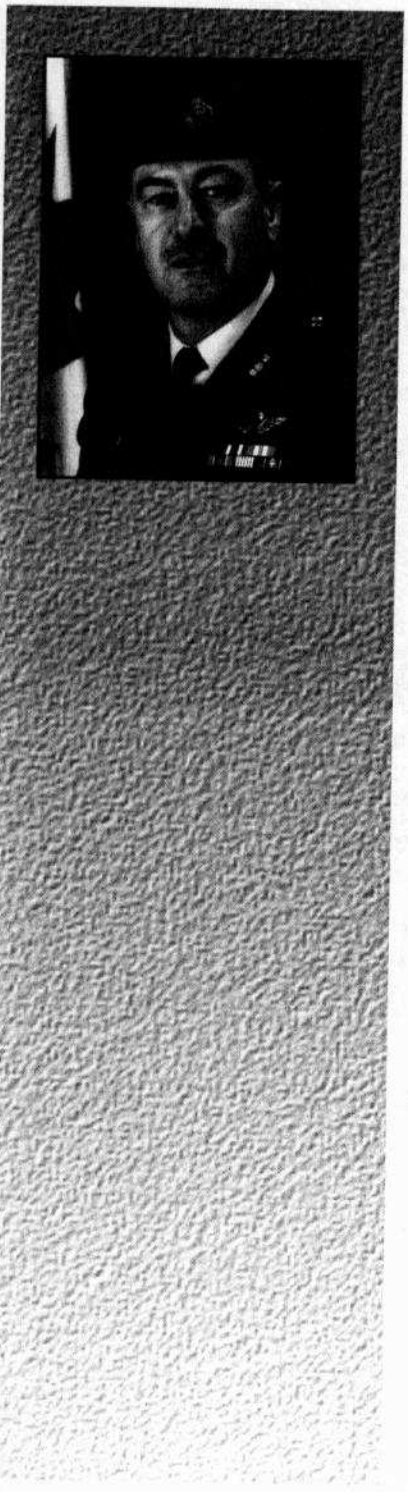
This process being developed will undoubtedly be founded in Canada's global position, the role of the Armed Forces, and the Army's part in that role. The fact that threats do exist, whether terrorist or territorial, large or small, any one of which having the potential to escalate rapidly, requiring full military force, must be recognised. More than sixty different conflicts of various sizes and complexity exist today, with Canada already involved in more than a dozen of them. There is obviously a considerable gap between the potential need and the potential to act. Simply put, Canada, a vast and rich country, enjoying a high global status, will be expected to do more than it is now to further democracy, stability and human security in the world. But that decision lies with our politicians.

Once the process is defined and agreed to, its products should show what the Army would need to deal with the worst case scenarios. Once that is determined, then logical structuring can take place of existing and near term capabilities in a disciplined, orderly manner. The remainder of the "whole" then becomes the Army's part of the national mobilisation plan. To prepare for this, the armoured corps should consider first principles such as the centralisation or decentralisation of the tanks (there are enough for each regular regiment to have two squadrons each). What should be the use and distribution of the Coyote and Cougars? Should one vehicle be used in two ways? Should the reserves be equipped as close as possible to the regulars? Assuming that the reserves will be the mobilisation base, surely they should be focusing on developing leaders in preparation for a rapid expansion? Are there not better ways to train leaders in the reserve regiments for either tank or reconnaissance roles than using expensive and hard to maintain vehicles such as the Coyote?

So these are a few of my thoughts as I begin my role as Colonel Commandant, being fully aware that my position is an honorary one primarily affording me the opportunity to offer advice and to foster esprit-de-corps. This I shall endeavour to do, my main focus being in those areas that affect the officers and soldiers of the corps, for it is upon them that not only the future of our regiments and corps depend, but the future of our nation and the world in which we live. I'm looking forward to my advisory role, the advise stemming from my association over the years with not only all of the former Colonel Commandants but also the countless others with whom I've had the good fortune to serve.

Worthy!
Major General (ret)
Clive Milner, OMM, MSC, CD
Colonel Commandant

Director Of Armour's Forward



Once again it is my pleasure to have the opportunity to address the Corps through the medium of the Armour Bulletin. The Bulletin has evolved into a relevant and thought provoking journal that offers the opportunity for members of the Corps to express their professional opinions in an honest and straightforward fashion without fear of retribution. I look forward to reading the articles.

The theme for this volume of the Bulletin is particularly timely and relevant to the Army in general, as well as to the Corps. Defence Planning Guidance 2000 has embarked on an ambitious program of strategic transformation within the Department. Planning is in progress aimed at developing options to transform the Army in accordance with that guidance and the broader, but complementary, vision expressed by the Commander. Within that debate, there has been significant discussion over recent years about the future of Armour in Canada. It is timely, therefore, that the ideas expressed in this Armour Bulletin be brought forward and submitted so that they can be considered in the development of solutions.

It is also significant that the Royal Canadian Armoured Corps Association has been pushing for resolution of a number of key issues affecting the Corps. At the last annual general meeting of that group, two resolutions were put forward to the Commander of the Army, the first relating to the retention of multi-purpose combat capability and the second concerning the roles and tasks of the Armoured Corps Reserves. Because of there relevance to the theme of this Bulletin, they are worth repeating here.

Multi-Purpose Combat Capability

The Royal Canadian Armoured Corps Association resolves that:

- the Leopard C2 must remain in service until a suitable armoured combat vehicle is acquired; and
- a future armoured combat vehicle must possess a multi-purpose combat capability fundamentally equal to or better than the existing armour close combat capability of Leopard C2.

Roles and Tasks: The Royal Canadian Armoured Corps Reserves

The Royal Canadian Armoured Corps resolves that:

- the task of reserve armoured units be expressed as "to provide individual augmentees and subunit formations trained in direct fire support and reconnaissance roles to meet army objectives";
- achieving vehicle and weapons platform compatibility between Regular and Reserve Force components be given the highest priority to ensure skills transferability and economies in training, operations and maintenance; and

- until such compatibility is achieved, adequate levels of financial and maintenance support be provided to the current Cougar fleet or, in the alternative, that sufficient numbers of the Coyote fleet be redistributed to the Reserve Force in order to preserve current skill levels.

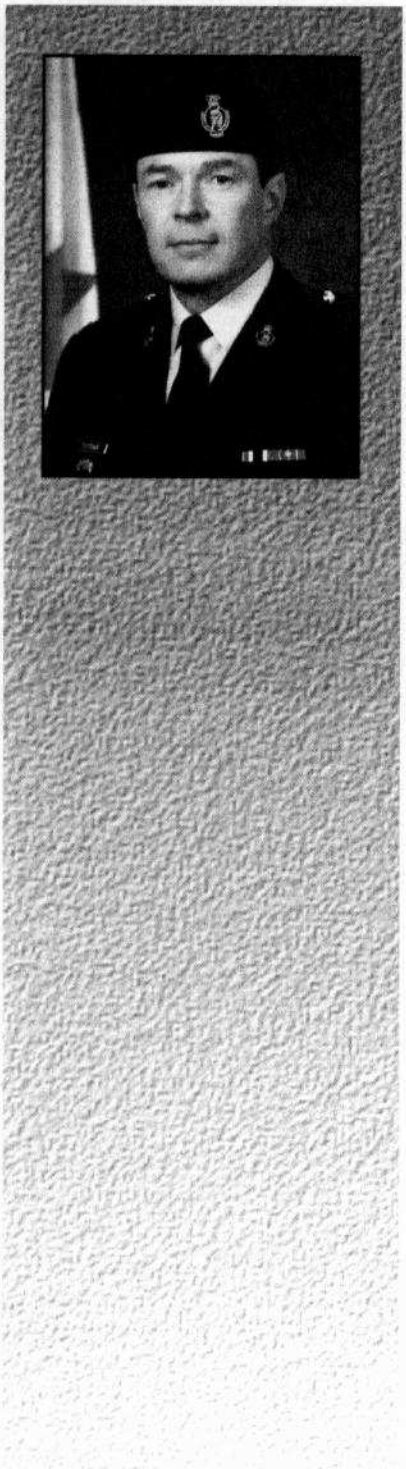
I have repeated these resolutions to stress that in line with the Commander's vision we are one Army and must bear that in mind when looking for solutions to any problems faced by the Corps. At the strategic level, much work is ongoing to develop an affordable, realistic and achievable Army. A strategic planning seminar was held in the fall of 1999 during which important issues facing the Army were discussed as a first step in developing a coherent strategy to move into the future. Other initiatives of interest include an Armoured Combat Vehicle Study that examined, on their merit, all of the options available to meet the direct fire requirements of the Army. On Reserve alignment, the various issues are well understood and will be addressed within the Land Force Reserve Restructure initiative. Some decisions and commitments have already been made as a result of these initiatives, but many others remain under consideration. Given the limited resources currently available to the Army, end-state solutions will take time to develop and initiate. I mention these various initiatives to stress that Corps problems must be examined within the larger perspective of all of the challenges faced by the Army, and the ultimate solution must be achievable and affordable.

With all of this work ongoing, it is not too late to input your ideas before an integrated solution is developed. The Armour Bulletin offers the opportunity to have your ideas widely read and appreciated.

In closing, I return to the subject of the Royal Canadian Armoured Corps Association. This group is concerned primarily with protecting the values of our Corps and I encourage those of you who are not already members to join.

Worthy!
Colonel W.J. Fulton, MSC, CD
Director of Armour

Editor-In-Chief's Foreword



In keeping with our plan of assigning themes to issues of the Armour Bulletin, this issue's theme is *Employment of Coyote*. I was very encouraged to see the number of articles forthcoming for this edition. So plentiful were the submissions that there was no need to make a call for articles to members of the Corps.

I am very pleased to see that you are thinking about your profession, and that some of you have taken the time to put pen to paper and recommend improvements to our methods of training and operations. One of the defining elements of a profession is that it must be self-regulated and that ideas for improvement must be generated from within. The Armour Bulletin is an excellent forum to use for professional debate.

We have an interesting cross-section of articles for this edition. Three of them discuss the recent Strathcona experience in Kosovo in terms of reconnaissance, tank and assault troop and some of the lessons learned during that difficult operation. There are tactical and technical lessons in all of these articles that are useful at all levels of command and staff and are well worth your time to read them.

Recently, regiments have been restructured to include a squadron of Coyote in the Cavalry or Direct Fire Support role. This squadron replaces the Cougar, some of which have been transferred to the Reserves and some withdrawn from service. The arrival of this new squadron has generated a great deal of discussion on how it should best be employed and this very question is addressed by some of this edition's contributing authors. I am again pleased to see that some of you have put pen to paper to express your thoughts on the issue. This is particularly timely as the Army examines its future structure in light of the current and future security environments and the fiscal realities we face today. The range of opinions on this subject covers the full spectrum. Capt Gillies recommends a multi-role squadron that could conduct both recce and tank tasks to support both OOTW and warfighting. Maj Branchaud recommends a transition to an armoured cavalry regiment supported by a tank squadron and Lt Miller recommends using the Cavalry squadron as an "Armoured Combat Vehicle (ACV) trainer" squadron in anticipation of the future acquisition of an ACV. Capt Long has written a thoughtful analysis of our current recce capability following implementation of Coyote and has identified some shortfalls that should be addressed.

Finally, a short biographical sketch on Brigadier Harvey, VC, MC is included and a book review of *The Tanks at Flers* by Trevor Pidgeon reviewed by Capt Bailey.

There being no shortage of issues to discuss in today's Army, and specifically the Armoured Corps, the next issue of the Bulletin will be dedicated to the subject of *Debating the Future Corps ACV*. The ACV project has been on the books for some time now, and recently, the Army Commander issued

direction that "the Army would make the transition to a primarily all-wheeled fleet". The current ACV project documentation implies a wheeled vehicle that is nearly as capable as a tank in terms of firepower, mobility and protection. Many of you will know that the technology does not exist to build a vehicle that weighs under 30 tonnes (the maximum possible for a wheeled vehicle) and has similar mobility, firepower and protection characteristics as a tank. The question is: "is it technically possible to build the ACV if it is to be wheeled and meet the Statement of Requirement?"

The direction taken by the ACV project will chart the course for the Armoured Corps for the next 30 years, and for that reason, we must get it right! The decision the Army must make is whether to optimise its structure for the most demanding (but least likely) task of warfighting, or on the less demanding (but most probable) task of Operations Other Than War. The outcome of this discussion will have a direct impact on the direction the ACV project takes and what type of vehicle we end up with.

In addition to the ACV project, the Army is reviewing its entire structure to rationalise its available resources with capability. This is an ideal time to make your views known on structures and capabilities that we should pursue for armoured regiments.

Once again, the issues cut to the very heart of what we do in service of Canada. As the officers and soldiers that will carry out the will of the government, your views are critical – after all you are the experts!

Lieutenant-Colonel C.M. Fletcher, CD
Editor-In-Chief,
Commandant Armour School

Keynote Address

Reconnaissance Squadron LdSH(RC) In Kosovo

Lieutenant Christopher Hunt graduated from the Royal Military College of Canada in 1997 with an Honours degree in Military and Strategic Studies. Since his posting to Regimental duty with the Lord Strathcona's Horse (Royal Canadians) he has been employed in Recce Squadron as a Coyote Troop Leader. He recently served in Kosovo on OPERATION KINETIC ROTO 0 and is currently employed as First Troop Leader, Recce Sqn.

INTRODUCTION

Reconnaissance Squadron LdSH(RC) is nearing the completion of OP KINETIC Rotation 0 at the time of writing this article. The Squadron has had an excellent tour, experienced a wide range of tasks, and learned several lessons. This article will deal with the employment of the Squadron, observations on command and control of the Squadron, lessons learned, and recommendations on the future employment of medium reconnaissance squadrons.

The Squadron is currently placed OPCON to Multi-National Brigade (Centre) (MNB(C)). During its time in Kosovo, the Squadron has worked with two different Brigade Headquarters: 4th (UK) Armoured Brigade from June to August 1999 and 19th (UK) mechanised Brigade/MNB(C) from September to December 1999. As a result of being a Brigade asset, the Squadron has worked throughout the MNB(C) AOR and has also conducted tasks into MNB(N), MNB(S), MNB(E), and MNB(W) which are the French, German, American, and Italian sectors respectively, although all tasks were conducted under the auspices of MNB(C). The Squadron has also been employed in a very wide range of tasks covering almost everything in *The Reconnaissance Squadron in Battle* (circa 1978) with the exception of NBC surveys.

TASKS

The Squadron has primarily been employed in security tasks, including observation posts (OPs), patrolling, checkpoints, vital point security, and escorts. OP tasks, both covert and overt, were conducted on a wide range of NAIs and TAIs ranging from enforcement of the Ground Safety Zone (GSZ) with Serbia to areas of high ethnic tension deep inside Kosovo. The all-weather long-range surveillance capability of the Coyote was constantly in high demand throughout the Brigade AOR. Patrol tasks have also been common during this tour. Assault Troop augmented by elements from the Reconnaissance Troops spent approximately two weeks in June/July patrolling in downtown Pristina, assisting 1st Battalion, The Parachute Regiment with maintaining law and order in the city. The Squadron has also deployed elements, especially Assault Troop, to smaller towns and even rural areas where Brigade felt the Battle Groups required assistance to increase KFOR presence.

Vehicle/personnel checkpoints (VCPs) were first conducted by the Squadron during its operations in Pristina, but they have been a common task throughout this tour. One of the final tasks of the Squadron on this rotation

has been to control the GSZ crossing checkpoints at Gates 2 and 3 North of Podujevo. Vital point security has also been a common task, especially when the Squadron was assigned a temporary AO as happened on three separate occasions. The most common static guards are on Serb churches and schools, which are obvious targets for ethnic violence. Finally, the Squadron has conducted countless escort tasks, both of VIPs and convoys, throughout the Brigade AOR and beyond into other MNBs and across the administrative boundary into Serbia.

The Squadron has also conducted a number of reconnaissance tasks during this tour, including zone, route, and point reconnaissance. Route BEAVER, which runs East from Pristina to the GSZ at Gate 4 was initially reconnoitred by First Troop back in June. The Squadron has also conducted several point reconnaissance tasks of bridges, and has gained a reputation within the Brigade for being the only unit that passes up engineer information within the normal course of its operations. The Squadron also maintains the most comprehensive high confidence route trace of the Brigade AO. Point reconnaissance tasks have been conducted on several locations of suspected illegal activity during the course of this tour.

As various units rotated in and out of the Brigade AOR, the Squadron has had economy of force tasks to plug the gaps during transitional periods. The Squadron was employed in the Lipjlan area during the hand-over from 1 Royal Gurkha Rifles Battle Group to FINBAT. During September, it was assigned its own AO when elements of the Irish Guards Battle Group rotated out and before SWEBAT took over the following month. The AO consisted of the villages of Caglavica, Laplje Selo, and Preoce, which are centred approximately 4 km south of Pristina. During October, the Squadron also had a very large AO in the mountains to the east of Pristina that it took over from D Squadron The Household Cavalry (The Blues and Royals) and later handed over to SWEBAT. As part of this operation, the Squadron manned the GSZ crossing checkpoint at Gate 4 and conducted a rigorous routine of vehicle, foot, and air-mobile patrols and OPs to maintain presence throughout the AO. Finally, in December the Squadron was tasked with another AO which included the GSZ checkpoints at Gates 2 and 3 and the area in between them.

One of the standing tasks of the Squadron has been Brigade reserve maintained at two hours notice to move. Indeed, wherever the Brigade has had problems flare up the Squadron soon found itself assisting the local Battle Group resolve the situation. Examples include provision of security in the village of Gracko following the murder of 14 Serb farmers in July and the call to assist in the search for a downed World Food Program aircraft in November. The Squadron offers the Brigade a readily available, flexible force, which can perform a myriad of tasks from surveillance and patrolling in normal operations, to anti-armour ambushes in wartime.

OBSERVATIONS

During the course of its operations in Kosovo, the Squadron has observed that command relationships were not readily understood by other Multi-national units. The Squadron is OPCON to MNB(C), which can assign missions and tasks to the Squadron; however, it cannot assign separate employment to components of the Squadron. On several occasions, the Squadron has been placed TACON to various Battle Groups for specific tasks and it was assigned TACOM to 1 Royal Gurkha Rifles throughout August. Many Battle Group CO's equated TACON to TACOM and have often tried to assign groupings as well as tasks or have tried to place elements of the Squadron under command of their sub-units. The Squadron has consistently stood its ground on the nature of command relationships, and was proactive to ensure they were followed.

MNB(C) HQ is run by a British Brigade HQ unit which uses different communications equipment. The OC's

The Coyotes proved extremely effective during the initial two weeks for the task for which they were designed: the detection and surveillance of mechanised and dismounted forces.

Tac and the CPs have no Brigade Secure VHF capability, as a result, the Squadron has a Fit For Radio (FFR) Landrover with three British signallers attached to it. The FFR is co-located with the Squadron CP. In addition, most units in MNB(C) do not have secure communications below Brigade level. The Squadron has often acted as a secure communications relay net when working with other units. The Brigade all informed CNR is usually only used for current operations. PTARMIGAN is the secure means that is used for all routine traffic.

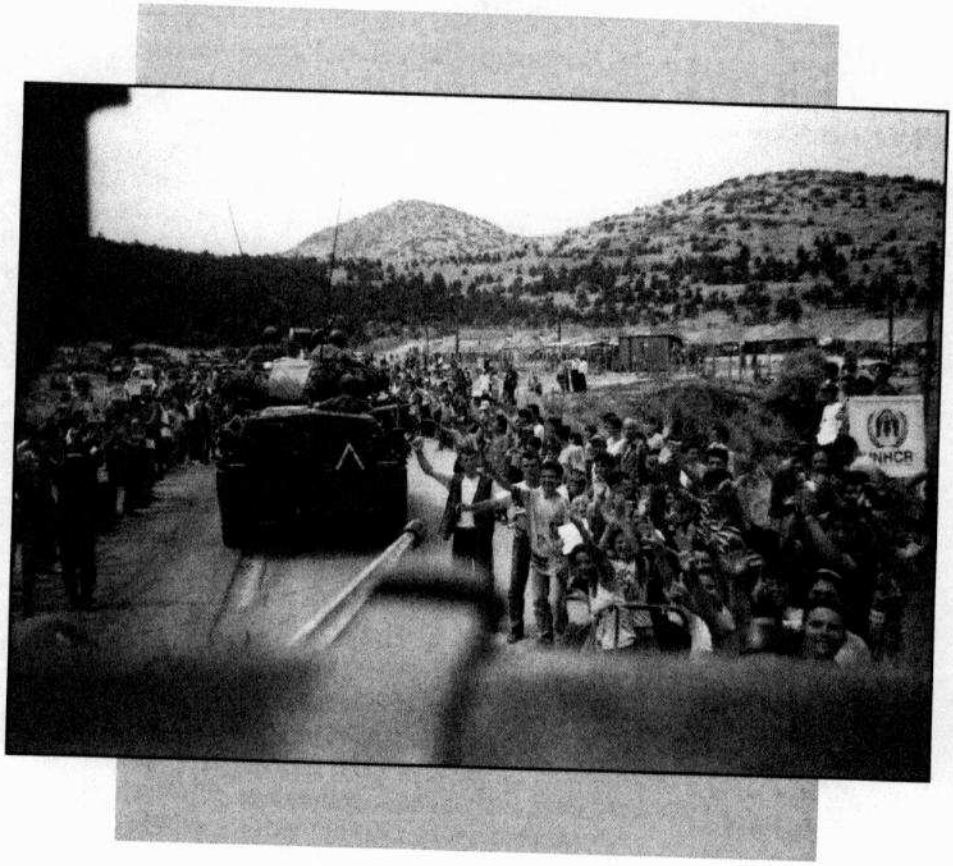
LESSONS LEARNED

The Squadron has countless lessons learned from its time in Kosovo; however, there are a few that stand out. One of the major limitations of the Coyote is the lead/acid battery currently used in most of the fleet. It allows for only between 2-6 hours of surveillance capability before the vehicle has to be started and run for about two hours to re-charge. The gel battery used in the Leopard has been tested and has proven to be far superior, where 6-8 hours of silent operations with a 60-90 minute re-charge time is the norm. One alternative that was tried and ultimately failed was the use of 2KW DC generators to re-charge the Coyote's batteries. The generators were almost as loud as the Coyote's engine; even when dug in, their noise signature was significant. In addition, the 2KW generators could not handle the power demands of the Coyote's surveillance systems and subsequently they suffered frequent burn-outs. This issue has been a serious although not a mission-critical problem since the vast majority of OPs have been overt in a low-threat environment; however, it would become a decisive issue if Coyotes are ever required to deploy into tactical OPs in a medium/high-threat environment.

The strengths and limitations of the Coyote have become evident during this tour. The Coyotes proved extremely effective during the initial two weeks for the task for which they were designed: the detection and surveillance of mechanised and dismounted forces. The Coyotes easily detected and tracked VJ forces as they withdrew, thereby providing critical information to Commander MNB(C) to assist his decision making process. The Coyotes' limitations became more evident during the lower intensity Operations Other Than War (OOTW) that followed. Although Coyotes with the Mast Mounted Surveillance System (MMSS) were often deployed at public events such as farmers' markets to provide a deterrent to violence because of the public's perception of their capabilities, their actual effectiveness was limited. This was due to the inability of the system to detect colours, sounds, and observe crowds within the 50m range. Note that in order to obtain the desired deterrence or effect, the system often had to be deployed directly in the middle of crowds. This surveillance deterrence tactic was employed in urban and rural areas, which had previously been trouble spots. A Coyote patrol would establish a prominent overt OP whose task was surveillance, but whose actual effect was deterrence and presence. This theory was proven by the fact that many former Coyote OPs were later replaced by OP towers manned by a small detachment of soldiers.

The surveillance limitations of the Coyote have also been discovered during this tour. On several occasions, covert Coyote OPs were established in overwatch of VCPs and to track suspicious vehicles. The covertness was achieved by remoteness from MSRs, which often meant standing off distances of 4-5 km. These operations proved to be unsuccessful as the Coyotes could not identify the "suspicious red Lada, vehicle registration number PR13482" from that distance, especially on the green operator control station (OCS) screen. However, military vehicles (including trucks and Land Rovers) were easily differentiated from civilian vehicles. The surveillance asset of choice for many tasks became the Sony Handi-Cam, which could be easily employed by covert, dismounted OPs at closer ranges. When coupled with its tripod and digital zoom (360X), its picture quality was actually superior to the Coyote day camera. Its microphone allowed the operator to narrate what was being taped or to pick up sounds when applicable. In addition, the Handi-Cams were used at VCPs to record searches of vehicles and personnel.

The Squadron also faced challenges with respect to the supply system. Firstly, the scaling of replacement parts was incorrect. Spare parts identified as high use items, based on the previous year's usage were put forward by the Squadron prior to deployment. However, it was not used as the basis for what actually arrived in theatre as spare parts, that decision was made by a third line support unit without consultation with the first line operators. The Squadron used spare parts more quickly than had been scaled, despite the fact that the equipment performed remarkably well. The second problem was that CFB Trenton proved to be a bottleneck in the re-supply system. Parts were emergency ordered (IOR) from Montreal and then they sat in Trenton for several days until there was a



scheduled sustainment flight or an aircraft could be filled.

Assault Troop has proved its utility, and in macro terms its doctrinal validity, during this tour. It has given the Squadron the flexibility to handle any task Brigade has assigned. Assault Troop's "forté" has proven to be surveillance and patrolling. Assault Troop has often provided dismounted covert OPs and/or foot patrols to augment gaps in Coyote surveillance coverage. Mobility/counter-mobility and other pioneer associated tasks have proven to be secondary tasks that have yet to be employed in theatre. Assault Troop's manpower has also simplified tasks for the security of VIPs or vital points. The Coyotes provide presence, but it is soldiers on the ground who provide real security in an immature OOTW environment vice a mature one such as that of SFOR in Bosnia. Assault Troop's ten man sections are ideal as they allow an eight-man section or two 4 man patrols to deploy while maintaining a gunner and driver in the Bison.

Another major lesson learned is that the Squadron requires some form of light reconnaissance capability. Many of the Squadron's operations took place in the mountains on Kosovo's north and eastern borders with Serbia, and it was difficult going for Coyotes and Bisons; however, a CVR-T or HMMVW type vehicle would have had a much easier time negotiating the mountain tracks. In addition, these vehicles would be much better suited for stealth reconnaissance as they are both much quieter and smaller than Coyotes and Bisons. Light reconnaissance patrols, or even troops, could be provided by militia reconnaissance units to augment regular reconnaissance squadrons during exercises or operations, if regular light reconnaissance troops remain off the Regular Force ORBAT.

Five car troops have also proven, this time and more importantly in an operational setting, to be inadequate because they fail to provide the necessary flexibility and depth paramount at the troop level. The Coyote has revolutionised the reconnaissance troop's surveillance capabilities; however, the reconnaissance troop still requires seven cars to carry out the remainder

of its tasks. Doctrinally and practically, the five car troop is not sufficient to conduct a proper escort, zone, area, route, or point reconnaissance. In addition, it reduces the troop to a mere four cars when crews commence R & R/H-LTA. This means the troop leader becomes a patrol commander in addition to his normal duties. In the course of operations on this tour, this has led to individual vehicles being left alone for short periods in OPs because the troop leader had orders to attend, and reconnaissance or liaison to conduct. Clearly, this is an unacceptable situation.

CONCLUSION

The lessons learned in Kosovo are relevant to future employment of reconnaissance squadrons. Firstly, the seven car troop (whether all Coyote or a combination of Coyote and light reconnaissance assets) needs to be restored to enable reconnaissance troops to execute their assigned tasks with the necessary balance, depth and flexibility. Assault Troop's primary doctrinal role needs to be adjusted to dismounted surveillance and security vice mobility/counter-mobility. Finally, the reconnaissance squadron needs to re-acquire some form of light reconnaissance capability. These changes would make the reconnaissance squadron more versatile and effective in all types of operations from peacekeeping to warfighting. [redacted]

Alternatives to the Five Car Coyote Troop

in the Brigade Reconnaissance Squadron

Captain Trevor Cadieu is currently serving as Regular Support Staff with The British Columbia Regiment. He has extensive Coyote experience gained as a Troop Leader with Reconnaissance Squadron and the Regimental Reconnaissance Troop, Lord Strathcona's Horse (Royal Canadians).

AIM

The aim of this paper is to outline the deficiencies of the Brigade Reconnaissance Squadron as it is currently configured with three, five car reconnaissance troops. Comment will be made on the negative effect that removing a patrol from each troop has had on Reconnaissance Squadron operations and how it has neutralised the benefits of the Coyote Reconnaissance vehicle.

INTRODUCTION

Although the Coyote enhances reconnaissance operations with increased surveillance and self defence capabilities, we have unfortunately adopted a "do more with less" attitude when employing this vehicle. Rather than employing the vehicle in a traditionally configured Reconnaissance Squadron of three, seven car reconnaissance troops, 1 CMBG Reconnaissance Squadron is currently made up of three, five car troops. Ultimately, by removing three patrols from the Reconnaissance Squadron arsenal, many of the technological advances offered by the Coyote have been neutralised, flexibility has been lost and the overall effectiveness of the squadron has been diminished compared to a squadron able to retain these resources.

DISCUSSION

Technological advances offered by the Coyote have the potential to drastically improve the reconnaissance and surveillance capabilities of the Canadian Army. Equipped with modern and effective thermal/infrared optics, chemical detection equipment and a 25mm Cannon, the Coyote can operate in environments not hospitable to earlier reconnaissance platforms. The Coyote's surveillance systems, comprised of a day camera, thermal imagery camera and MSTAR Radar, permit the Commander to see forward up to 24 kilometres in *ideal* conditions. These characteristics combine to make the Coyote a formidable reconnaissance asset on the modern battlefield. The situational awareness and vision of the Brigade has greatly improved with the introduction of the Coyote.

Perhaps due to the financial restraint encountered by the Canadian Forces in recent years, many leaders have been forced to adopt a "do more with less" attitude with regards to the employment of personnel and equipment. Unfortunately, the Coyote has not escaped this rationale. Upon receiving shipment of its new fleet of vehicles, the 1 CMBG Reconnaissance

Ultimately, by removing three patrols from the Reconnaissance Squadron arsenal, many of the technological advances offered by the Coyote have been neutralised, flexibility has been lost and the overall effectiveness of the squadron has been diminished compared to a squadron able to retain these resources.

Squadron was directed to eliminate a patrol from each of its reconnaissance troops. Proponents of this directive argue that, due to the technological advances offered by the Coyote, fewer reconnaissance vehicles are now required to get the same job done on the battlefield. Furthermore, there is a belief that Army reconnaissance assets should no longer be as far forward as they once were, as they have the ability to see further on the battlefield and will become of increasing value to enemy counter reconnaissance. Common sense dictates however, that as we pull our reconnaissance assets closer to the main body, the contributions offered by the Coyote will be neutralised. Using this new vehicle in a less aggressive manner will ultimately lead to an inability to read the enemy as we remove the "eyes and ears" of the Brigade from the battlefield.

Offensive operations

The five-car troop has already proven to be ineffective during exercises in Wainwright, Suffield, and the National Training Center (FORT IRWIN, CALIFORNIA) in the Spring and Summer of 1998. When tasked to conduct offensive operations, reconnaissance troop leaders found that they did not have the equipment or manpower to get the job done. This problem was highlighted during route reconnaissance operations, where troops were required to physically track a route and clear ground adjacent to the route at the same time. Troop leaders found that they had only two options: One way to accomplish both of these route reconnaissance tasks is to push both patrols forward to clear all ground immediately adjacent to the route while the troop leader physically tracks the route himself. This option is not very desirable as the threat to the troop command vehicle is significantly increased as it moves down an unproven route. Furthermore, the troop leader is essentially taken out of the battle, as his movement is restricted to the route; his ability to maintain situational awareness and control is diminished by the inability to stray from the centre of axis. A second option is to commit another troop vehicle to track the route while the troop leader acts as the second car of the split up patrol. This option however, once again limits the flexibility of the troop leader's movement and forces him to directly manage the actions of both the troop and a patrol. With a patrol removed from each reconnaissance troop, all route reconnaissance tasks have become a squadron level operation.

Area reconnaissance tasks proved to be even more taxing on the five car troop in July 1998, when 2nd Troop Reconnaissance Squadron, Lord Strathcona's Horse (Royal Canadians) deployed to the National Training Center in FORT IRWIN, CALIFORNIA with the 116th Armored Cavalry Brigade. During this exercise the reconnaissance troop was often called upon to clear a sector of land which was made up of mountainous and rolling terrain. Although the frontage assigned to the troop was at times only three to five kilometres across, the five car reconnaissance element still found their capabilities stretched with regards to the ability to locate and define enemy positions in concealing ground. Equipped with MILES gear throughout the deployment, the troop also learned the valuable lesson of mortality on the battlefield. In one instance, an entire Coyote patrol was destroyed by friendly fire. Regardless of who the fire came from, the result would not have changed: the Brigade lost its eyes on one of its flanks, allowing an enemy Forward Detachment to move unrestricted, and unreported, directly into the underbelly of the friendly main body. A third patrol, which could have been pulled from a depth position to "plug the hole", would have proven invaluable not only to the reconnaissance troop leader but to the 116th Brigade as well.

Screen operations

The reconnaissance troops' capability to effectively conduct screen and surveillance operations are once again greatly influenced by their current configuration and manning restrictions imposed by the Coyote and its systems. An initial glance at the current configuration of reconnaissance troops may indicate that each troop leader has four surveillance systems at his disposal when assigned a screen task. This however, is not the case should a troop be required to maintain surveillance duties over an extended period of time. While deployed in a screen, patrols must now ensure that continuous attention is paid to monitoring the surveillance/communications equipment, maintaining local security around the vehicles and providing an over watch or listening post to observe movement around the deployed surveillance system. Should a patrol be required to sustain surveillance operations for anymore than 24 hours, both vehicle crews will be vital to the operation of one surveillance system.

As with offensive operations, flexibility is lost in the screen with the five-car troop. Although the Coyote's surveillance systems allow us to pick up enemy movement at greater distances, we are countering these benefits by removing a patrol from each troop. With reduced assets spread over the Brigade's frontage, Reconnaissance Squadron has lost all redundancy in surveillance operations. Should an observation post be destroyed by either enemy counter reconnaissance or direct/indirect fire, a non-repairable gap is created in the Brigade screen line, allowing enemy movement to go unhindered and unseen. The effects of such a scenario in real life could be devastating to both the mission and the survival of the Brigade.

Though not directly related to the five-car configuration, another factor dictating the requirement to increase the strength of reconnaissance troops stems from the limitations of the Coyote's surveillance systems. Both the MSTAR Radar and the day/thermal cameras are restricted to line of sight observation and under perfect conditions can see out to 24 km and 12 km respectively. Unfortunately, these ideal conditions will likely be the exception rather than the rule when deploying these systems. As a result, the current configuration of Reconnaissance Squadron does not offer the flexibility

required to provide surveillance into areas not observable by primary observation posts. Potential solutions are discussed later in this paper.

RECOMMENDATIONS

All recommendations aimed at increasing Reconnaissance Squadron's effectiveness require the allocation of additional vehicles and personnel to the current squadron configuration. Regardless of what type of vehicle is used to augment the squadron's strength, the underlying goal is to provide reconnaissance troops with the resources needed to accomplish doctrinal tasks assigned to them. Subsequently, should a troop experience the very real possibility of losing personnel and equipment, either to enemy fire or maintenance difficulties, the Troop Leader has some level of flexibility to carry on with his assigned mission.

Option 1

Augment each troop with two additional Coyote reconnaissance vehicles. During all phases of war troop leaders would be provided with the flexibility required to maintain operational effectiveness. This patrol could provide depth to the troop; in the event that losses are suffered on the battlefield, these additional vehicles could be used to "plug holes". In the offence, an extra patrol would provide the troop with the ability to clear ground in a more rapid, fluid and thorough manner and provide the depth required to allow handovers to Battle Group Reconnaissance. When employed in the screen, this patrol could offer redundancy on observation tasks.

With three additional Coyote patrols added to their organisation, Reconnaissance Squadron would also have the ability to maximise the vehicle's surveillance system capabilities. For example, while conducting offensive operations in optimal ground, Coyote Mast Mounted Surveillance Systems could be held back behind the main body to provide over watch for advancing friendly elements. At the same time the remainder of Reconnaissance Squadron would continue to develop all enemy contacts and clear dead ground not visible to the deployed surveillance systems.

With Coyotes augmenting the current Reconnaissance Squadron configuration, maintenance would remain standardised, the self-defence capabilities of each troop would be enhanced and the overall flexibility and effectiveness of the Squadron would also improve.

Option 2

Perhaps one of the greatest down falls of the Coyote as a reconnaissance vehicle is that it is not easily concealed. The vehicle is large and emits a great deal of noise while on the move and in a static position. To counter this deficiency and, at the same time, increase squadron flexibility, the second option introduces three "stealth patrols" to the Reconnaissance Squadron configuration. These stealth patrols would each consist of two light wheeled vehicles such as the HMMWV and would have anti-tank firing capabilities. With a patrol attached to each reconnaissance troop, they would serve a multitude of roles. In the advance, the stealth patrol may conduct reconnaissance tasks in conjunction with the rest of the troop (ie the traditional "E" patrol), conduct detailed reconnaissance of all obstacles or even be left to hand enemy contacts over to follow on Battle Group Reconnaissance elements.

With Brigade Reconnaissance Squadron deployed in a screen, the stealth patrols would prove invaluable. Prior to the deployment of Coyote surveillance equipment, which is both costly and time intensive, stealth patrols could be sent forward to clear an area of enemy and assess ground suitability for the Coyote patrols to establish their equipment. Once the Coyote patrols have commenced surveillance operations, the stealth patrol could be used to provide close protection to each observation post or assume responsibility for contacts allowing Coyote patrols to re-deploy surveillance assets unhindered by enemy fire. The stealth patrol could also be deployed forward of the screen line to conduct reconnaissance on all ground not observable by the Coyote surveillance equipment. Should the Squadron be tasked to provide delay on the enemy advance stealth patrols could establish anti-armour/ambush teams, utilising their anti-armour firing capabilities in a lay back role.

As reconnaissance patrols are often employed independently from their respective troops, consideration may also be made into the possibility of providing each troop with two to three stealth patrols in addition to the two Coyote patrols already in place. Through the use of speed, agility and silence, these stealth patrols would undoubtedly save the Brigade some of its most valuable resources, both the Coyote Reconnaissance vehicles and the soldiers that man them.

Option 3

With its state of the art technology, the Coyote has without a doubt, become a higher priority battlefield target than its predecessors ever were. Even though the M242 25mm

Canon provides the Coyote with some measure of self-defence, it is definitely no match for an enemy main battle tank. Drawing on American experience, option 3 discusses the possibility of forming an Armoured Cavalry type organisation in lieu of a Reconnaissance Squadron, as we know it. Comprised of two Coyote Reconnaissance Troops (Scout formations) and two tank troops, this organisation could conduct reconnaissance in a much more aggressive manner than currently possible. To augment the power of the tanks weaponry, the Armoured Cavalry Squadron would also be equipped with indirect fire, anti-tank and dismounted assets.

Although each of these three options provide Reconnaissance Squadron with increased flexibility and an improved capability to fully utilise the advances offered by the Coyote, option 2 would offer the greatest improvement to the current configuration of the squadron in affordable terms. Stealth patrols would benefit the Brigade through their ability to be used in a variety of reconnaissance and surveillance tasks while, at the same time, protecting valuable Coyote equipment and personnel. In order to maintain continuity in training and liaison between reconnaissance and stealth assets, a minimum of one Stealth Patrol should be created per troop manned by Regular Force personnel. Additional patrols could be drawn from Reserve Reconnaissance units thus giving these units a viable role in the future.

CONCLUSION

Fundamental to the success of our forces in battle is Brigade Reconnaissance Squadron's ability to gather accurate and timely information on the enemy and the nature of the ground on which the war is to be fought. To assist the squadron in their efforts in front of the Brigade, the Canadian Army has acquired a new LAV Reconnaissance vehicle, the Coyote. Unfortunately, we have contradicted the potential benefits provided by the Coyote by stripping a patrol away from each reconnaissance troop. Rather than being satisfied that the same job can now be done with less, we should aggressively exploit the capabilities of this new vehicle. Augmenting the current Reconnaissance Squadron organisation with additional Coyote or stealth patrols would lead to increased flexibility and manoeuvrability for both the Brigade and its reconnaissance assets.

Let's Face Reality...

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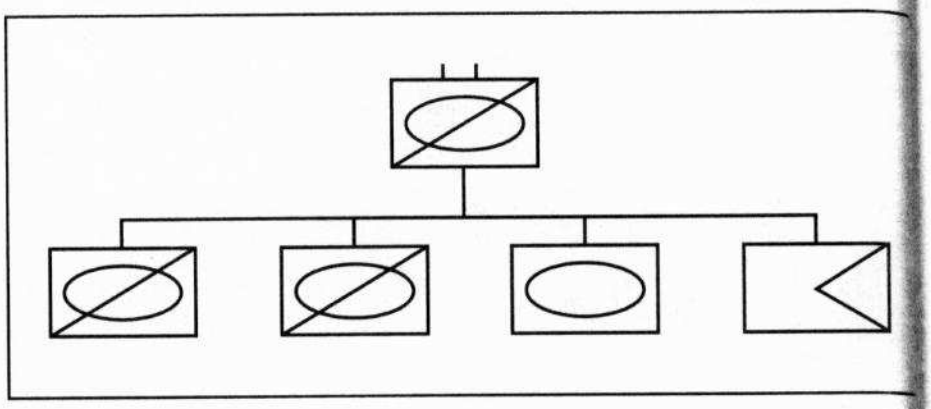
Some years ago, I wrote an article in this Bulletin about the deployment of Coyote in our Regiments. At the time I concentrated on crew manning and I questioned the necessity for the infantry to be issued with the Coyote instead of another vehicle that may be more adapted to their need for close reconnaissance. Since then, crew manning has been revised and the infantry, like it or not, has been issued with the Coyote. In this article I would like to address the reorganization of our Regular regiments at a time when we are loosing one line squadron per regiment and the Cougar fleet to the Militia; as well as taking over a second Coyote squadron per regiment.

In the past, the Armour Corps has put the tank function first and reconnaissance function second, thought should now be given to reversing the priority. One could argue that during the Cold War Era, the tank function was preponderant due to the role that our armoured regiments were called to play in the defense of Western Europe. The guarantee that the Cougars would only be used as tank trainers (not to be deployed on operations) and that those squadrons so equipped would miraculously receive MBTs on deployment to Europe, kept the status quo. Since then, the world balance has drastically changed. The time line of modern high intensity war is very short and the forces that a nation lines up prior to hostilities is likely to be the one that will fight through to the end of the conflict. Time for troop replacement or unit relief in place seems non existent. Should our politicians allow us to participate (as part of a coalition of course) in a conflict in the near future, the Canadian Army in its present posture, could not be part of the "Armoured Punch". However, a more realistic role within such a coalition could be to provide a potent Flank Screen/Guard force to the allied plan. Accordingly we should organize and train towards a goal that we can achieve with the type of equipment that we have, in order to fulfill a realistic role alongside our allies.

Let's face reality; our regiments have only one tank squadron and they are not about to receive any more. With our involvement in regional conflicts, recce type tasks have increased. With the current missions and rotations we are facing, it is not one but at least two recce squadrons that are required per regiment (and some would argue for three). At the moment, sabre squadrons called to fill the slots in Bosnia, constantly have to re-role and re-organize from sabre to recce; with the constant flux and instability in personnel manning that such reorganization causes. The Canadian Armour Corps has not deployed units in the sabre (tank) role since the Korean War. Instead, it has been called to provide reconnaissance units as currently deployed in Bosnia and Kosovo or to take up light infantry tasks as experienced in Cyprus. That is not to say that we should ditch our tank/combat team role, far from it; it is paramount that we should keep our lead and expertise in this field. We should however do it with the right tool, a TANK. We should not think that we would fill the armour role with a Coyote when the following infantry will be on LAV-III! The remaining TANK squadron per regiment should be the one to concentrate on being the brigade lead in combat team tactics and training. The Tank

PROPOSED REGIMENTAL ORGANIZATION

Our regiments should be organized in order to provide the commanders with the best structure that the few resources at their disposition can provide.

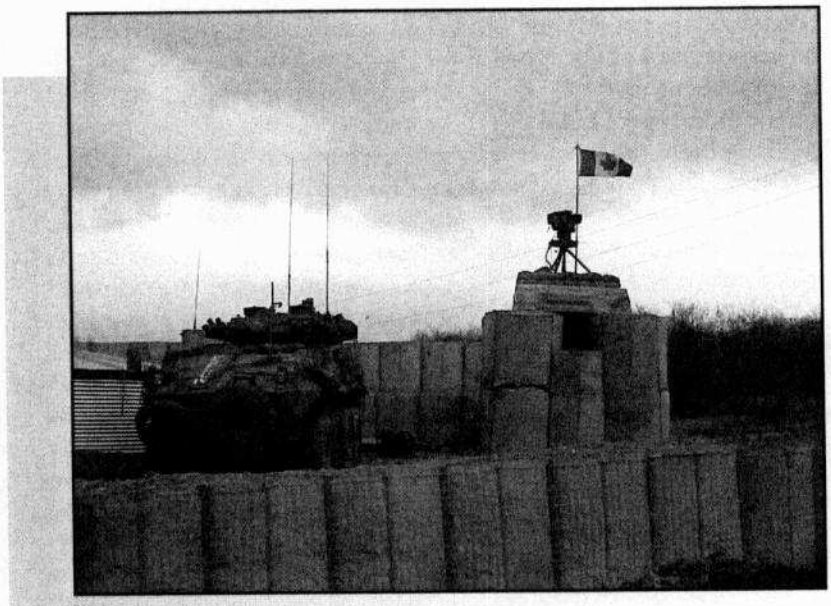


Squadron should also be prepared to fill it's role as part of an ARMOURED RECONNAISSANCE REGIMENT, that of extracting Reconnaissance Squadrons from unfavourable positions.

The organization of our Brigade Groups *pseudo* Armoured Regiments has been for too long just what it is...*pseudo!*

Even in Germany, we never had a full four tank squadron Regiment. Our allies in NATO consider an armour unit to be an organization of battalion size with at least three to four tank sub-units, while it is generally accepted that an armour reconnaissance unit is an organization of two to three reconnaissance sub-units and one direct fire support sub-unit (tank or ATGW missiles). Look at the organization and the equipment of our Regiment and draw the logical conclusion!

With the above configuration, our regiments could provide a recce squadron to an external BG mission (UN or NATO), while the rest of the Regiment can continue to provide the Brigade commander with brigade recce and MBT capabilities. If an entire regiment were ordered to deploy and form (with attachments) a Recce BG, its two Recce squadrons and one MBT squadron would prove to be an important asset to the local force commander.



It is time that we face reality and that we stop lingering on impractical solutions. Our regiments should be organized in order to provide the commanders with the best structure that the few resources at their disposition can provide. If we choose not to concentrate all our tanks in one Regiment (as it seems to be the case now), then we should face the reality that our equipment imposes on us, and transform our three *pseudo* armour regiments into potent armoured reconnaissance regiments.

The New Armoured Regiment

Captain Paul Gillies holds an Honours Degree in Political Science from Carleton University. His previous service includes tours in Germany and Belgium with NATO, in Toronto as part of a District Headquarters and in Petawawa and Bosnia with The Royal Canadian Dragoons. Currently, he serves in Headquarters 2 Canadian Mechanized Brigade Group as the G3 Exercises.

INTRODUCTION

The demise of the Cougar and the advent of the Equipment Rationalisation Plan (ERP) has left the Royal Canadian Armoured Corps (RCAC) in the surprising position of having to re-evaluate both its doctrine and structure on rather short notice. On the positive side, the plan does see a reduction in the number of vehicles in the fleet and moves the remainder of our soldiers onto more modern equipment. On the verge of such change, serious thought should be given to how we are going to confront these recent realities and prepare our Corps for the next millennium. Below is an attempt to outline what I see as a possible structure and role for the new armoured regiment.

OVERVIEW

Under ERP, the new armoured regiment will find itself equipped with a Coyote squadron, a Direct Fire Support Vehicle (DFSV) squadron and a tank squadron. Thus, overnight, ERP has changed our unit structure from mainly tank to armoured cavalry. Our military responsibilities, on the other hand, have not changed. We are still expected to field the tank regiment found in the Operation (Op) SABRE Brigade Group while concurrently continuing to fulfil peacekeeping requirements, which usually entails a reconnaissance (recce) squadron. These are diverse requirements but not insurmountable ones. To rationalise them and to put them into a workable formula for training and operations will necessitate a certain flexibility of mind and spirit. Let us begin with training.

TRAINING

Very little has changed in the requirement to train up to squadron level. The Coyote squadron will still be required to train as the brigade reconnaissance squadron. The tank squadron will still train as the main fire support element within a combat team or a battle group. What has changed, and

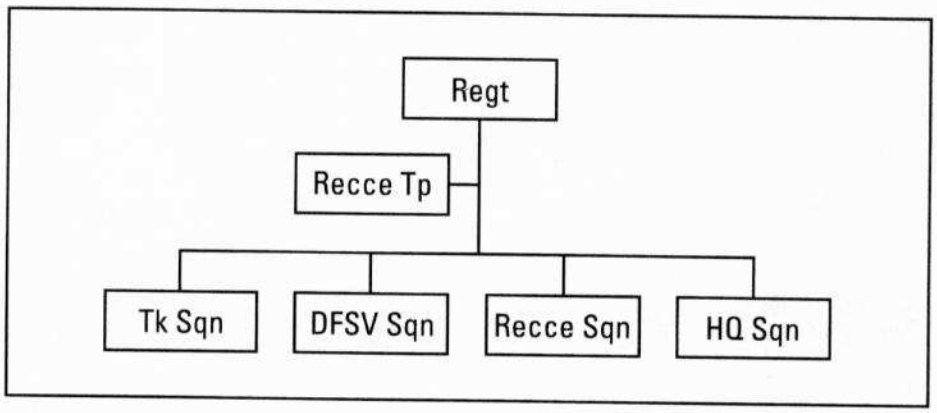


Diagram 1: Structure of the new Armoured Regiment

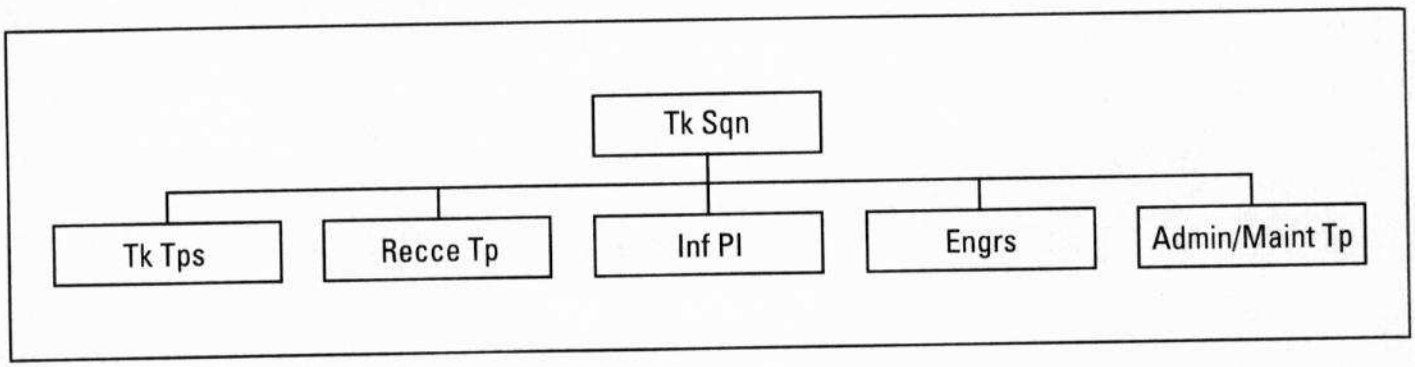
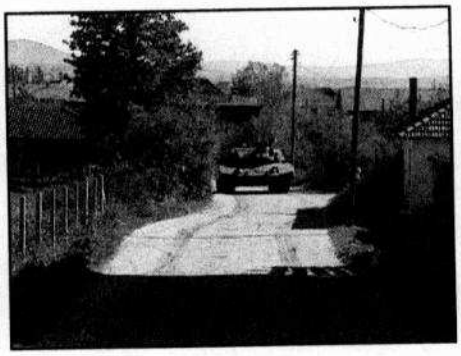


Diagram 2: Possible Tank Squadron Task-tailored Organisation

only slightly at that, is the requirement for the DFSV squadron to train for both roles. In preparation for any peacekeeping mission on which it might be employed and to provide a suitable replacement pool for the deployed Coyote squadron, the DFSV squadron must train in the reconnaissance role. In order to properly train the infantry battalions of its brigade and to provide the armoured Commanding Officer (CO) of its parent regiment with the practical experience should the latter be called on to command the SABRE armoured unit, the squadron must train in the direct fire support role. This will undoubtedly mitigate it doing either task to the same level of proficiency as its partner squadrons but, then again, it does not have to. It is unlikely to see combat in its direct fire support role and, should it be called upon to deploy on a peacekeeping mission, it would have anywhere up to six months (no less than the current Cougar squadron gets) to properly train as a recce sub-unit.

In addition, now that we lack some of the Cougar's heavier firepower in our peacekeeping squadrons, some thought should be given to mixing tanks and Coyotes/DFSVs at the lower



level during training exercises for potential operations. A recce squadron should practice having a troop of tanks attached (and vice-versa) so that commanders at all levels have experience in task-tailoring units and sub-units to specific purposes. Unit COs should also find time to practice commanding in both the armoured recce and traditional tank roles, perhaps on an annual rotating schedule. No structural change is required to assume the former while the latter could be accomplished by having the DFSVs and, if need be, the Coyotes portray tank squadrons. Given the longer postings that both officers and senior NCOs are experiencing these days, it would be quite feasible to expect a certain amount of expertise to build up over time in both roles. In this way the corps should be able to meet the variety of missions that one could expect to find at the low to medium combat spectrum – the level at which we are most likely to be deployed.

OPERATIONS

I have already touched upon the requirement to fulfil the Op SABRE commitment. Unless the tanks are grouped in one Land Force Area in the immediate future (an unlikely event given our current budget and operational status), we shall continue to see the formation of an ad hoc regiment for this contingency. The latter would consist of each Area's tank squadron and an even more ad hoc fourth squadron that would probably be whipped up from a combination of school staff and ex-tankers spread throughout the corps (it is here that the demise of A Squadron, 8 CH (PL) is most heavily felt). Not a pretty picture but a conceivable one, none the less. What will change is the incorporation of Coyote or DFSV into the 60 Troop greatly enhancing its protection,

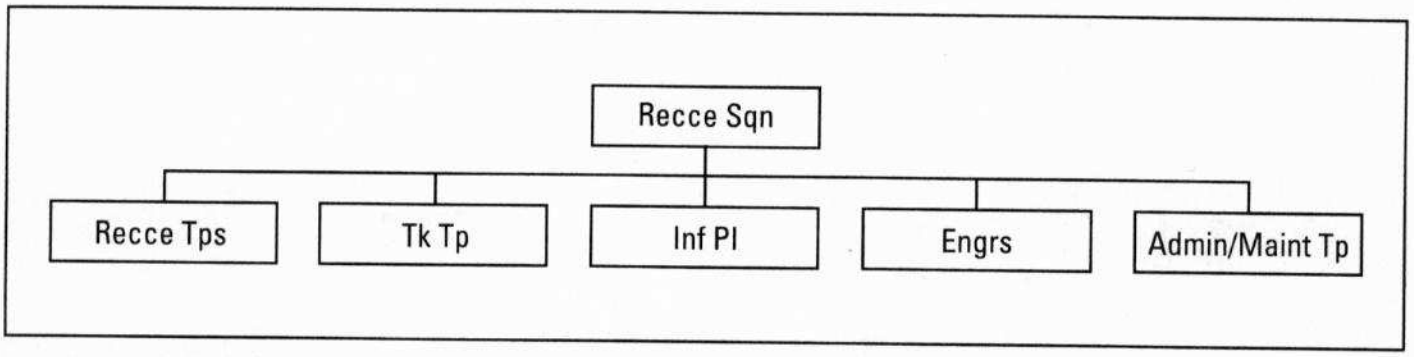


Diagram 3: Possible Recce Squadron Task-tailored Organisation

defensive firepower and information gathering abilities. On a far more likely basis will be the re-occurring necessity to send armoured recce squadrons alone or in combination with infantry and other arms overseas on peacekeeping/peacemaking missions. It is here that the flexibility of mind is paramount.

The Coyote, though a good recce vehicle, lacks anything more than a reasonable defensive weapon. In any operation other than the Cyprus-like calm to be found in Bosnia currently, we are going to have to seriously consider deploying Leopards (and whatever replaces it) to provide back-up and offensive punch, should that be required. In this case, one could see the attachment of a troop or half-squadron of tanks to the normal recce squadron. These tanks could either be deployed in reserve or up front working in close concert with the Coyotes. The concept, here, being that the forward screen of Coyotes makes the initial contact with the enemy and attempts to define it to the greatest extent possible. The tanks provide the firepower needed to either extricate the screen (in a defensive scenario) or punch through limited resistance (in an offensive scenario).

In addition, such a squadron might have infantry and engineers attached to it much like a World War Two German Aufklarungs battalion thus giving it a limited ability to fight for information or to provide truly effective flank protection. To properly prepare for these types of operational employment, though, we shall have to incorporate such possibilities into our normal training exercises and routine.

CONCLUSION

The advent of ERP is going to provide the RCAC with many challenges not the least of which will be in the personnel world. Paradoxically, it has made our unit structure a little more logical and our training and operational realities much more achievable. The SABRE brigade commitment can still be met and our capability to deploy on peacekeeping missions may actually have increased given the Coyote's surveillance package and modern fire control system. What will need to change is the way in which we task-tailor the units and sub-units which we send on these missions in order to provide them with the relevant equipment which they require, including the possible deployment of tanks on peacekeeping/peacemaking missions. In order to practice the various structures that we might employ and to fully develop the mental flexibility to use them, unit training should be more diversified and less dogmatic. In this way, the new armoured regiments will be better prepared to train and operate in the next millennium.

What will need to change is the way in which we task-tailor the units and sub-units which we send on these missions in order to provide them with the relevant equipment which they require, including the possible deployment of tanks on peacekeeping/peacemaking missions.

Concept for the Employment of the Coyote in the Armoured Regiment

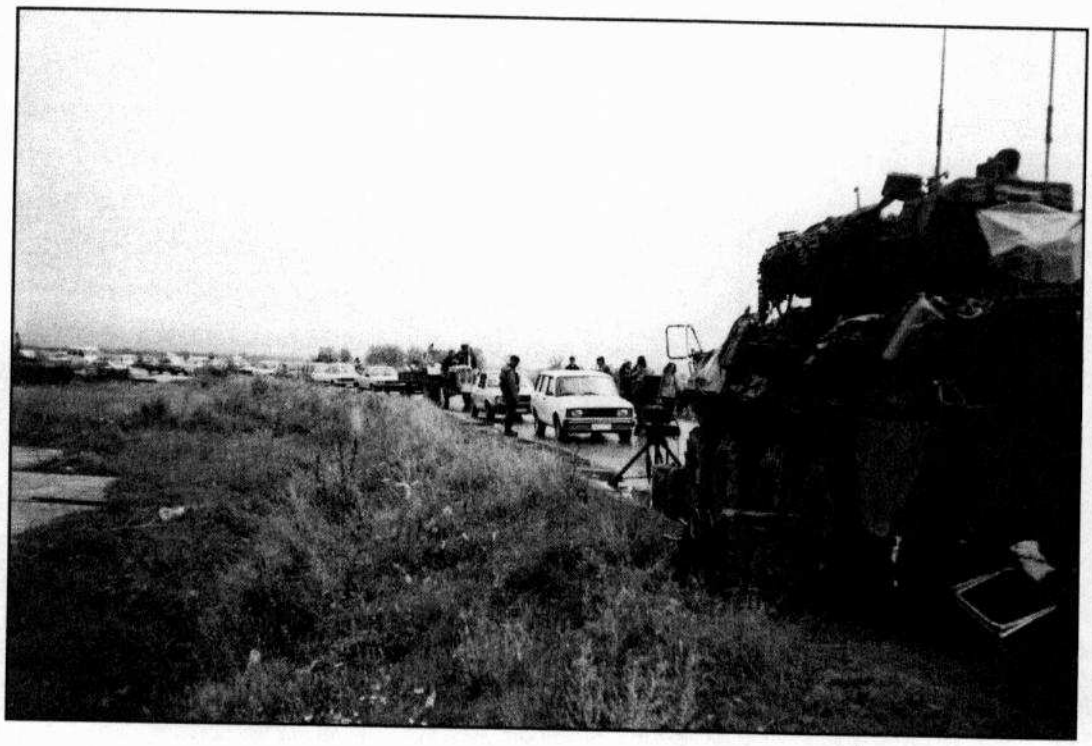
Armoured Cavalry or Tank Trainer?

Lieutenant Derek Miller is presently serving in Kosovo on OP KINETIC Roto 1 with the 1st Battalion, The Royal Canadian Regiment Battle Group. He is the Second-In-Command of the Battle Group Reconnaissance Platoon, equipped with Coyote.

Presently, the Canadian Forces are going through a difficult and challenging period of change. The Army is meeting these challenges by responding to a wide variety of operational tasks and missions that are continuously developing and changing. Simultaneously, budget cutbacks and downsizing have further strained the resources with which the Army is able to accomplish the tasks assigned to it. Of no exception to this, the way in which equipment is procured has also suffered the consequences of these difficulties. While the purchasing of the Coyote recce vehicle was a great step forward from its predecessor, it represents the first of a number of new vehicles which the Armoured Corps requires to continue to provide the Canadian Army with the ability to defeat opposing Main Battle Tanks. This year the Cougar is being retired from the Regular Force and passed on for use by Reserve units. To compensate for this loss of an operational vehicle, the Cougar is to be replaced by the Coyote, less its surveillance equipment, until the arrival of an Armoured Combat Vehicle (ACV). As such, two key options present themselves when considering the implementation and employment of these new Coyote equipped squadrons. The first would be to operate, as an armoured cavalry squadron where the tactics employed would accurately reflect the characteristics of the vehicle. This option may be preferable if the planned procurement of an ACV is cancelled. The second method would be to use the Coyote in a way similar to that with which the Cougar was utilised – as a tank trainer where tactics would mirror those performed by a sabre squadron. This option rests largely on the assumption that an ACV will be purchased in the near future. Given these two options, this paper will argue that the coyote must be viewed only as an interim measure and, as such, should be employed as a tank trainer in order to preserve armoured expertise in all areas of possible future operations.

The Coyote being employed as a tank trainer would not be the first instance whereby alternative vehicles were employed in lieu of tanks while practising tank tactics. While recent history presents the Cougar as an example, the mid-70s also witnessed such an endeavour to train sabre squadrons without tanks. Between the retirement of the Centurion and the acquisition of the Leopard, the Royal Canadian Dragoons trained with APC/Lynx's mounting .50 cal machineguns, which simulated main battle tanks (MBT). By doing so, the Dragoons were able to maintain the fighting skills and tactical knowledge required to field a sabre squadron thus enabling a transition to the Leopard tanks with relative ease.

Within the Canadian political environment, decision makers have yet to direct the Army to train solely for operations other that war, thus leaving war-fighting as a primary task for which to train. Additionally, while the possibility of a high-intensity conflict occurring in the immediate future is currently relatively low, emphasis must still be placed on being prepared to deal with such a conflict if it were to arise. The Canadian Armed Forces



are unable to assemble, deploy and sustain a force capable of waging war on its own. Our capability to participate in medium to high intensity conflicts must be and can only be envisaged in a coalition context. Therefore, if war fighting is to remain our "raison d'être", we must bring with us capabilities which are meaningful in a coalition context. Further, it is a well-recognised fact that by training for war, units will be better prepared to perform tasks less intense in nature; like peacekeeping and aid to civil power operations. Ideally, all sabre squadrons would be equipped with tanks to pursue this operational readiness qualification, however, given the current financial restrictions placed on procurement, this solution is not practical. Consequently, the Army must seek alternative venues to meet these requirements while keeping within the financial restraints prescribed. Thus, while the acquisition of an ACV is on the horizon, it behoves the Armoured Corps to preserve its skill and ability to fight on such a vehicle throughout the interim. As the Coyote is the temporary measure to be employed while awaiting the arrival of an ACV, it follows that it be utilised in the same manner as would be expected from an ACV within a sabre squadron. The importance of this choice is critical when one considers that this temporary measure could last for up to ten years while the Corps waits for the ACV to be purchased and delivered.

Since the prospect of a Canadian ACV is paramount to the argument presented here, it is necessary to categorise its qualities and characteristics. An ACV would provide great amounts of flexibility for operations other than war deployments while maintaining fundamental characteristics of armour like firepower, mobility, and protection essential to fighting in a low to high-intensity conflict. While remaining very similar to a MBT in many aspects, an ACV would cost considerably less. This would be a significant issue when considering the financial state of the military at present. Assuming that an ACV were to be purchased within the next ten years to replace the Leopard, current implementation of the Coyote within a sabre squadron context, is the only acceptable use of armoured resources. Such a squadron would resemble a present day tank squadron consisting of four troops with four Coyotes in each. Such employment will provide essential training and maintenance of current skills while ensuring preparedness upon the introduction of the ACV.

Nonetheless, if the purchase of an ACV is not an option then the use of the Coyote as a tank trainer becomes unrealistic and futile. If this were to be the case then the current employment of the Coyote should accurately reflect its characteristics and abilities as an armoured vehicle. As a result, the assumption that an ACV will eventually be implemented within the Armoured Corps is fundamental to employing the Coyote as a tank trainer over the transition period.

Regardless, if an ACV is not on the horizon and the Coyote, or an equivalent, were to replace Canada's ability to field an armoured force of any substance, ie. capable of destroying a belligerent tank, the effect on doctrine throughout the Army would be enormous.

Regardless, if an ACV is not on the horizon and the Coyote, or an equivalent, were to replace Canada's ability to field an armoured force of any substance, ie. capable of destroying a belligerent tank, the effect on doctrine throughout the Army would be enormous. Current Canadian Army doctrine is based largely upon a combined arms concept of operation. Within this framework, units are organised into combat teams and battle groups composed of all elements and operate as a team, relying on the strong characteristics of each arm to enhance the success of the group on the battlefield. If one component of this is extracted, the entire organisation suffers accordingly. The role of armour within this concept of operations is paramount to its success, as the direct fire capability which armour brings to the battlefield is indispensable and irreplaceable. This direct fire role does not fall within the capabilities of the Coyote thus making it unable to perform the role of armour in war. Considering these factors, the ACV emerges as not only the future of the Armoured Corps but also as an integral component of future Army doctrine. Once the Armour Corps ceases to bring to the table a direct fire weapons which can defeat a tank, we will become irrelevant and the Canadian Army will gradually become a Defence Force or worst a Constabulary Force unable to operate in a combined arms environment. Our inter operability with our major NATO Allies will disappear. The Infantry Corps recognises this in its draft LAV III tactics paper. LAV III can not operate on the modern Battlefield without the support of a direct fire weapon system that can defeat a tank.

Again, with the ACV on the horizon, present implementation of the Coyote should occur within a sabre squadron. In comparison to the Cougar, the Coyote will provide greater similarity to a tank in terms of ability to perform as a tank trainer. Highly technological equipment such as GPS, TI, and a stabilisation system are aspects of the Coyote that make it a superior tank trainer. Crews and leadership will remain current on tank tactics and be prepared to deploy with relative ease in a tank or an ACV. Additionally, the Coyote could still be employed in tasks such as peacekeeping without difficulty.

In summary, it is prudent that the Coyote be deemed a temporary measure in anticipation of an ACV and that its employment during the interim be within a sabre squadron organisation. Similar instances have occurred in the past and have left the Armoured Corps better prepared when new equipment was purchased. As well, the ACV is crucial to the survival of the Corps, as we know it and, within a wider context, to the maintenance of current Army warfighting doctrine. Knowing this, the present use of the Coyote must be such that skills and tactical awareness remain at a high level of expertise enabling a quick and painless transition to a more appropriate vehicle. Further, the Coyote presents itself as an excellent vehicle to be employed in a tank trainer role as its technologically advanced equipment and gunnery system are modern and thus easily convertible to a tank or ACV. Finally, as with all types of planning that occurs within an organisation, it is imperative that the leadership identify and establish long-term goals and, in doing so, recognise the means by which to achieve them. Employing the Coyote as an interim measure within a sabre squadron is the means, which will best accomplish the long-term goals of the Armoured Corps and the Army.

Defence of an Armoured CP

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The adoption of manoeuvre warfare as doctrine, after nearly a decade of debate by the Canadian Army has meant for some, a change in the way the army fights. The Armoured Corps has been the least affected, as many of the manoeuvre tenets reflect traditional armoured fundamentals and consequently support existing armoured SOPs. One issue that remains open to debate, however, is how current doctrine provides for the tactical set-up and operation of the Battle Group (BG) Command Post (CP). Some proponents still espouse the need for tactical and battle procedure CP Hides that provide for a barrier plan constructed with triple strand concertina and low-wire entanglement circling the CP – ala – 1980s Germany training and our beloved Infantry brethren. What this article will illustrate for a new breed of Corps officers is the need for a CP complex that is fast, flexible, quiet and not fixed to the ground.

BACKGROUND

Current SOPs used by the BG HQ of The Royal Canadian Dragoons (RCD) for the defence of its CPs, relies heavily on the uses of natural concealment and sentries. Established deep in woodlines, BG HQ hides use cover and ground contours to prevent easy detection from the prying eyes of the enemy. The depth at which the Operations Officer takes the CP into the woods, is inversely proportional to the level of noise, light and heat signatures. In addition, the cunning set-up of BG HQ sentry positions at key areas of tactical concern around the CP by the Operations Warrant Officer provides the early warning necessary for the CP to react to the oncoming enemy threat. Current armoured doctrine is ambivalent in its detail on the defence of an armoured BG CP.

INFANTRY VS ARMOUR – EMPLOYMENT OF WIRE

The employment of concertina wire by the infantry and not the Armoured Corps reflects the fundamental differences between our two arms. The infantry's traditional role in battle is to hold ground, close with, and destroy the enemy; more times than naught, this is accomplished through attrition. The use of concertina around the infantry's CP assists them in the fulfilment of their role. Securely locked to the ground, the infantry command CP provides the necessary command and control element for all companies within the Battalion. The manpower available within the Infantry Battalion is also conducive to the achievement of their role and is nearly triple in size to the soldiers available in an armoured CP. This manpower provides

the sheer horsepower to ensure that the infantry CP can be set-up and properly defended as their final line of defence.

The role of armour, in contrast, is to defeat the enemy through the aggressive use of firepower and battlefield mobility. Mobility being the key. Unlike the infanteer, the armoured crewman learns how to fight with his vehicle. The need for mobility and manoeuvrability dictates the requirement for two separate command groups (OA and OB). The two CPs increase the survivability and flexibility of RHQ, and with their inherent ability for rapid movement lessens the chances of being detected and destroyed. The placement of concertina wire around the CP complex severely restricts the mobility and reaction time of RHQ – increasing the chances of its destruction. Further, in the event of enemy infiltration around the BG CP complex, the placement of wire would actually aid the enemy in his detection, recognition and destruction of the CP. Most soldiers around the world know that armies only put important things inside wire. **No wire! Obviously it cannot be important.** Thus, the lack of wire, in fact, increases security within the hide by disguising the operating CP.

MANOEUVRE WARFARE

Historically, war fighting in the Canadian Army has tended towards the doctrine of attrition warfare. Canadian Army Doctrine based it tenets on securing and holding ground while the enemy was worn down. As the name implies, manoeuvre warfare places less emphasis on the securing of ground and more on the manoeuvre aspects of war. A concept, which readily falls under traditional armoured thinking. As a result, the fundamentals of manoeuvre warfare, as stated in *B-GL-300-01/FP-000 Land Forces Tactical Doctrine and CFP 300-1 Conduct of Land Operations*, seem to support current RCD SOPs with respect to the operation and set-up of BG CPs. In particular, this is seen in the principles of mission type orders, agility and acting boldly and decisively.

Mission type orders. Mission orders allow Commanders at all levels, to react to situations and to capitalise on them as they arise. The Commander directs and controls his operation through a clear dictation of his intent, rather than a detailed list of tasks and control measures. This fundamental difference means that the CP is not a vital during the moment to moment fighting of the battle as sub-unit Commanders use their initiative combined with a CO who is forward in a functioning TAC, rather than dogmatically seeking advice from higher. What this allows for is the quick movement of CPs in the event of enemy attack as they no longer slavishly maintain absolute control over BG nets. Further, the introduction of Tactical Battle Command System (TBCS) or 'digitisation' allows the CP to maintain situationally aware despite being on the move.

Current armoured doctrine is ambivalent in its detail on the defence of an armoured BG CP.

Agility – acting quicker than the enemy and exploiting tactical opportunities. The emplacement of wire around an armoured CP would violate this fundamental. Quickness is the key to agility and the use of wire hampers a CP's quickness. RHQ must be able to instantaneously react to an enemy's attack and it cannot do so if it has to move and gather wire to extract its CPs. If the BG is to be able to respond with sufficient speed to exploit the change of direction in a battle and get inside the enemy's decision cycle, its BG HQ must be able to do so as well.

Acting boldly and decisively. Commanders at all levels must be able to deal with uncertainty and act with audacity, initiative and inventiveness in order to seize fleeting opportunities within their higher Commander's intent. Risk is calculated, understood and accepted to allow for the exploitation of situations during the battle. By not emplacing wire, the BG CP is provided the ability to react quickly to exploit fleeting opportunities during the course of battle.

CONCLUSION

Current armoured SOPs concerning the use/non-use of concertina fences around CPs have long reflected the traditional armoured emphasis by the Corps on speed and agility. Further, they reflect the recognition that armoured soldiers are not trained as infantry with respect to the ability to fight in close combat with the enemy or use their CPs as the final line of defence. The use of wire around a BG CP provides the enemy added advantage by providing a victim who is restricted in movement and penned into a convenient, well-defined kill-zone.

Manoeuvre warfare doctrine also supports the limits on the use of wire. Commanders must think and react faster than their foes in order to mass friendly strengths against the enemy weaknesses and vulnerabilities. A BG HQ that is not tied to the ground allows him to do this.

Assault Troop in the Medium Reconnaissance Squadron

Captain Dale Cheeseman graduated from the Royal Military College of Canada in 1996 with a degree in Chemical and Materials Engineering. A member of the Lord Strathcona's Horse (Royal Canadians), he has recently returned from Kosovo where he was the Assault Troop Leader during Operation KINETIC ROTO 0. Captain Cheeseman is currently employed as the Regimental Recce Troop Leader.

INTRODUCTION

An assault troop is designed to support and augment the full spectrum of medium reconnaissance operations. The previous reconnaissance generation, equipped with the Lynx and M113, meant that assault troop stealth capabilities were an excellent long-range reconnaissance tool to augment reconnaissance troops' surveillance capabilities. Assault troop's combined infantry and pioneer training gave squadron commanders the ability to deal with obstacles on the move and create them for defensive purposes when required. Fighting for information, although not the optimal method, was a more viable one in extreme circumstances due to assault troop's combat capabilities. Furthermore, since its surveillance capabilities were equal to those of reconnaissance troops at the time, an assault troop could easily serve as a fourth reconnaissance troop for most if not all reconnaissance tasks. In summary, its versatility gave the reconnaissance squadron enhanced flexibility as well as improved survivability.

With the advent of the Coyote and its recent inclusion into medium reconnaissance squadrons, the role of assault troop must be reassessed. The Coyote's third generation surveillance suite permits observation of targets to a distance of 24 kilometres. In addition, the Coyote 25mm Bushmaster main armament has given it a defensive capability never before seen on a Canadian reconnaissance vehicle. In recent medium reconnaissance squadron doctrinal discussions, the advent of the Coyote has led some to believe that its capabilities could render assault troops obsolete. However, the characteristics of a reconnaissance squadron as outlined in reference A (see end of article for list of references), include mobility, flexibility, and logistic economy. Also, the limitations outlined in reference A include lack of firepower, vulnerability in close quarter fighting, endurance, and reserve. The flexibility of the medium reconnaissance squadron is due in large part to the multi-role capability of its assault troop. Furthermore the squadron's firepower capabilities are enhanced, its vulnerability diminished, and an effective reserve is provided, all by the assault troop.

AIM

The aim of this paper is to demonstrate that despite the potential of the Coyote, an assault troop will continue to be an invaluable asset to the medium reconnaissance squadron.

DISCUSSION

This discussion will be based on references A and B with reference C providing examples of Assault Troop Reconnaissance Squadron Task Force Kosovo operations conducted thus far on Operation KINETIC, Rotation 0. Further examples will be provided from extensive work up training scenarios conducted prior to deployment to Kosovo. Some clarifications must be made regarding references A and B. In this paper the term assault troop will be used in place of support troop, which is used in references A and B to refer to the same organisation. Also, the terms reconnaissance troop and scout troop will be used interchangeably as both refer to the same organisation.

The organisation of Assault Troop has been modified for OP KINETIC ROTO 0 from what is shown in Figure 1-2 of reference B. Assault Troop is currently configured with four ten-man sections and a HQ section consisting of seven personnel for a total strength of 47 all ranks. It manoeuvres with the Bison 8 x 8 wheeled armoured personnel carrier in place of the M113. It is equipped with a large selection of weapons and equipment allowing it to fulfil a number of roles. Its arsenal consists of the C6 MMG, M203 Grenade Launcher, 60 mm Mortar, M-72 SRAAW-L, 84 mm Carl Gustav MRAAW-M, and the Eryx anti-tank missile system with thermal imager. For pioneering equipment it has the HP-1 hydraulic pioneering kit, chainsaws, and augers. Also, each section is equipped with mine detection equipment and Claymore command detonated mines.

Because of the Coyote's surveillance suite, Assault Troop no longer carries ground surveillance radars. However it is equipped with an assortment of other surveillance and night vision devices which allow the Troop to conduct surveillance tasks in all weather conditions. These include the NODLR, the Eryx thermal imager, image intensifying night vision goggles, and hand held digital cameras. The Troop's large size, vast arsenal and diversified training all combine to make it a very flexible and robust organisation. When employed at full capacity, it greatly improves the Reconnaissance Squadron's flexibility and capabilities in all phases of war and OOTW.

Reconnaissance Operations

The assault troop is an excellent support element to scout troops when they are conducting zone, area, point, and route reconnaissance tasks. A single section attached to a scout troop gives it a security capability that can greatly improve its effectiveness while conducting these tasks. An assault troop section can readily clear various obstacles not easily tackled by a scout troop. Bridges defiles, roadblocks, and even small minefields are all within an assault troop's realm of capabilities. Task organisation of a section with a Coyote troop has been practised in the past during 1 CMBG war operations training. During Exercise PRAIRIE RAM 98 such task organisation proved very effective and made reconnaissance operations more swift and efficient. During a Brigade advance, Reconnaissance Squadron encountered a minefield that spanned the entire Brigade axis of advance. Assault troop was used to breach and secure three lanes through the obstacle, permitting the Squadron to continue its advance with minimal delay before the Troop handed over the lanes to respective Battle Group close reconnaissance assets.

As well as supporting scout troops, the assault troop's five-car configuration allows it to be employed as a fourth reconnaissance troop by the squadron commander. This allows for more ground to be covered in shorter time when the situation dictates that such a tactic be employed. This occurred during Exercise ROVING CANINE in spring 1998. Assault Troop conducted detailed route and point reconnaissance tasks behind the scout troops as they conducted a squadron zone reconnaissance. This procedure permitted the scout troops to concentrate on developing the ground and enemy picture. The end result was that the Squadron was able to advance at a greater speed without sacrificing detail in its coverage.

Surveillance Operations

An assault troop provides many capabilities to the medium reconnaissance squadron during surveillance operations, including the provision of local security to Coyote patrols operating an observation post. For surveillance operations over an extended period of time, fatigue becomes a major factor for Coyote crews due to limited manpower. Providing their own local security as well as maintaining constant surveillance becomes taxing and unsustainable for long periods in high threat scenarios. The presence of Assault Troop assists in alleviating this problem. Assault Troop's ability to conduct foot patrols allows it to complement the Squadron surveillance and target acquisition (STA) plan by providing a dismounted stealth presence. This ensures that dead ground not seen by the Coyote patrols is observed. In addition, it allows for contacts to be verified when optical and electronic surveillance means cannot confirm their identity within or in the vicinity of NAIs/TAIs. These capabilities were effectively practised during Exercise STEALTHY CANINE 98. Assault Troop foot patrols were deployed to cover key areas in a non-linear Reconnaissance Squadron screen. The foot patrols could identify and confirm contacts picked up by the Coyotes. This redundancy was necessary in inclement weather conditions, such as during dense fog, when the Coyote optical surveillance systems could not observe their radar contacts. Patrols were also deployed into dead ground along a river valley to observe NAIs/TAIs (key river crossings) that could not be adequately seen by Coyote OPs. In effect, Assault Troop's presence greatly increased the Squadron's surveillance capability.

Assault Troop could also be deployed as a fourth scout troop. In the case of a screen it could then increase the amount of ground observed by the Squadron. This task would take advantage of the Troop's light capabilities to move in close to the target area, for example, to execute a task within or around a built up area. This will be discussed further during OOTW.

Secondary Operations

An assault troop is capable of performing all rear area security tasks. Due to its dismounted fighting capability, it can deal with certain threats that the scout troops cannot. For example, threats in the form of dismounted enemy incursions can only be effectively dealt with by dismounted personnel, especially in a built up environment. Having an assault troop trained in dismounted fighting allows the medium reconnaissance squadron commander to deal with these types of problems without the requirement for outside assistance. This also allows him the flexibility to save his scout troops for other tasks such as airborne/airmobile surveillance, for which the Coyote is well suited. Other tasks including traffic control, escorts, and radiological/chemical surveys can also be conducted by assault troop.

Operations Other Than War

The deployment of Reconnaissance Squadron LdSH(RC) to Kosovo, OPCON to MNB(C), as part of Operation KINETIC Rotation 0 is the first time that a Coyote equipped medium reconnaissance squadron has deployed on operations. Assault Troop has filled a variety of roles and has gained valuable first hand experience conducting tasks in an operational theatre. Tasks conducted by Assault Troop during Operation KINETIC include:

a. vital point security;

b. OP security for a Coyote patrol;

c. OPs (mounted/dismounted);

d. route reconnaissance;

e. urban patrolling/maintenance of law and order;

f. rural patrolling;

g. intimate security for VIP escort;

h. vehicle check points/traffic control; and

i. responsibility for an AO.

Due to the Coyote's vulnerability while the surveillance suite is deployed, Assault Troop has played a pivotal role in protecting these valuable assets on numerous occasions throughout this deployment. During the initial days of the deployment into Kosovo, the Serbian Army (VJ) was in the midst of withdrawing. Tensions were

The Troop's ability to adapt and act in any number of situations makes it an invaluable asset. The medium reconnaissance squadron requires an assault troop to give it the added robustness, flexibility, and versatility it needs to be successful in many of its tasks.

high between the VJ and Kosovo Liberation Army (UCK) forces. There were often exchanges of fire between the factions as the VJ withdrew, which made for a tense environment and required a heightened state of security by all KFOR forces. As a result, Assault Troop was employed extensively in a Force Protection role. At one point, Assault Troop was simultaneously securing two KFOR RRB sites and two Coyote OPs, a demonstration of its versatility.

Assault Troop's patrolling capabilities have been vital in assisting Reconnaissance Squadron accomplish its tasks, amply demonstrated in operations carried out in Glogovac and Pristina. Glogovac is a town situated approximately 5 kilometres north of Donja Koretica. Assault Troop moved into Glogovac along with a scout troop in order to establish KFOR presence in the town as well as establish security in the area. The joint task was executed very effectively. The Coyote troop, using its surveillance assets, set up observation posts around the town perimeter looking outward to outlying areas. Assault Troop patrolled the inner town and made an initial assessment of UCK presence, activity, and sentiment toward KFOR.

Assault Troop's structure allowed it to surge nine four-man foot patrols into the town, which proved to be an adequate force to conduct the task. This was vital since the same task would have taken two other scout troops to conduct in the absence of Assault Troop, thus using the remaining Coyote assets in the Squadron for non-surveillance related tasks. The remaining two scout troops in the Squadron were already employed to observe sensitive areas west and north west of Pristina where VJ and UCK forces were in close proximity.

Reconnaissance Squadron was called into Pristina on the evening of 24 June 1999 to assist 1 Parachute Regiment Battle Group in quelling an outbreak of violence, most of which consisted of widespread looting. A scout troop was deployed to provide overwatch of key areas around the downtown core. Assault Troop deployed on foot to provide law and order in the downtown area. Once again, a surge of nine four-man foot patrols conducted patrolling on a 24-hour basis. On the initial evening, Assault Troop detained approximately thirty criminals and dealt with numerous tense situations. Over the course of the following two weeks Assault Troop remained in the city and was highly effective in reducing crime in the area. Situations ranging from looting to illegal evictions were dealt with head on due to Assault Troop's robust structure. Establishing law and order was achieved by maintaining a constant presence through patrolling and additionally by providing traffic control and establishing vehicle checkpoints. Some low-level searches were also conducted, as was vital point security. For example, when KFOR was notified of a bomb threat, Assault Troop was tasked to cordon off a busy area in the heart of the downtown during a citywide celebration. This allowed EOD teams to conduct a search for the bomb. Within minutes, the main downtown block was evacuated of its approximate five thousand revellers and all traffic was stopped from going into the area. Assault Troop was able to quickly establish positive control over the area to allow EOD teams to carry out their task unhindered.

The Pristina operation allowed Assault Troop to demonstrate its effectiveness in handling a wide range of tasks in an urban environment. It also demonstrated that it is capable of sustaining a heavy burden of tasks for extended periods of time. Assault Troop's ability to act independently for almost two weeks allowed the remainder of the Squadron to continue to conduct key surveillance tasks throughout the Brigade AO at a critical time in the stabilisation of Kosovo. Without Assault Troop, Reconnaissance Squadron could not have played the vital role that it did in Pristina.

Another task given to Reconnaissance Squadron by MNB(C) was the conduct of border surveillance of key areas along the Kosovo/Serbia

Administrative Boundary looking into the Ground Safety Zone in the event of a hostile VJ incursion into Kosovo. Due to the mountainous terrain in the border region, the Coyote was unable to reach several overwatch locations. However, Assault Troop was able to deploy by foot and helicopter to establish dismounted OPs in the mountainous northern and eastern sectors of Kosovo.

CONCLUSION

Assault troops can not only provide critical support to scout troops in all operations but they can also perform the tasks of a scout troop when required. During surveillance operations the Coyote's electro-optical strength is also the source of one of its most critical weaknesses. Assault Troop assets become essential in not only providing added protection but also in allowing the Coyote crew to remain effective for extended periods of time. The current operational deployment in Kosovo has allowed Assault Troop to showcase its capabilities.

The Troop's ability to adapt and act in any number of situations makes it an invaluable asset. The medium reconnaissance squadron requires an assault troop to give it the added robustness, flexibility, and versatility it needs to be successful in many of its tasks. Assault Troop's ability to perform all scout troop tasks also makes it a strong reserve for the Squadron when required.

RECOMMENDATIONS

It has been demonstrated that an assault troop is a necessary element of a medium reconnaissance squadron. However, as with any organisation, there is still room to diversify and improve its abilities. The assault troop's strength lies in its extensive operational capabilities. Retaining these capabilities is not a simple task. We

must not lose sight of the training requirements necessary to sustain the assault troop's versatility. Training must therefore continue to be diverse in order to cover all requirements.

Assault troop's anti-armour capability currently lies inside the 700 metre range. This is insufficient in dealing with modern enemy reconnaissance elements equipped with the AT-5 Spandrel Missile. This weapon has a maximum effective range of 5000 metres. The addition of a medium range anti-armour weapon such as the MILAN or JAVELIN missile systems into the assault troop's arsenal would allow the troop to engage and destroy enemy counter reconnaissance patrols and therefore provide further protection to scout troops in contact. During screen operations and flank surveillance, assault troop could offer the anti-armour protection otherwise obtainable only through non-integral assets such as tanks or other direct fire anti-armour resources.

The assault troop is also limited in its surveillance capabilities. Being equipped with medium or long-range surveillance equipment would allow the troop to be more effective when conducting certain surveillance tasks. The NODLR currently employed by assault troop is effective out to a maximum range of two kilometres in ideal conditions. It is recommended that assault troops be equipped with surveillance equipment such as MSTAR, and high magnification video cameras (ideally with thermal capability). These additions would allow the assault troop to effectively detect targets at 24 kilometres and identify them at five kilometres. This gives the squadron commander a fourth reconnaissance troop with advanced STA capabilities. [redacted]

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The Leopard Tank in Kosovo –

Warfighter, Peacemaker and Armoured Combat Vehicle

Captain Don Senft is currently the Second in Command, C Squadron the Lord Strathcona's Horse (Royal Canadians). He has recently returned from Kosovo where he was the Senior Liaison Officer and Armoured Advisor to the 1st Batallion, Princess Patricia's Canadian Light Infantry Battle Group.

INTRODUCTION

1999 has been an important year for the future of the Royal Canadian Armoured Corps (RCAC). A number of key meetings and planning sessions have been held with the intent of mapping out the future for the Canadian Army. At the crux of many of these sessions has been the debate surrounding the future vehicle of the RCAC, the much-touted Armoured Combat Vehicle (ACV). There has been a great deal of discussion regarding not only the role of this vehicle, but the type of vehicle as well. There are clearly two sides to the ACV coin, and the arguments for both are well documented and have been the subject of many studies, debates and even simulations. The key facets of the debate have revolved around the capabilities of the ACV in two key arena's of conflict, the role of general purpose combat, and en vogue of late, the role of the vehicle in peace support operations. Proponents of the wheeled 105 ACV have backed their arguments by showcasing the wheeled ACV's capability in peace support operations, which have clearly become the focus of armed forces worldwide. The argument was presented that a wheeled ACV was ideal for such an operation, and with its firepower and flexibility, it would also be capable of dealing with threats on the more conventional battlefield even with its reduced mobility and protection, despite how unlikely this scenario may be. They have argued that the tank is a dinosaur designed for the large scale battlefields of the Fulda Gap, and that it in fact has no place in peace support operations due to its size and weight. Apparently the tank is not flexible enough to satisfy the requirements of being able to operate effectively in both time of war, and in peace support. However, there had never been a true test of the theories and studies, and no real validation of the simulations that were conducted. That is until now. I have recently had the privilege of serving as the armoured advisor for the 1 PPCLI Battle Group in Kosovo, overseeing the first employment of Leopard tanks in the peacemaking role. I can now positively refute many of the arguments that have been presented in support of a wheeled ACV based not only on first hand operational experience with the Leopard in this new arena of operations, but I can also comment on the effectiveness of the wheeled ACV in that same forum of operations, as was represented by the Italian Centauro in Kosovo. I will highlight those attributes of the Leopard that so ideally suited it to its new role, while at the same time drawing on my experience with the Italians and their employment of the Centauro. My aim will be to show clearly that our proven warfighter, the venerable Leopard, is a superb peacekeeper, and is in fact the Corp's ACV of the future.

In outlining the capabilities in this new spectrum of low intensity conflict, I will focus on the characteristics of armour in order to highlight how the vehicle's mobility, protection, flexibility and firepower resulted in its unrivalled success in support of Operation KINETIC. By demonstrating how the Leopard excelled in each of these aspects it will become readily apparent that the Leopard tank is completely capable of meeting and

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exceeding all task standards set for operations in support of peacekeeping.

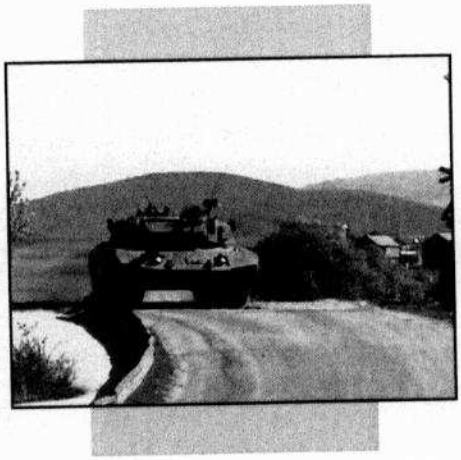
BACKGROUND

On arrival in theatre, there was a very large multinational tank force represented across KFOR. This large tank force was deployed into Kosovo to counter the armoured threat posed by the Serbian (VJ) Army equipped with the M-84 and T-55 tank. The NATO tanks represented included the German Leopard 2A5, the British Challenger 1, the Danish Leopard 1A4, the Canadian Leopard C1, the Italian Leopard 1A5, the US M1A1 and the French Leclerc. These tanks were present in force as the majority of VJ armour was successful in evading the NATO airstrikes and escaped to Serbia. This left a very large force of enemy armour equipped with a very potent tank sitting along the Serbian/ Kosovo border, able to launch across known ground on very short notice and with very little warning. The large NATO tank force was deployed as a deterrent to any re-introduction of the VJ army led by its strong armoured Brigades. A number of the nations here chose to centralise their armoured assets, and held them as a reserve to be deployed against the VJ threat only when required. Canada, Denmark and Italy chose to deploy their tanks as part of their normal routine in support of their missions, and in doing so, were able to demonstrate the effectiveness of the vehicle in this role, all the while maintaining the necessary deterrence so vital to maintaining stability in the region. The Leopards assigned as part of the 1 PPCLI Battle Group were a BG resource that was employed in the same fashion as the other support platoons in the Battalion such as TOW and Recce platoons. Initially they were assigned their own AOR based in the Serbian village of Kuzmin, located within the BG boundaries. At mid tour, as a result of a change to the BG boundaries, they were returned to the BG main camp, but continued to operate in the same fashion as they had when controlling their own AOR. The tanks operated across the BG AOR throughout, controlling their operations through their own CP, which operated as an outstation of the BG main Command Post. The tanks assigned mission was to provide a force projection and force protection capability to the BG. Daily tasks included vehicle patrols, vehicle checkpoints, support to cordon and search operations, defence of the main camp, and planning and support to a myriad of CONPLANs (contingency plans). Through the course of the tour, the tanks compiled nearly 3500km each and proved themselves stalwartly reliable. The tanks performed very well in theatre and several key points were confirmed as a result of their success in this new role which clearly proved the Leopard's suitability as a peacemaker.

MOBILITY

I begin here with the characteristic that set the Leopard apart from its counterparts in theatre. The Leopard tank was able to distinguish itself in several key areas pertaining directly to its role as a peacemaker. Many of the main battle tanks in theatre weighed in at over 80 tons with the addition of add-on armour and ERA. The Challenger was a good example of the heavy armour that was deployed. In its Kosovo configuration, it weighed in at 82 tons, and was nearly 5 feet wider than the Leopard with its add on armour. Main Battle tanks of this size would have been well suited to the open rolling plains of the Podujevo basin in a tank on tank confrontation. Unfortunately, as the mission evolved, many of these large and heavy main battle tanks found it impossible to adapt to the constraints of the peace support mission, and were simply parked and held as a contingency force. The Leopard C1 however, was well suited to both roles, and was certainly capable of performing both very well. With the add-on armour package and our proven and reliable IFCS/105 combination, the Leopard would have easily been able to hold its own had a tank on tank fight been necessary. When the mission focus did change to that of peace support, the Leopard showed it was as suited to this new role as it was to warfighting. The Leopard is a medium tank, and even with the add-on armour, weighed in at only 47 tons. This gave the Leopard access to areas in Kosovo that British, French and German tanks had been unable to access as the

majority of the rudimentary bridges in Kosovo are classed for 50 tons or less. In addition, many of the mountain roads are criss-crossed at regular intervals with concrete culverts, capable of taking the weight of a Leopard, but not that of a heavier tank. This allowed us access to several key areas that required a show of force to aid in pacification, without damaging the routes and making them impassable to the local populace. Secondly, small villages blanket the Kosovo countryside with most roads lined with brick and rock walls making them very narrow. The larger main battle tanks that were deployed either avoided these areas altogether, or forced their way through resulting in serious damage to the local populace's homes. The Leopard was able to access these areas without difficulty, giving it a much larger patrol area than the other tanks, thereby allowing it to participate as the inner or outer cordon in many of the operations that were conducted in theatre. In proving many of these secondary routes as patrol routes, the Leopard's ability to pivot turn and withdraw out of tight situations allowed it to extract itself from areas without having to reverse long distances, or make difficult multi point turns. In addition, due to the size of the Canadian AOR, nearly 1000 square kilometres, the ability of the Leopard to use main routes without interrupting traffic flow allowed it to respond quickly anywhere within the AOR. The larger main battle tanks proved a severe disruption to these key routes when they were on the move, affecting not only local traffic, but seriously impeding the vital flow of KFOR supply convoys that also relied on these routes. Finally, as the weather worsened here in Kosovo with the onset of the rainy season, many of the roads became completely impassable and dangerous for wheeled vehicles.



Many of the key patrol routes leading to isolated mountain villages became the sole responsibility of the tanks or other tracked vehicles belonging to the Battle Group. We did not encounter any conditions that the tank wasn't able to overcome and power through.

In reviewing the Italians experience with the Centauro during this same period of operations, several key points arose. The Italian commander highlighted the fact that once the weather made the roads slick, his vehicles became ineffective as the sheer weight of the vehicle and the limited traction afforded by the eight wheels cut his area of influence by nearly 60%. As well, he was not satisfied with the vehicle's large turning radius, which made it very difficult to extract itself from the narrow streets and mountain roads so prevalent in the Italian area around the city of Pec. The vehicle did well during the summer months, but as the onset of winter began to influence operations, the Italians handed over many of their Centauro's routes and areas of responsibility to their Leopard 1A5's. One other point that warrants mention here is the argument that the wheeled ACV would be a more rapidly deployable vehicle than the Leopard, with a far greater strategic mobility. When examining the Centauro as deployed in theatre with its level 3 add on armour, its combat weight was just over 32 tons. This results in the requirement to use a large aircraft such as the C-5 or C-17 to deploy the vehicle, as is the case with the Leopard. In this case at least, the Centauro holds no strategic lift advantage over the Leopard. Clearly when examining the mobility requirements presented in Kosovo, the Leopard reigns supreme.

PROTECTION

Of all the vehicles deployed as part of the 1 PPCLI BG, no other offered the level of protection against the array of threats here that was afforded by the Leopard. With the add on armour package, the Leopard as deployed was set to cover the full spectrum of available anti-tank weapons. The RPG series of weapons is a common sight when dealing with the former warring factions here, as well as several models and adaptations of the old "bazooka". The VJ army is equipped with the M84 tank sporting a 125mm canon, and the T55 with its 100mm main gun. The IFV of choice for the VJ forces is the M80 or M80A with its 20mm autocanon. The Leopard is the only vehicle in the BG capable of going toe to toe with any of these threats, and having any chance of surviving a direct hit. The add-on armour has afforded us a solid increase in the level of protection afforded to the crew, with very little extra weight. This has resulted in the Leopard being called upon frequently for operations where the possibility of anti-tank weapons may be present. The add on armour also serves to increase crew confidence in the

survivability of their vehicle, allowing them to fight the vehicle more aggressively, confident in its ability to take a hit and survive. I will point out that even with the addition of the add on armour, the Leopard did not show any adverse signs of wear and tear due to the extra weight. There was in fact a marked reduction in the number of major assemblies that were replaced, due in no small part to the fact that the vehicle was used on a regular basis and did not sit idle for any prolonged period. The Leopard was one of the most reliable vehicles in the Battle Group. Finally, the Leopard afforded the Battle Group the unique capability of using the mine plows and rollers to clear and prove large areas of ground in a very short time. No other Battle Group asset could provide this capability. If the requirement to activate any of the CONPLAN's countering VJ incursion had come to fruition, this capability would have been essential to enable the Battle Group to move into and assume its defensive positions in the heavily mined areas north of Pristina. A wheeled ACV cannot provide this same type of support to the Battle Group. In so far as protection is concerned, the same modular approach to protection that was employed by the Leopard can be afforded to a wheeled ACV, as was demonstrated by the Centauro employed in theatre. Its normal combat weight was 25 tons, however the addition of the level 3 package to the Centauro that afforded it the protection required against the VJ army threat increased its operational weight to nearly 33 tons, and this severely hampered its off road movement capability. In this case, the added protection had a direct and negative impact on the vehicle's mobility. The uparmoured Leopard was highly mobile, and very well protected.

FIREPOWER

There is no doubt whatsoever that the tanks arrayed in theatre were the "hammer" for KFOR. The 105mm and 120mm cannons of the armour were the greatest firepower available to COMKFOR to respond to a high intensity threat, such as a VJ incursion. There was an abysmal lack of indirect fire support available to KFOR, with only 6 self-propelled guns available in the British Brigade area. For this reason the 105mm of the Leopard could also have been employed in the semi-indirect or indirect role. The fact that the Leopard C1 is one of the few tanks remaining in the world still equipped with gun laying instruments (gun clinometer and traverse indicator) allowed us the depth to perform this role as a worst case scenario. We drilled the crews in the two techniques to ensure the tanks were ready if called upon to perform this task. Hand in hand with this is the fact that we still carry both white phosphorus smoke (WP) and high explosive squash head (HESH) ammunition which are well suited to operations in support of the infantry as well as firing indirect and semi-indirect. Most of the other tanks in theatre were only equipped with High Explosive Anti Tank (HEAT) or Sabot ammunition, designed for killing enemy vehicles. This limited their flexibility in being employed in a non-typical role. NATO had limited its indirect fire support assets in favour of relying heavily on NATO airpower to blunt the force of any large-scale Serbian assault. The coaxial and antiaircraft machine guns of the Leopard allowed a scaled response to threats, by providing a suitable option for the commander to return very accurate and effective fire against a lesser threat. With the coax linked into the integrated fire control system (IFCS) of the Leopard, the commander could be certain that only his intended target was neutralised, eliminating collateral damage and casualties. The availability of these two accurate weapons systems on the Leopard made it well suited to this operation, allowing day to day operations to continue with the machine guns as the primary system, with the 105mm sitting at the ready should the overall tactical situation in the theatre worsen. Finally the tanks sighting system was perhaps our Achilles heel here, as the lack of thermal imager left us at a decided disadvantage. The current Night Fire Control System offered us only limited target acquisition and surveillance capabilities at night, somewhat limiting the vehicle's effectiveness to operate on a 24 hour basis. The addition of the thermal sight on the 1A5 turrets will rectify this situation, correcting the one shortfall that was our biggest limitation on this tour. The Centauro is equipped with a robust thermal equipped turret, very similar to that of the Leopard 1A5. In this instance, there was no advantage to the Leopard over the Centauro. Both have very capable weapons systems offering a robust and accurate response to any threat, and once the 1A5 arrives, this response will be available by day or night in a variety of weather conditions.

FLEXIBILITY

Because of the factors I've outlined above, the Leopard proved itself as a "master of all trades". The Leopards in theatre were able to conduct all of the same tasks assigned to the infantry platoons operating with the Battle Group, but from a much more mobile and well-protected platform. The tank conducted route patrolling accruing over 3500km during the tour. In addition, the tanks proved very

adept at the conduct of vehicle check points (VCP's) as it was very quick and simple to have two tanks roll into position on major routes, pivot turn one around, and begin checking vehicles. The tanks made a firm statement and were an intimidating sight commanding respect. The 8 personnel from the two tanks was the minimum number of personnel that could be used to effectively conduct the VCP, any less would not only have been impractical but dangerous. For this reason the current four man crews assigned to the Leopard are the ideal solution. The French with their Leclerc and its autoloader, found themselves short when conducting VCP's with their tanks, and used a B vehicle to shuttle additional personnel to the sight of the checkpoint. Any reduction in the current four man crew would have a significant impact on this flexibility. The tanks were also regularly involved in providing cordons for many of the searches that were conducted in theatre. Once again their dominating presence was put to good use in establishing a solid presence as part of the outer cordons, cutting off all traffic flow into the area of the operation, as well as providing a quick and powerful response capability should the situation have escalated. Finally, the tanks were fully integrated into the CONPLAN's that involved defence of Kosovo against large scale VJ Army invasion. The tanks' mobility and firepower were tied in closely with the limited TOW assets of the Battle Group to inflict as much damage as possible against what would be an armour heavy Serbian force that had the advantage of being familiar with the ground. Most of this fighting would have occurred in the open areas in the northern half of the province on ground that had not been cleared of mines, and as our recces showed, was almost impassable to wheeled vehicles once the rains began to fall. There was no other Battle Group asset capable of traversing this difficult ground quickly, and no other equipment that could use its firepower, mobility and protection to deny this high-speed approach to the enemy. Even the Recce Squadron's Coyote's had difficulty using these routes in this area once the weather made them impassable. There was no wheeled vehicle in the Battle Group that could safely navigate around this terrain in the rainy season. By employing the Leopard as a matter of routine, it was not seen as an escalation of force, and became a familiar sight across the Battle Group AOR conducting a myriad of different tasks. The locals not only supported the tanks' employment in the AOR, but also were extremely receptive and happy to see this symbol of KFOR's strength rumble past their shattered homes on a regular basis. The Leopard excelled at all of the tasks it was assigned in support of this peacemaking operation, and stood ready at a moment's notice to revert to its role as the King of the battlefield.

COST

With the fiscal reality that we all face today, no examination of any purported success can be completed without first examining the bottom line. As I have stated previously, the Leopard here proved to be one of the most reliable vehicles in the BG fleet. The Leopards operated at a 100% vehicle operational readiness state throughout the tour, despite their constant use and the high mileage accumulated in such a short period of time. The Leopard excels under constant use. All the numbers are not in, however a cursory attempt at determining the cost associated with the Leopard's operation here including parts, fuel and spares has the cost sitting at approximately $57 per kilometer. This is by no means a scientific result and is based on the information I have available to me at this time in theatre. This cost compares more than favourably to the forecasted costs for vehicles such as the LAV3 which has been estimated at between $70 and $80 per kilometre. One would surmise that a wheeled 105 ACV based on that same type of chassis would cost even more. The $57 per kilometre that we have seen here in theatre is substantially lower than the $82 per kilometre that is the published figure for the Leopard. I believe this is due to the fact that the vehicles here did not sit idle for any period of time, and the Leopard thrives on constant use. Even with the added burden of the add-on armour, there was no ill effect on the tank, and only two major assemblies required repair. The remainders of the repairs were solely routine replacement of track pads, track, shocks and components of the hydraulic system. The other side of the costing coin is of course the cost of acquisition. I'm led to believe that the Leopard 1A5's that are currently available on the market are selling for around $1 million dollars per copy. The Italians in theatre here have told me their uparmoured Centauro's are selling for nearly 3 times that amount. The math would appear fairly straightforward, in that we can acquire three Leopard 1A5's for the cost of a single variant of a wheeled ACV, and then operate that vehicle for less money on a day to day basis. Not only would we be getting 3 times as many vehicles, but we would receive a tank that can perform almost all of the assigned warfighting and peace support tasks as well, and in several cases

better than any of the wheeled variants. We have proven that here in Kosovo. As for future costs, it will still be much cheaper to upgrade the Leopard 1A5 with what little equipment is lacking, through purchase at a discount rate on the open market, with no R&D or manufacturing costs involved. Find it, buy it, and install it. The Leopard is not only the most cost effective option, it would provide us with a larger, more capable fleet that can operate at cost savings over many of the vehicles currently in operation.

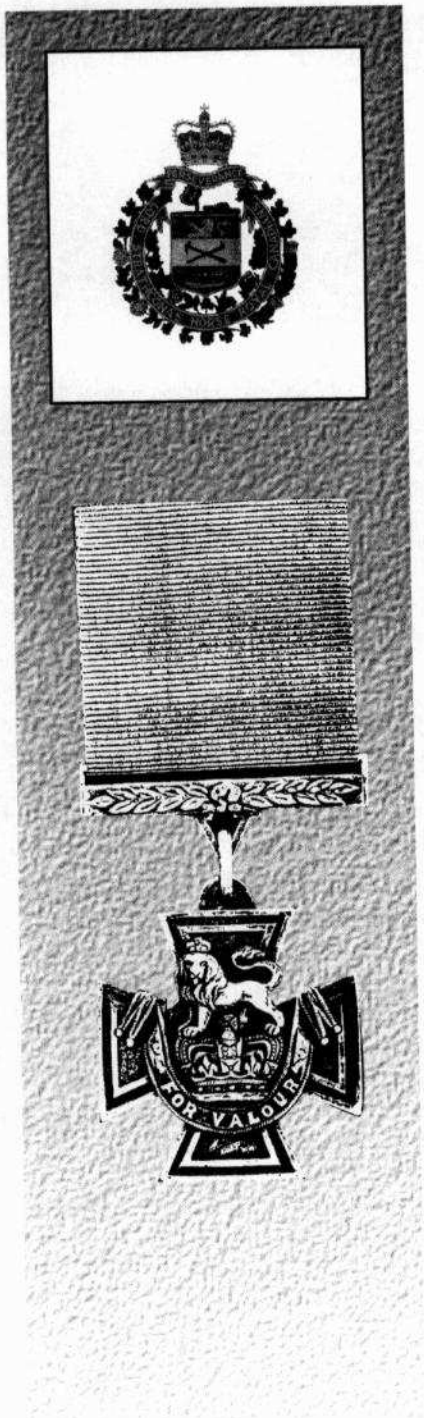
CONCLUSION

By deploying our venerable Leopard into a theatre of operations such as Kosovo we have been given the opportunity to validate much of what has been debated over the past decade. Kosovo was a chance to see if a medium tank such as the Leopard could shed its warfighting skin, and step up to the challenges presented in peace support operations. The wide array of tanks here allowed us to see the full spectrum of armoured employment in support of such operations, as each nation chose to employ its tanks in this new forum in a unique manner. As the Battle Group Armoured Advisor, I was fortunate in having a free reign to employ our Leopards as fully as possible, ensuring they were an integral part of the Battle Group's operating methodology. The Leopard proved beyond any doubt that it was fully capable of completing all of the tasks normally assigned in peace support operations while still maintaining its capability to respond with lightening speed, overwhelming firepower and stalwart protection to any increased threat or large scale incursion. In doing so it demonstrated how ideally suited it was to the conditions and limitations of this mission. I have also been privileged to be witness to the Italians' employment of the Centauro in this same theatre of operations, as they shared a boundary with our Battle Group. The Centauro's inability to operate in certain areas once the conditions became bad and the fact that the Italians used their Leopard 1A5's to fill the void created speaks volumes as to its mobility. Despite add-on armour, the Centauro cannot be as well protected as the Leopard, and had any large scale VJ incursion come to fruition, the Italians were to send their tanks to the fore, holding their Centauro's in reserve. They are just as not as well protected as the tanks. At nearly 33 tons, an up-armoured Centauro is no more air transportable than our Leopard. I understand fully that the Centauro is but one example of many contenders for our ACV project, but my point has been simply that the Leopard arrived in theatre a proven warfighter capable of dealing with the modern battlefield. During the course of its first five months as a peackemaker, the Leopard has refuted many of the arguments made against it, showing clearly that not only can it serve in this role, but in can do it exceedingly well.

Is the Leopard 1A5 or C2 the answer then? Not quite. It will certainly go a long way to ensuring our trusty mounts continue to serve us well into the next century. It will enable us to fight the vehicle 24 hours a day, and on peace support missions, it will give us a much needed night surveillance capability. What we still need is either a larger more powerful gun such as the 120mm, or in its place a high pressure 105mm with improved ammunition. Secondly, total replacement of the hydraulic turret drive system with a more reliable, safer, faster, and less maintenance intensive electric drive system would be beneficial. Finally, the commander must have an independent thermal sight allowing him to seek and acquire targets while the gunner continues his engagement. This hunter killer sight is readily available on the open market, and should be our next upgrade project for the recently acquired 1A5 turrets. These modifications to the 1A5 will provide us a suitable platform to continue operating effectively for at least 15 more years on a vehicle that is a robust and proven warfighter, and now an equally effective and more importantly a proven peacemaker. The Leopard has proven itself on the training battlefields of Canada, and now, has proven itself in the theatre of operations in Kosovo. For the foreseeable future, and until AFV technology proves otherwise, the Leopard is the Canadian Army's ACV.

Corps Victoria Cross Winners:

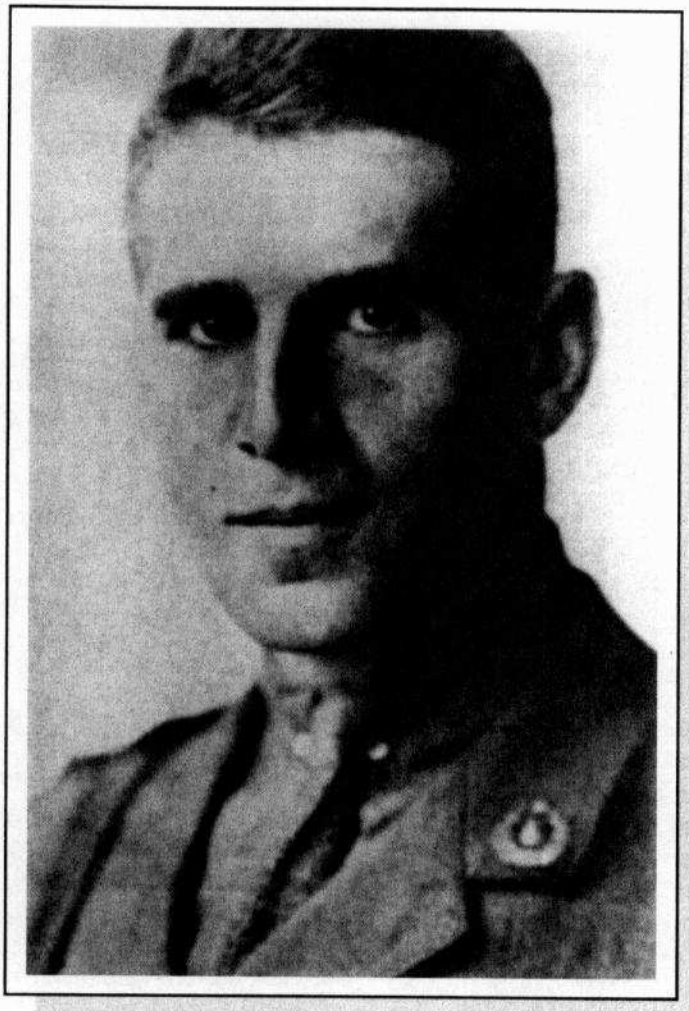
Lieutenant Frederick M.W. Harvey



Frederick Maurice Watson Harvey won the VC at the village of Guyencourt, France on the 27th of March 1917. At the time, Lt Harvey was a troop leader in C Squadron having been posted-into the Regiment in November of 1916. Harvey had been born in Athboy, Ireland on 1 September 1888, and had immigrated to Medicine Hat in 1908. He initially went overseas with the 13th Canadian Mounted Rifles before joining the Regiment. Lt Harvey was to earn the Military Cross at Moreuil Wood and later, the French Croix de Guerre. Following the war, he remained with the permanent force and commanded the Regiment in 1938. Never deploying overseas in World War II, he later rose to the rank of Brigadier-General and was the Alberta District Commander.

Arriving in France on May 4, 1915, the Strathcona's were quickly to lose their horses and take up the much more static role of infantry in the trenches. The Regiment had spent the summer and fall of 1915 fighting dismounted and had "earned their spurs" at Festubert. As time passed however, the trenches on both sides were continually improved to the point where it became obvious that a breakthrough was needed in order to break the deadlock. The first, albeit short, opportunity for a breakthrough arrived in February and March of 1917 with the German retirement to the Hindenburg Line. For the Strathcona's, the first contact with the enemy as mounted troops was to occur on March 26 with the capture of Equancourt. Acting as part of the Canadian Cavalry Brigade, the Strathcona's were initially given the task of reserve, as the Brigade moved forward. On Monday, March 26, 1917, a conference of commanding officers was held. It was here that the Strathcona's were given the task of capturing Equancourt. The following day, the Divisional objectives were identified as the capture of the high ground south of Villers Faucon, the high ground west of Grebaussart and Saulcourt Woods as well as the village of Guyencourt. Once captured, the Regiment was to hold its objectives until replaced.

From 1630 to 1715 hours, the Royal Canadian Horse Artillery opened fire on Guyencourt and Saulcourt. At 1630 hours amidst a blinding snow storm which lasted about 20 minutes, the Strathcona's moved to the attack in open order, "C" Squadron and "A" Squadron leading, with "B" squadron in reserve. The enemy shelled the advancing squadrons until they were close to the village and then opened up with machine guns when the squadrons topped the last rise. About seven horses were hit at this point with one man killed and five wounded. Upon reaching the village, the squadron dismounted and attacked with bayonets fixed. At this time, Lt Harvey, in command of the lead troop, spotted a German trench protected by barbed wire and containing a crewed machine gun. Swinging from the



saddle, Harvey sprinted at the position firing his service revolver as he went. Reaching the triple entanglement, he hurdled the wire, shot the machine-gunner and jumped onto the gun. An interesting footnote provided by Captain SH Williams when speaking of the German gunner tells "we know that his gun jammed and that he died a violent death." After this act of heroism, the remaining opposition in the village rapidly disintegrated. The Regiment held the village until being replaced at 1930 hours.

For his role, Lt Harvey was awarded the Victoria Cross. Of his exploits, the citation reads:

> "At this critical moment, when the enemy showed no intention whatever of retiring and fire was still intense, Lieut. Harvey, who was in command of the leading troop, ran forward well ahead of his men and dashed at the trench still fully manned, jumped the wire, shot the machine-gunner and captured the gun. His most courageous act undoubtedly had a decisive effect on the success of the operation."

Corps ADJT'S Corner:

Is Our Current Reconnaissance Organisation Correct?

Captain Scott Long is the current Corps Adjutant RCAC and, in his spare time, holds the position of Adjutant at the Armour School. He is a member of the Lord Strathcona's Horse (Royal Canadians). At his Regiment, he has previously held the positions of Battle Captain and Second-In-Command of Reconnaissance Squadron. His last Regimental employment was as Second-In-Command, Headquarters Squadron.

"The purpose of reconnaissance is to agitate the enemy and ascertain the pattern of his movement. Determine his dispositions and so ascertain the field of battle. Probe him and learn where his strength is abundant and where deficient."

Sun Zsu

This opinion paper is written to address my growing concerns about the effectiveness of our current brigade reconnaissance squadron on the modern battlefield. The 21st century will present an array of challenges to the Canadian Army. Technological advances in surveillance equipment and firepower have made it increasingly difficult to manoeuvre undetected and survive on the modern battlefield. With the digitisation of equipment, modern forces now have the capability of detecting and striking farther than previously possible. This has caused many of the world's armies to change their approach to war fighting. Consequently, the Canadian Army is in the process of fielding modern equipment and has embraced the doctrine of manoeuvre warfare. As an army it is essential that we not only examine and incorporate the new doctrine, but also that we closely examine our organisations, to ensure we can field balanced forces, capable of performing tasks as set out in our doctrine. This paper will examine the current organisation, role and tasks of the Canadian Brigade Reconnaissance Squadron in a warfighting setting as compared to the tasks that reconnaissance forces must be capable of performing on the modern battlefield.

Assumption. This paper will examine the organisation of the Brigade Reconnaissance Squadron currently fielded in the Armoured Regiments, and not the ORBAT of the 20 CMBG Recce Squadron, which is reflected in the Canadian Land Force Command and Staff College Staff Officer's Handbook.

Assumption. The current organisation of a Brigade Reconnaissance Squadron, which will be examined, is common to all three brigades.

The aim of this paper is to examine the present organisation of a Brigade Reconnaissance Squadron and examine the effectiveness of this organisation given the doctrine of manoeuvre warfare. Specifically, is the squadron as it is currently organised and equipped capable of accomplishing the possible tasks it will encounter on the modern battlefield?

ROLE OF 21ST CENTURY RECONNAISSANCE

Reconnaissance as a combat multiplier is a fundamental tenet of manoeuvre warfare as the information gathered by reconnaissance forces significantly increases the commander's situational awareness and his ability to shape the battlefield. All forces of the 21st century must be capable of performing intelligence, surveillance, target acquisition and reconnaissance (ISTAR) tasks to one degree or another. The modern battlefield will develop unevenly with no fixed fronts. Consequently, friendly and enemy forces will constantly be non-linear and situations will develop and change quickly. In this environment the importance of reconnaissance in manoeuvre warfare cannot be over-stated. Improvements in the field of information technology enable reconnaissance forces to gather large amounts of valuable information on the "deep battle space", and make plans well in advance. As the

tempo of battle increases significantly, real-time reliable intelligence becomes vital to timely decisions making. To ensure initiative is maintained reconnaissance forces must be aggressive, in that they have offensive capability, capable of operating independently along broad frontages to find the enemy, and determine his surfaces and gaps. If the situation allows, and it is in accordance with the higher commander's intent, reconnaissance forces can be expected to observe and fix enemy positions or conduct counter-reconnaissance tasks to deny information to the enemy. Once gaps have been identified reconnaissance forces must be capable of pulling our forces through these gaps in order to continue the advance or to exploit the tactical situation.

PRESENT RECONNAISSANCE ORGANISATION

In accordance with Reference B (see end notes for a list of refs), the role of the current armoured reconnaissance squadron is to gather accurate tactical information on the enemy and the ground in all phases of war and pass it back quickly to higher. The organisation of the Canadian Reconnaissance Squadron is largely unchanged since the 1970s. True the equipment used has changed, for example the introduction of the Light Armoured Vehicle (LAV) Coyote, however the basic organisation remains the same. As well, we are currently in the position of developing doctrine, which in my opinion is based entirely on the introduction and employment of the Coyote, and not on the realities of the modern battlefield. Currently, the brigade reconnaissance squadron is organised primarily for the task of information collection using stealth, with a limited capability for counter-reconnaissance tasks. In my opinion, the squadron is not capable of conducting the "aggressive" reconnaissance required for in manoeuvre doctrine; ie they do not have the capability to fight for information. Nor does the squadron contain balanced forces, capable of operating independently along wide frontages in sustained operations. Realistically, the squadron is equipped to fix small forces up to platoon size, but only for a limited period and only if the enemy does not have tanks in location. The composition of the current brigade reconnaissance squadron is as follows:

a. The squadron headquarters of two Bison command posts, a radio rebroadcast (RRB) vehicle, the OC's Coyote command vehicle and the LO's Bison.

b. Three reconnaissance troops consisting of five Coyotes per troop. Each Coyote troop operates with two patrols composed of two vehicles, a mast and remote version, and a command vehicle for the troop leader.

c. A support troop of five Bison vehicles, which provide integral assets for limited security, reconnaissance patrols and mobility/counter-mobility tasks.

d. An Administration troop capable of providing limited first line combat service support; repair and recovery, supply, medical, petroleum, oil, lubricants (POL), ammunition and transport.

FUTURE EMPLOYMENT

A Canadian Mechanised Brigade will operate as part of a Joint Task Force, most likely within a coalition corps or division context. It will not, and cannot, be expected to fight a deep battle beyond its capability. This will be done at higher levels. For example, an American corps will have an Armoured Cavalry Regiment that will, in conjunction with other corps assets, fight the corps deep battle out to approximately 200 to 300 kilometres. I feel the brigade will fight it's own version of the deep battle, but given the resources it will be done at closer ranges, approximately 20 to 30 kilometres. In keeping with the doctrine of manoeuvre warfare the majority of operations will be offensive in nature, thus requiring aggressive offensive and/or defensive action. The following proposed characteristics of modern reconnaissance forces have been garnered from current American, British and Canadian references. On the modern battlefield these characteristics are assessed as essential for reconnaissance to be successful. They are provided as criteria to compare the existing organisation of the Canadian brigade reconnaissance squadron to what is ultimately required:

a. Survivability;

b. Mobility;

c. Sustainability; and

d. Information Operations.

SURVIVABILITY

The first and most important characteristic of reconnaissance is survivability. Reconnaissance forces must be able to survive in order to accomplish their missions. The key to survivability in the brigade close battle is protection and combat power, as opposed to stealth, which is more suited to the deep battle. The technological advancements in night observation, remotely piloted vehicles and electronic detection sensors have made stealth on the modern battlefield, while

still possible to some degree, increasingly difficult. The Coyote vehicle is lightly armoured and consequently, the Canadian reconnaissance squadron must rely solely on stealth to carry out its missions. The two vehicle patrols work together, and depending upon the terrain, either the remote or mast surveillance system is used. This provides a work force of eight soldiers to run the system and provide close security. The sophisticated radar employed by the Coyote is the low probability intercept radar, designed to overcome jamming by frequency hopping. However, the radar does give off a significant electronic signature that can be detected. Equipped with advanced surveillance systems that require approximately 20 minutes to complete set-up and tear down for the mast and 25 minutes for the remote (timings are from tests done by a well trained crew), crews are vulnerable throughout this process to artillery fire and dismounted forces. The vehicle is mounted with a 25-mm cannon and add-on armour for limited counter-reconnaissance, but primarily they are for self-defence. This provides the crew the capability to destroy BMP/BTR type vehicles and Hind helicopters. It does not provide the crew with the capability to aggressively find the enemy, fight for information or adequately fix forces, which are essential tenets of manoeuvre warfare. As well, the armament does not provide a sufficient advantage to the crew when stripping enemy recce. Ultimately, the Coyotes will be attrited conducting this task. In my opinion this is not a suitable task for one of the best surveillance platforms available to the commander. In addition, the squadron does not have any integral infantry to support it in operations. While there is an argument for keeping the force as small as possible to avoid detection, the presence of infantry would provide protection to the Coyotes, and provide a more balanced force. It would enable the crews to concentrate on conducting surveillance operations, without devoting scarce manpower to security tasks for their observation post (OP), tasks they currently have great difficulty accomplishing with eight soldiers.

MOBILITY

Reconnaissance forces must be well balanced and extremely versatile in order to accomplish their mission. The modern battlefield has expanded as technology now enables us to detect, identify and destroy the enemy at much greater distances. Reconnaissance forces must be capable of operating over large frontages and depths, and reacting to ever changing situations. Canadian doctrine currently defines the battle space for a brigade as being 20 kilometres forward of the FEBA and the area of interest as being 70 kilometres forward of the FEBA. The Area of Operations (AOR) for a brigade reconnaissance squadron has grown significantly in size. Consequently, the squadron must have excellent operational mobility and tactical agility to cover the AOR, provide a screen for friendly forces, and locate the gaps and surfaces in the enemy. The modern surveillance equipment in the Coyote enables the vehicle to detect at long ranges. However, that is only half the battle. Reconnaissance forces must also maintain contact with the enemy. The Coyote has several restrictions on its mobility and tactical employment. In ideal conditions the vehicle has demonstrated adequate mobility. Introduce snow, swampy areas and slick route conditions to the equation and vehicle mobility is degraded. In snow, the mobility of the vehicle is severely limited. The use of chains on the wheels does little to solve this and the vehicle is often stuck. This limits the vehicle largely to routes. Obviously, this is not the preferred option for a stealth force. Further, the Coyote does not have an amphibious capability. This was a conscious decision based on financial restraint and not the stated requirements of the corps. However, the fact remains that we are using a vehicle for reconnaissance that cannot cross water obstacles without a fording site.

SUSTAINABILITY

This characteristic is, and will remain, a key issue. Reconnaissance forces can expect to be in operations for extended periods of time. The concept of resupply well forward of friendly lines and perhaps behind enemy lines has always been of great concern. As previously stated, the reconnaissance squadron is organised for, and relies primarily upon stealth operations. The administration troop of the squadron is the pipeline for combat supplies and it is essential in the replenishment of the squadron. The squadron is capable of operating for 72 hours. The A echelon vehicles of the squadron are equipped with POL, ammunition and rations for one day on the battlefield. The administration troop is normally divided into A1 and A2 echelons. This organisation of B vehicles has a self-defence capability limited to small arms and some handheld anti-tank weapons. It is a very vulnerable target on the battlefield. The administration troop conducts the majority of its resupply and movement at night. However, this is no longer viable as technology in the field of night observation enables forces to see and fight 24 hours a day. The introduction of the Coyote has placed a strain on the administration troop. The troop organisation has changed little while

the squadron equipment has changed drastically with the implementation of the Coyote, certainly in the area of ammunition requirements. The 25-mm chain gun is capable of firing all of its ammo in a short period of time, however, the vehicle can only carry 420 rounds of ammunition. During intense and prolonged operations the squadron will require frequent resupply of combat supplies, ie ammunition, POL. Therefore, the administration troop will be moving continuously and will be susceptible to enemy observation and destruction. Further, the troop, as organised, has insufficient lift to carry the ammunition required. In the past the squadron was able to rely on aerial re-supply via helicopters. Unfortunately, the Griffin Utility Helicopter is ill suited for this role as it has limited lift capacity. Consequently, we no longer practice this method of re-supply or in fact work with helicopters.

INFORMATION OPERATIONS

Reconnaissance forces must be capable of locating and maintaining contact with the enemy. Further, they must be capable of communicating this information back in a timely manner to provide the commander the opportunity to take advantage of weaknesses, and seize the initiative. They are an integral part of the commander's ISTAR plan. They must be capable of accomplishing their tasks both day and night, and in all types of terrain and weather. The Coyote is a very effective surveillance platform that can gather tremendous amounts of information. Equipped with third, and in some cases fourth, generation technology in the areas of surveillance and target acquisition, it is able to detect contacts up to 20 kilometres away, under ideal conditions. It is capable of collecting large amounts of information for passage up the chain of command. However, the requirement for this information to be filtered, collated and interpreted at each level is of paramount importance. Presently, the brigade reconnaissance squadron has two Bison command posts commanded by the squadron battle captain and the operations warrant officer. These individuals are responsible for the initial interpretation and collation of intelligence. However, with no requirement for advanced formal training in the area of intelligence, this critical step is difficult to accomplish and can significantly delay the passage of critical information in a timely manner. Further, with the increase in information these individuals quickly become overloaded to the point that it becomes impossible to "paint an accurate picture." Advancements in technology enable our forces to detect further out, which has resulted in a larger area of influence, and the requirement to be well dispersed to cover it. Depending upon terrain, the reconnaissance squadron can realistically expect to be deployed in an area with a frontage of 20 to 30 kilometres and a depth of 30 kilometres. This will present a problem for the timely transmission of information. At present, the squadron has one RRB vehicle in its organisation, and provides no redundancy in communications in the event the RRB has a malfunction or is destroyed. This is not sufficient to provide adequate coverage and from personal experience communications from the troops to the command post and then on to brigade is often difficult. That said, I feel the key concern in this area is not how the information is gathered but how it is passed. The Coyote as presently configured, is not capable of passing digital information, nor is there any capability at the brigade headquarters to receive digital information. While the information can be video taped at the source, the coyote, it cannot be digitally transmitted to the command post or to higher headquarters. More distressing is the fact that there are no plans in place to rectify this problem.

CONCLUSION

In accordance with the doctrine of manoeuvre warfare reconnaissance on the modern battlefield requires well-balanced forces, capable of aggressively conducting their missions and surviving. In the course of this paper I have compared the current organisation to four criteria that are essential elements to fielding a successful reconnaissance squadron: Survivability, Mobility, Sustainability and capable of conducting Information Operations. From this comparison it is obvious that our current squadron organisation and equipment are lacking. I feel the brigade reconnaissance squadron as currently organised is designed primarily for surveillance operations. Undoubtedly, the Coyote has significantly increased the surveillance capabilities of the reconnaissance squadron however, no serious effort has been made at changing the existing organisational structure to address the myriad of other deficiencies. The coyote is designed for stealth with limited protection and armament, essential requirements for the aggressive style of reconnaissance advocated in manoeuvre warfare. Alone it is not sufficient to effectively conduct the reconnaissance tasks required on the modern battlefield. The acquisition of the Coyote is a major step in fielding an effective reconnaissance force, however, it is just that, a step, and not the solution. Much time is spent on teaching and talking about the doctrine of manoeuvre warfare,

however, we do not have the balanced forces required to put these teachings into practice. It is essential that the Canadian Army fields these forces quickly or we will continue to be an army of theorists and not practitioners.

RECOMMENDATIONS

The recommendations that follow are one possible proposal for a capable reconnaissance force. While not the ideal solution they are realistic for the Canadian Army. Based on the research conducted, the comparison against the criteria employed in this paper, and my own personal experience (Battle Captain, Second in Command and Acting Officer Commanding a Reconnaissance Squadron) the following recommendations are offered.

a. The Brigade Reconnaissance Squadron requires integral infantry to provide close protection to the reconnaissance troops, and the administration troop. To provide a force that can perform close protection tasks the assault troop should be increased in strength to at least 60 soldiers and provided more heavy weapons. This would provide the squadron commander more flexibility, and the capability to better utilise or augment his surveillance assets.

b. In order to field more balanced forces the squadron must incorporate a wider range of vehicles in its reconnaissance troops to compensate for the mobility, firepower and protection limitations of the Coyote. The squadron requires integral assets capable of destroying tanks and assisting/performing the counter-reconnaissance tasks. These assets would also enable the squadron to better fix contacts and provide the squadron with an offensive capability. A tank troop and a platoon of TUA incorporated into the squadron would be better suited to accomplish these tasks. The incorporation of a patrol of light, mobile vehicles (HUMVEE variant) per troop will provide a vehicle capable of close reconnaissance tasks, where stealth is required. These additions would preserve the Coyote for its primary responsibility, surveillance.

c. The increase in the AOR that the squadron must now cover requires aerial reconnaissance in support. The Griffin will shortly be fitted with surveillance equipment similar to the Coyote, thus making it an ideal platform. Aerial reconnaissance, in concert with ground reconnaissance, would provide a more flexible force for reconnaissance, with resupply and casualty evacuation as secondary tasks. It is understood that this helicopter is not designed for the reconnaissance role however, it is the only asset available and this role must be maintained in order for us to preserve the necessary skills.

d. To ensure adequate communication coverage the squadron requires as a minimum an additional RRB.

e. There must be formal training for command post personnel in the collation and interpretation of intelligence. Further, all reconnaissance soldiers must be better trained in this area in order to interpret the accurate enemy picture. The brigade intelligence staff could conduct this training.

f. The administration troop must be equipped, as much as possible, in armoured vehicles vice B vehicles, which would provide the troop with better protection. Note the forces are currently in the process of life extending and modifying the M113, Grizzly and Husky fleets to assume the tasks of combat service support (MRTs, communications vehicles and armoured ambulances). Further, the troop should be allocated heavy weapons, with anti-tank capability, for self-defence.

g. The integration of the recommended assets, with the exception of the helicopters, would be permanent, and not an affiliation. Permanent integration allows the squadron to develop into the cohesive, confident, well-trained force required to conduct reconnaissance on the modern battlefield. This end-state cannot be achieved by introducing new groupings for each field deployment. [redacted]

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Book Review

An account of the first use of tanks in war at the battle of Flers-Courcelette, the Somme, 15 September 1916. Reviewed by Capt Patrick Bailey, Editor Armour Bulletin.

The Tanks at Flers by Mr. Trevor Pidgeon, Fairmile Books, Fairmile Lane, Cobham, Surrey, UK, KT11 2DQ, 1995. 247 pages, US$64.95 (2 hardcover volumes).

> "This morning we attacked the enemy on a front extending from Bouleaux Wood to the north of the Albert-Bapaume road, a distance of about six miles. Considerable successes have already been obtained. Our troops have advanced some two to three thousand yards at various places and the attack is progressing satisfactorily. Large numbers of prisoners have been taken.
>
> In this attack we employed, for the first time, a new type of heavy armoured car which has proved of considerable utility."
>
> *(Official communiqué released by British General Head Quarters at 12:50, 15 Sept 1916)*

It is a common misconception that the first use of tanks in war was the Battle of Cambrai, November 1917. This is only partly correct. The Battle of Cambrai was the first time in which tanks were used correctly, in mass, under their own command structure and the success achieved was, and still is, used as the justification of the armour concept. However, the first use of tanks in battle was at Flers-Courcelette on 15 September 1916. At 05:15, the first tank that advanced to engage an enemy in battle was a Mark 1, named D1, commanded by Captain Harold William Mortimore. D1 began its move forward from well behind the British front line and crossed into No Mans Land at the lumbering speed of 1 mile per hour. The tank was tasked to support a preliminary British attack on a German strongpoint at 05:30 before the main British H-Hour at 06:20. Captain Mortimore easily supported the capture of this objective, but shortly thereafter, an artillery shell strike damaged his starboard track, leaving the tank unserviceable.

Amazingly enough, a detailed description of the first use of tanks in battle has never been published. The author, Mr. Trevor Pidgeon, is a retired member of the British Foreign Service and was the Cartographer of the Western Front Association from 1986 to 1994. *The Tanks at Flers* was not only researched and written by Mr. Pidgeon but he also published the book himself, when those publishers whom he approached could not produce the book at the high quality and reasonable price desired by the author. Mr. Pidgeon spent years researching this book, combing every possible avenue of information both British and German and including extensive field trips to the battlefield in France. The result is a very rich reading experience.

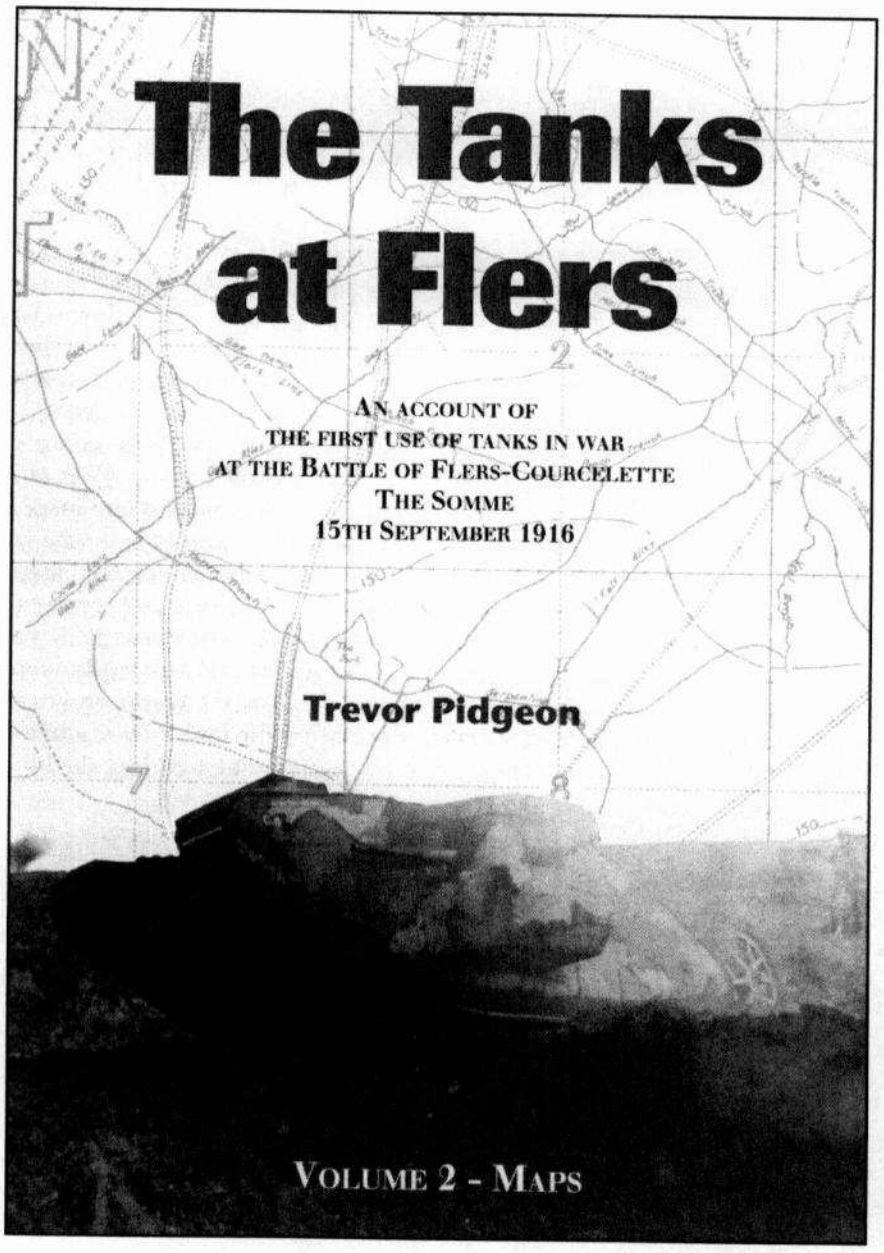
The Tanks at Flers is written in two volumes. Volume One contains all of the text while Volume Two is a collection of WW I trench maps supporting the text. The book covers the early development of the tank and its first use on 15 September 1916. The battle of Flers-Courcelette was the last attempt at victory during the infamous battle of the Somme that had begun on 1 July 1916. The British aim was to pierce the German line allowing their cavalry to pour through and hopefully roll up the enemy's defences. Recommendations that the tanks should be husbanded until enough could be amassed to make a decisive attack were ignored. The British commander in France, Field-Marshal Sir Douglas Haig, saw the value of the machine and thought it would give him the edge in gaining victory for his Somme offensive, which had gained little ground at the expense of many lives. In order to do this, the British Fourth Army and one corps of the Reserve Army were tasked to make an assault. Forty-nine tanks (two companies of 25 tanks each) were allotted to lead the attack of the British XIV, XV and III Corps and the Second Division of the Canadian Corps. A corps, at that time was composed of three divisions each. Instead of fighting as a unit, the tanks were broken into small groups and allotted to support each division.

The attack met with limited success and the anticipated breakthrough never materialised. In summing up the

tank's performance on 15 September, one tank commander wrote:

> "If only we had been able to reconnoitre; if only there had been some semblance of co-operation with the artillery; if only there had been some proper practice over ground that was like the Somme; and if only we had had a little more sleep and a little less showing off, what a marvellous story this Somme Battle might have been."
>
> *(The Tanks at Flers, p 206)*

Of the 49 tanks employed, 36 arrived mechanically sound at their start points. Of these, 27 reached the German front line, 19 reached the first objective, 11 the second objective and 6 the third objective. No British forces succeeded in attaining the fourth, and final, objective. Used for the most part individually, across ground that had been churned up by artillery, most of the tanks either became bogged, had mechanical difficulties or were destroyed by enemy artillery fire. However, in its inaugural battle, the tank showed that it had the potential to break the deadlock of the Western Front. The lessons learned from Flers-Courcelette were refined over the next year and were employed at Cambrai in November 1917.



The Tanks at Flers is broken into chapters to mirror the action in each of the divisions, and more importantly, the tanks, which were in support. The chapters that precede the battle outline the development of the tank and the initial training of the crews including a detailed colour photo tour of a Mark 1 tank. Each battle specific chapter follows the activities of the individual tanks, in support of their respective divisions, in their first day

of combat. The chapters following the battle outline the impressions of the German and British Armies to this new weapon of war and the lessons learned. Mr. Pidgeon spares no expense in his account of the actions of each tank. The prose is supported by original battlefield aerial photos, excerpts of war diaries, vintage photos of the tanks and their crews in action as well as orders and letters written at the time. Furthermore, Mr. Pidgeon includes modern photos of the battlefield (in both colour and black/white) upon which he has superimposed the routes and positions of individual tanks during the battle. In addition, each chapter ends with a modern field guide of the battlefield so that those who are interested can visit France and follow the tracks of those first tanks. The appendices of the book offer a cornucopia of information including orders of battle, how to drive a Mark 1 tank and how to use the British WWI map grid system. Of course, the original Army orders for the attack and contemporary notes by authorities on the suggested employment of tanks are also included.

Volume Two is one of the most interesting aspects of *The Tanks at Flers*. This thin volume contains copies of the original British WWI trench maps printed, like the story of the battle, as one sheet per divisional area. The maps are black and white with unit boundaries, objectives, and routes of the tanks and important grid references highlighted in colour. Once the reader has read the appendix on the British WWI map grid system, the maps in Volume Two become a valuable tool for following the action of the battle. Especially since Mr. Pidgeon has cross-referenced many of the battle details to the WWI map grid system.

The raison d'être of this book are the tanks and their crews. With the amount of detail, sources and maps, *The Tanks at Flers* would be a valuable edition to any unit or personal library. The story of the tank's development, initial training and first battle is very well written. This allows the layman to easily follow the battle, and more importantly the tank crews, while at the same time providing the kind of detail sought by the military historian. It is rare for a military history book to achieve this kind of balance but this book succeeds admirably. *The Tanks at Flers* is highly recommended for all members of the Corps who are interested in the difficulties of fielding a new weapon system as well as designing tactics, techniques and procedures during wartime. In addition, this book gives an excellent understanding of combat in the First World War and the toils of the first tank crews, from whom all modern tankers have descended.

At this time, *The Tanks at Flers* can be ordered through Mr. Pidgeon's North American distributor, Articles of War Ltd, 3 Rodeo Road, Silver City, New Mexico, 88061-8710, USA. Orders can also be placed by phone at (505) 534-8840, by FAX at (505) 534-8842 or by E-mail at warbooks@aol.com. The price for this two-volume set is currently US$ 64.95.

Letters to the Editor

ON THE REGIMENTAL SYSTEM

Regiments are not like houses. They cannot be pulled down and altered structurally to suit the convenience of the occupier or the caprice of the owner. They are more like plants: they grow slowly if they are to grow strong..., and if they are blighted or transplanted they are apt to wither.

– Winston Churchill

We must be very careful about what we do with the Regiments. Their fighting spirit is based largely on morale and regimental esprit de corps. On no account must anyone tamper with this.

– Lord Montgomery of Alamein

I read the articles dealing with the regimental system in your last bulletin with great interest. There is no doubt that some of the opinions expressed will delight the reformers who are only waiting for the moment of the final "Americanisation" of our Army and our traditional institutions. Well done for the bootlickers who see the Light, because they see very clearly how to get to the Kingdom of Heaven...

The question is to know whether we want a real regimental system or whether we will continue to "sit on the fence". Having said this, I am for the traditional regimental system and in my opinion we are not applying it completely. In our Corps we have a regimental system which really is not one. We take pride in the heritage we have received without understanding it or applying it fully. At the same time, we look to our Neighbours to the south to find "THE" solution! And yet these same Neighbours to the south are envious of our regimental system.

In my view, the regimental system, as we know it in Canada, is being poorly applied. To remove our regimental badges and replace them by Corps badges, as one of the interveners would like to do, would be easy and would change just about nothing in the current state of affairs; since "cross-badging" is already very common and the Corps already seems to control the majority of activities which normally devolve on a regiment, both in the administration of its personnel and from the point of view of its heritage and its accoutrements.

First, if we had a REAL regimental system, the regiments would have their own well-defined recruiting areas. Although that might be the case (by default) with 12e RBC and the Militia regiments, it is really not a matter of course for the RCD and the Strathcona's. Secondly, the Regiments should have an influence on the selection of their officers (certainly) and of their soldiers (preferably) to ensure that their characters are compatible with the expectations of the Regiment, even before they begin their basic armoured training. Thirdly, all promotions (from trooper to lieutenant colonel) should be the exclusive business of the Regiment. The Corps career managers should only be there to control the fair distribution to the Regiments of the promotions allocated (annually) to the Armoured Corps by NDHQ and the extra-regimental postings allocated to armoured personnel or the Combat Arms. Why, in effect, create promotion committees and merit lists in Ottawa where individuals must decide on the careers of other individuals whom they do not even know and who come from different regiments? The lists should be regimental ones and it should be up to the Regiment to promote its people, adhering to the number of allocations given by NDHQ through the career managers' office.

One of the articles also mentions the lack of depth of operational experience due to the withdrawal from Germany and how the individual rotations were profitable for the regiments, which remained in Canada. Whether it was 8CH or 3RCAC, if Canada decided to leave Germany, it left it. What should have been done during our period of deployment in Germany was that all the Regiments should have had an opportunity to serve in Germany. They all should have been able to leave one location and set up in another. For example, why could the RCD not leave Petawawa and set up in Edmonton, and the Strathcona's go to Valcartier so the 12e could take their place in Petawawa, and so continue the rotation every eight or ten years? **Horrors!** Many people would exclaim; but that is how a Regiment can gain experience in various surroundings and that is how we operated in the days of the "Army" (before unification). Furthermore, we may very well wonder whether we really have a national Army, when our units remain permanently camped

in the same bases, with the same brigades and the same manoeuvring grounds. In the regimental system, regional tribalism must take place at the Regimental level and not at the brigade or Area level. If we are really a national army, there should be no problem for a unit that has its roots in one part of the country serving as part of a brigade who is stationed in another part of our country. The status quo only encourages the vision of Western, Ontario or Quebec armies.

The regimental system is not being applied in its entirety in Canada. In fact, the influence of the Corps is much too great; the Corps should only advise the Army staff on technical matters concerning the purchase of new equipment and the tactical use of Armour in co-operation with the other arms in the field. It can be stated that the current size of infantry regiments has forced greater centralisation in favour of the Corps on us, but here again, why not have 9 infantry regiments of one battalion each, rather than what we have at the moment? Many of the officers of a famous infantry regiment in my brigade do not even know each other, each one having been "brought up" in different battalions. The very essence of the Regiment is to express a character and particular cohesion whose various characteristics depend on its area of origin, its history and the behaviour of its rank and file and its officers. In my opinion, these characteristics are no longer as evident within our regiments as they were before unification. For these reasons, it is easy to understand the conclusions reached by some people who are attracted by the American model, and that is unfortunate.

C. Branchaud
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12e RBC