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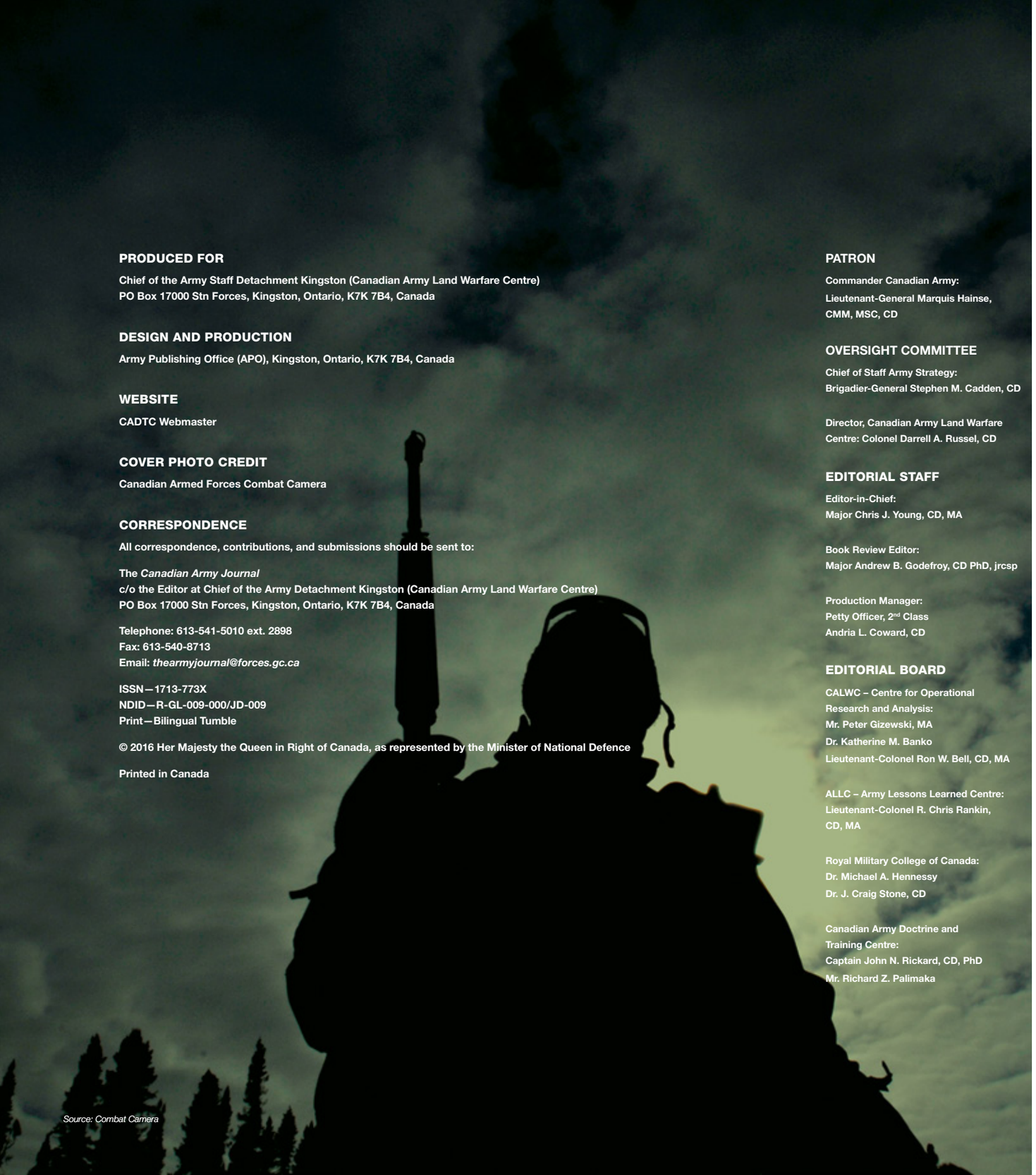

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The Canadian Army Journal

Canada's Professional Journal On Army Issues

The *Canadian Army Journal*, a refereed forum of ideas and issues, is the official publication of the Canadian Army. This periodical is dedicated to the expression of mature professional thought on the art and science of land warfare, the dissemination and discussion of doctrinal and training concepts, as well as ideas, concepts, and opinions by all army personnel and those civilians with an interest in such matters. Articles on related subjects such as leadership, ethics, technology, and military history are also invited and presented. The *Canadian Army Journal* is central to the intellectual health of the Canadian Army and the production of valid future concepts, doctrine, and training policies. It serves as a vehicle for the continuing education and professional development of all ranks and personnel in the Canadian Army, as well as members from other environments, government agencies, and academia concerned with the Canadian Army, defence, and security affairs.

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EDITORIAL: BRIGADIER-GENERAL S.V. RADLEY-WALTERS, CMM, DSO, MC, CD, 11 JANUARY 1920–21 APRIL 2015

Colonel Lawrence J. Zaporzan, OMM, CD

At Rad's passing, I began to reflect on the close connection that I and many of the Royal Canadian Armour Corps (RCAC) members had had with him over the course of his distinguished lifetime. The first time I met Rad was the summer of 1980 when, as Colonel Commandant of the RCAC, he visited my Phase II course in Gagetown.

Ever the teacher, I recall him talking to us in the shade of an APC, but I sadly cannot recall what he talked about, since we were all just happy to be taking a break from section attacks in the hot summer sun on the Lawfield corridor and really did not know much about tanks at that point in our careers. The next time I met him was at my first 8th Canadian Hussars (Princess Louise's) mess dinner in Petawawa where, as was his custom, he took the opportunity to pass on the hard-won lessons of combat, tactics and leadership. Of course, I also recall a whooping Rad riding on Ross Wickware's back in the mess games later in the evening! Our paths crossed many times in the years thereafter, but I really got to know him on a much deeper level when I did my research for my master's thesis, which was a study of Rad's leadership to the end of the Normandy Campaign.

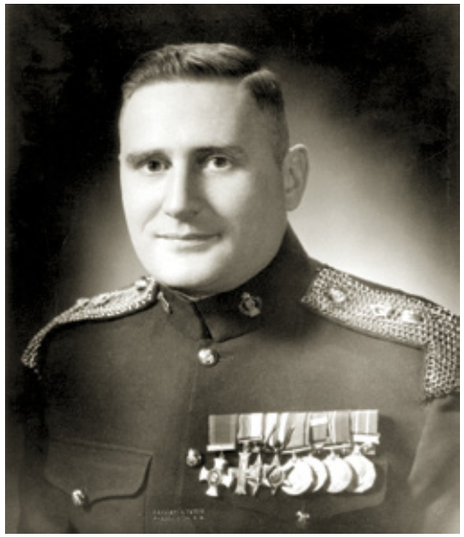
Although a soft-spoken man, he was a strong, tough fellow; raised in the Gaspé, he loved the outdoors and combative sports. He played football for the Army in Europe and in the Canadian Football League. It was that background that gave him a folksy but tough leadership style that the soldiers could relate to and the officers could respect. His wartime accomplishments are well known: he was the top tank ace of the western Allies, destroying a total of 18 German tanks. He had three tanks shot out from under him and was twice wounded. His squadron likely killed the legendary German tank ace Michael Wittmann near Gaumesnil during Operation TOTALIZE. After the war, he rose to the rank of Brigadier-General and commanded 2 Canadian Infantry Brigade Group and the Combat Training Centre before retiring in 1974.

Source: Library and Archives Canada

His greatest legacy to the officers of my generation was as a mentor and teacher. He took every opportunity he could to impart his knowledge of leadership and tactics; he believed it was his duty because he survived the horror of the war and had a responsibility to pass on what he could to those who followed so that they might also survive and win their war. He was a regular guest lecturer at the Canadian Land Force Command and Staff College and a frequent participant in battlefield studies and tours of Normandy. As the Colonel Commandant of the RCAC, as an honoured guest, or when hosting at home, he took every opportunity to impart the lessons of his wartime experience. It was in that spirit that he allowed me to conduct in-depth interviews with him to put together the story and lessons of his wartime experiences. He later did the same with Craig Mantle, who published a series of articles on his leadership in the *Canadian Army Journal*. His dedication to teaching went beyond the shores of Canada, as he was a member of the group of veterans who created the Normandy Foundation to raise funds to be used at the Musée Memoriale in Caen, France, to recognize the substantial contribution and sacrifice of the Canadian Armed Forces in the Allied victory in Normandy and Europe.

In the course of my research, I also discovered that Rad's recollections came at a personal cost, as he suffered sleeplessness and nightmares for weeks after we delved into the depths of his wartime experiences. In recounting his experiences, he stated that every man has his "breaking point" and that people manifest psychological symptoms in different ways. Ever the teacher, Rad stated that, in his case, he began taking undue risks, and he thanked his commanding officer for recognizing his condition and sending him back to England

for a five-week rest. Otherwise, he believed that he would likely not have survived the war. Rad was never judgemental of other people who suffered psychological injuries and clearly carried his own burden after the war. The fact that Rad—the epitome of a combat soldier—suffered shows his humanity, the timeless vulnerability of us all and the need to recognize and treat psychological injuries with the same rigor as physical injuries.



Source: DND

To the soldiers of my generation, he will be remembered as a teacher and mentor and, for those who knew him a little better, as a man who also loved to laugh and enjoy life. He believed that the members of our profession have the obligation to educate those who come after us. In Rad's words, "It really comes back on our own shoulders, that before they put us six feet into the ground, that somebody should sit down and each one of us at least pass on to the generation that's going to follow some of the lessons which we learnt."[1] Consider your contribution in Rad's memory.

Lawrence Zaporzan
Colonel
21 June 2015

Editor's Note: Colonel Zaporzan's MA thesis is entitled "A Biographical Study of Sydney Valpy Radley-Walters from Mobilization to the End of the Normandy Campaign, 1944" (University of New Brunswick, 2001). He has also co-authored a two-part piece on General Rad and leadership: see Craig Leslie Mantle and Lieutenant-Colonel Larry Zaporzan, "The Leadership of S.V. Radley-Walters: Enlistment to D-Day – Parts One & Two" (*Canadian Military Journal*, Vol. 9, No. 4, & Vol. 10, No. 1, available online at http://www.journal.forces.gc.ca).

1. See post-production script of Episode Three, "In Desperate Battle: The Normandy Campaign," available online at <http://www.valourandhorror.com/DB/STORY/normandy_script.php>.

Source: Library and Archives Canada

GUEST EDITORIAL: ANSWERING THE CALL

Brigadier-General
Stephen M. Cadden, CD

As the Army prepares to conduct its next series of Exercise MAPLE RESOLVE (MR), it is timely to ensure that there is a common understanding of why the Commander of the Canadian Army (CCA) has directed that every year, the CA will train, as well as confirm that it has trained, a brigade based on three manoeuvre units to a high state of readiness. In doing so, the CA will position itself to be more agile, scalable and responsive to fulfil its expeditionary and domestic responsibilities as outlined in the annual CAF Force Posture and Readiness (FP&R) Directive. These FP&R tasks are tangible proof of the CA's contribution to the six core missions set out in the Canada First Defence Strategy (CFDS). Given the spectrum of capabilities for which the CA is responsible in order to effect force generation (FG) under CAF FP&R, it is most appropriate to train and confirm these capabilities in a brigade context.

While Exercise MAPLE RESOLVE remains the culminating point in the CA's annual FG cycle Main Effort—the Road to High Readiness Phase—it is not the objective. The objective is a CA positioned with sufficient capacity to carry out its FP&R tasks. The annual FG of a brigade, to include prescribed joint enablers tasked under FP&R, and guided by structures in FORCE 2018, enables the CA to provide the Chief of the Defence Staff (CDS) with a broad range of land centric military response options. In the current strategic context, the CA must be prepared to offer scalable options, ranging from large task forces for sustained coalition combat operations to very modest task forces of 10 to 20 personnel, to achieve specific outcomes for the Government of Canada. Sometimes less is more. To be clear, however, the CA must train its high readiness (HR) forces up to and including brigade level in order to confirm the readiness of all components of our annual FP&R contribution.

Each corps mechanized brigade group (CMBG) will be required to exercise three manoeuvre elements, under the command of a Brigade Headquarters, during Exercise MAPLE RESOLVE, once every three years. This will ensure the requisite level of knowledge and experience in general warfighting throughout the Army, which, when augmented by the mission specific training required for a particular theatre, will ensure that our forces are prepared when called upon.

As the CA makes slight changes to its annual FG outputs to give it sufficient capacity to carry out assigned tasks, the Army must also ensure that it does not become or remain fixed on the structures, as experienced during the CA's large-scale and sustained engagement as part of Op ATHENA. The CA must not only remain prepared to make a similar commitment, if necessary, but it must also become more comfortable with providing options where more junior leaders conduct independent operations or activities, in support of the government's direction and objectives.

Starting in 2016, upon completion of Exercise MAPLE RESOLVE, the Army will be in a better position to carry out its FP&R tasks, having confirmed the readiness of three manoeuvre units and its joint enablers in a brigade context. This does not mean that we will always train two infantry battle groups and one armoured battle group during MAPLE RESOLVE. Instead, we will make sure that the planned Brigade has moved into a state of high readiness and achieved the necessary gateways to be able to respond to any task that the Government of Canada may assign to it. Following a certain amount of mission-specific training, the capability best suited for a particular mission would be available on short notice to meet our defence requirements. The Army continues to develop its models to ensure that there is a response to the most challenging problems, and that it can scale down its response to meet any requirement the country may have.

Brigadier-General Stephen M. Cadden, CD
Chief of Staff Army Strategy

Source: Combat Camera

Source: Combat Camera

DOCTRINE DEVELOPMENT IN CANADA'S ARMY IN THE 1990S

Lieutenant-General (retired) Mike Jeffery, former Chief of the Land Staff[1]

INTRODUCTION

To understand the evolution of an army, it is vital to study warfare and the concepts and doctrine that shape it. Too often, people possess an idealistic and theoretical sense of how doctrine evolves. In reality, it is a messy business. Rarely do new concepts arrive in a logical or considered manner. They may evolve through a long and deliberate process, or they may emerge during conflict, but rarely are they developed easily or neatly. Invariably, their development and the ultimate success achieved are greatly affected by the events of the day and the human tendency to resist change.

In the 1990s, there was a significant shift in doctrine development in Canada's Army. This paper is not a linear, detailed exposé on doctrine, but rather a global assessment of what was done during that period and why. It offers a very personal view of the change that occurred and the underlying forces that shaped it and, lastly, attempts to draw some lessons from that period.

Although this paper is written from a personal perspective, it is important to note that the achievements throughout this period were the result of many people's efforts. Given the turmoil within the Canadian Armed Forces and the Army at the time, soldiers at all levels were questioning the status quo, creating a healthy and dynamic stream of ideas. The Army's challenge was to harness that ingenuity and intellectual energy. It is unfortunate that more was not accomplished, and in hindsight it is easy to ask why certain actions were not taken. The reality is that the leadership had its hands full, not all issues were easy to resolve, and the conditions for change often did not exist.

DOCTRINE

The term "doctrine" can be defined in many ways, ranging from a body of knowledge, to principles, to tactics. However, this paper will view doctrine in its broadest sense, as a guide to action which links theory, history, experimentation and practice, not the rules found in detailed tactical doctrine such as tactics, techniques and procedures.[2]

THE STATE OF THE ARMY

The 1990s were a difficult and tumultuous period for the Army. In 1991, budget slashing began, following the stillborn 1987 Defence White Paper,[3] which had projected considerable growth. The cuts accelerated considerably with the 1994 budget,[4] in which DND resourcing was reduced by 40 per cent. They precipitated major force reductions in all services and considerable reductions in Army resources, personnel and equipment, including the loss of 4 CMBG, the Army's high-readiness brigade. At the same time, the operational tempo skyrocketed with deployments to the Balkans. Given Canada's commitments to UNPROFOR,[5] IFOR[6] and SFOR,[7] the Army was increasingly being asked to do more with less, and the load was being carried disproportionally on the backs of the soldiers.[8]

These operations—the first real conflict the Army had faced in many years—exposed some serious shortcomings. Equipment modernization had lagged, resulting in severe capability limitations. The main AFV fleet continued to be the 1960s-vintage M113, which, though upgraded, was obsolete. The Army lacked surveillance capabilities and had little effective night-vision equipment. Even the basic items of personal equipment were inadequate. Emergency operational buys of U.S. helmets and fragmentation vests alleviated the immediate shortfall, but highlighted the reality that there was insufficient quantity to meet requirements effectively. Troops arriving in an operational theatre were not pleased to be issued sweaty helmets and vests that had just been handed in by returning soldiers. Even more significant, there were a number of incidents that called the quality of the leadership into question. While many leaders performed extremely well, not all were up to the task.

Finally, the Somalia Inquiry into events surrounding the murder of a Somali civilian by a member of the Canadian Airborne Regiment publicly exposed some of the weaknesses of the institution. The spectacle of senior officers testifying on national television on a daily basis further eroded confidence in the leadership and caused an upsurge in public displays of frustration by serving soldiers and their families. Complaints of inadequate equipment, low pay, deplorable housing and double standards of treatment abounded. It was the period that General Rick Hillier has referred to as the Decade of Darkness.

While some improvements were made, in particular at the national level, the Army continued to suffer major problems, largely due to inadequate funding. By 2000, it was evident that the Army was unsustainable and there was "too much army for our budget and too little army for our tasks."[9] The Army Programme had little resource flexibility, which meant that many of the problems could not be fixed. The manning situation was serious, resulting in regular cannibalization of units to meet operational demands. That led to a loss of unit cohesion and higher operational risk. Increased attrition combined with little recruiting was exacerbating the situation. The tempo was too high, eroding morale and increasing stress. Training was focused solely on preparing for specific missions, with the result that general combat skills, particularly at the unit level, were not being maintained. In effect, the Army's collective experience was rusting out.

Paradoxically, while the modernization agenda had been seriously delayed by the resource cuts, the Army's capabilities were improving. Long-planned re-equipping programs were coming to fruition and driving the Army to change, meaning that it was in transition regardless. But the Army had little idea of the type of force it was building. Most, if not all, of the equipment projects had been implemented during or immediately following the Cold War, driven by a very Cold War mentality. Little real thought had been given to the changes in operational requirements. Equally important, there was no plan to integrate a collection of very different and often incomplete systems.

Perhaps most important, the Army lacked unity. There was no clear vision of the Army's future, and therefore no unity of thought, purpose and action. Despite the best efforts of many to address the challenges, different parts of the Army often seemed to be pulling on opposite ends of the rope.

THE NEED FOR CHANGE

It became clear early in the 1990s that much needed to change within the Army: not the piecemeal changes that were already occurring, but coherent change based on a long-term plan. However, the environment was not conducive to that approach. In the face of major operational commitments and huge resource challenges that forced the Army to fight fires on a daily basis, there was little appetite and arguably little capacity for long-term planning or visioning. But events provided the opportunity to start a shift that was to have important future benefits.

ORGANIZATIONAL CHANGE

In 1996 the Army started to close FMC HQ in St Hubert and move Army HQ to Ottawa. As part of that move, the Army's Doctrine and Training functions moved to Kingston under the Canadian Land Forces Command and Staff College (CLFCSC). Unfortunately, much of the collective experience was lost along the way. The college received a large number of filing cabinets, with just a couple of staff officers accompanying them, and the staff teams had to be rebuilt from the ground up.

The move was the starting point for a long discussion with the Army leadership about the Commandant CLFCSC's responsibilities with respect to the doctrine and training functions. Were the staffs just "in location" reporting directly to Army HQ, or was the Commandant now responsible for Army Doctrine and Training? There was no immediate answer to that question and no full resolution of the issue for a couple of years. In the meantime, that responsibility was assumed and the staff college began the process of regularizing the functions within the college. Over time, the Army designated the Commander 1st Canadian Division as the Army's Training Authority, with the Commandant of the staff college under command responsible for doctrine. In time, this structure evolved into the Land Force Doctrine and Training System (LFDTS), a command where doctrine and training functions came under one roof.

PROCESS CHANGE

As part of the organizational evolution, the process of doctrine development also changed. Through the 1970s, 1980s and early 1990s, the guiding doctrine medium was the combat development process (see Figure 1). The output was an organizational model called Corps 86, subsequently framed as Corps 96. It was the product of a very linear process. In theory, concept development was a key step, but the primary focus was on organizational design. There were concept papers written and some general discussion about them, but they had little if any impact on the structural decisions made.

The Corps 86 model, in theory, became the basis upon which the Army developed its doctrine and capability plan. The problem was that the organizational design was unconstrained and resulted in large and unrealistic structures that contained every imaginable capability. It was the soldier's ultimate wish list, but it did not recognize resource realities. Some argued that it was ideal for training officers at the staff college, as it exposed them to capabilities the Army did not have. However, it created or perhaps perpetuated unrealistic expectations among Army officers. In any event, as a base for guiding doctrine and capability decisions, the Corps 86

model did not respond well to the conflicting demands of today and the future—today always won. It was also too linear, taking a great deal of time to complete and lacking flexibility. Once the process was implemented, there was no easy way to inject new factors or concepts into it.

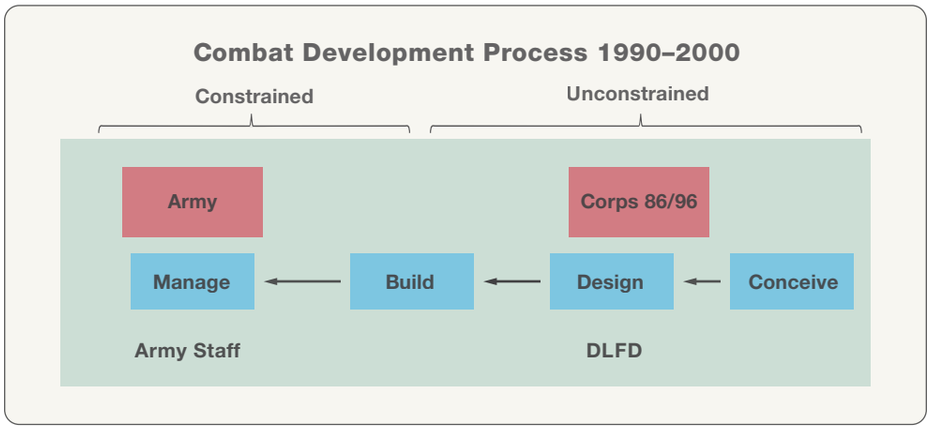


Figure 1

At the other end of the process, the Corps structure provided little, if any, value as the Army tried to modernize. It was clearly too large and ambitious to use as a guide or justification for organizations or equipment, and any attempts to take such a structure forward to the Department in support of resource requirements eroded the Army's credibility. The result was the growth of a parallel set of resource-focused organization and equipment plans, largely in isolation from the Combat Development Process. In turn, the implementation of specific change was driven by resource decisions, primarily the introduction of new equipment. This resulted in even more turmoil for the Army as attempts were made to schedule these changes against an already full and chaotic training and operational plan.

Through the tumultuous 1990s, these attempts at modernization evolved into the Land Force Development Process, which focused very much on structural issues as driven by the almost constant change on the resource front. Almost no conceptual or doctrinal thought was undertaken, as the Army focused on the survival of combat capability. By 1996, no one in the Army was looking at new concepts, and virtually no effort had been put into doctrine writing for many years. In fact, it had been over a decade since any doctrine manual had been published.

Army staffs considered and debated the challenges of re-energizing the development process, which could be considered dysfunctional. Clearly, it needed to respond to three potentially conflicting demands.

First, it had to allow for unconstrained intellectual thought in its consideration of evolving concepts. This should be real "blue sky" thinking and should allow consideration of new technology, concepts and structures under the umbrella of the Future Army.

The process also had to allow for the logical application of real-world constraints. As much as the Army wanted to achieve all the ideal capabilities identified for the Future Army, resource and political constraints would never allow it. Those constraints were best applied in the design of an Army of Tomorrow. That effort would be informed by the Future Army work, but would be shaped by the demands of defence policy and realistic resource levels. The Army of Tomorrow would be the vision upon which all doctrine development and capability planning would be based.

Finally, the Army of Today had to be on a cycle that allowed change, including equipment modernization, to be instituted without disrupting or jeopardizing training and operational activities. Management of change had to be integrated into everything the Army was doing.

This thinking led to the development of the three-horizon or three-army model which was adopted in 2000 (see Figure 2).

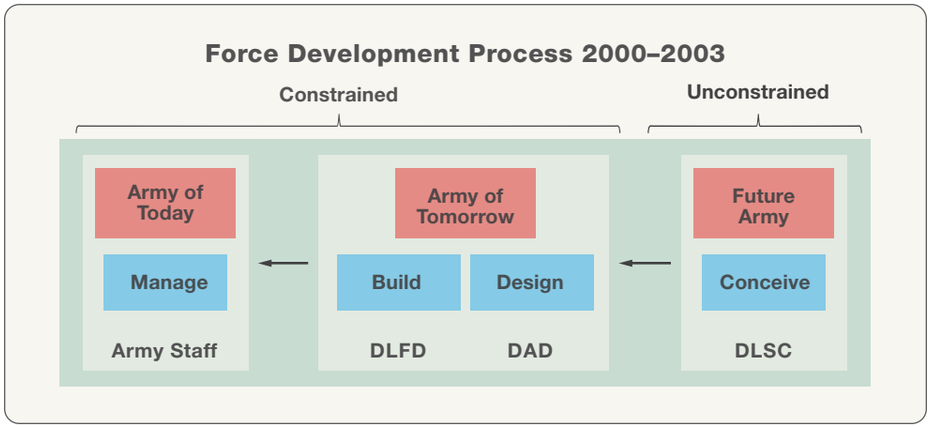


Figure 2

One important development from this process discussion was the formation, in the late 1990s, of the Directorate of Land Strategic Concepts (DLSC). The Directorate was established in Kingston under the Staff College, although there was pressure to move it to Ottawa to support the Force Development work. Ultimately, it remained in Kingston, where it could engage in the important conceptual work the Army needed, away from the daily crisis of Force Development. The creation of DLSC was vital to getting the Army back to thinking about the future, which became critical as it faced the development of the Army Strategy in 2000.

As part of the process of doctrine development, and given the challenges faced by the Army in responding to a high operational tempo, the Army Training staffs also gave considerable thought to the way the Army trained and generated forces. It was clear that the historical approach of aiming to maintain universal high readiness across the Army, especially with constrained resources, made little sense and was not sustainable. In addition, the experience

of generating forces for operations in the Balkans made it clear that a more structured approach to force generation was essential if we were to achieve the required cohesion and reduce the stress on our soldiers.

As a consequence, the Army Training staffs developed a concept for managed readiness that would address many of the scheduling challenges by putting the Army on a logical and consistent cycle. In this model (see Figure 3), approximately one third of the Army would be at high readiness or in operations, one third would be training and preparing, and one third would be reconstituting. This model also enabled managed implementation of change with no disruption of training or operations. Initial attempts to institute this model were not successful, but the idea had resonance and was eventually adopted.

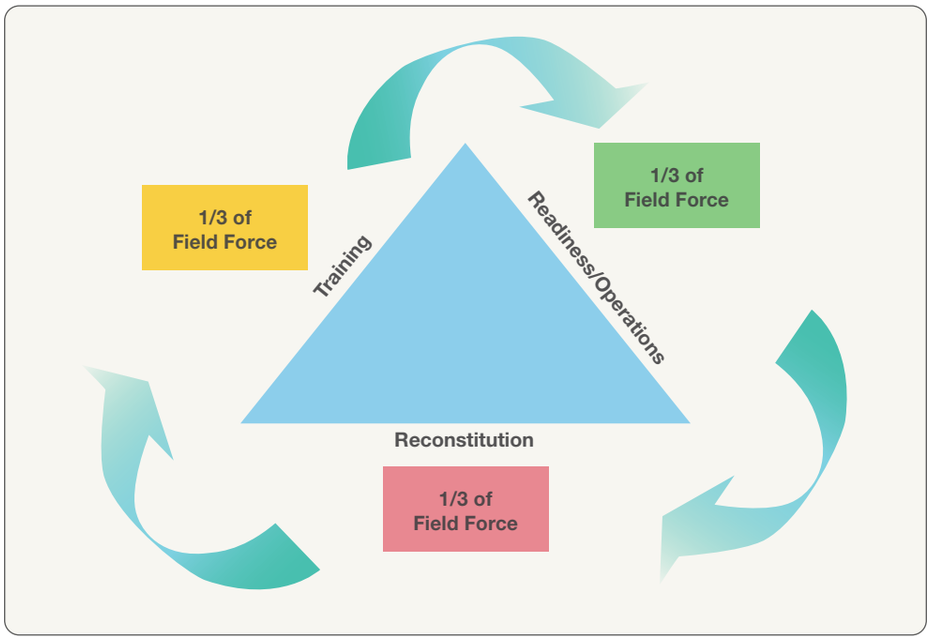


Figure 3

LEADERSHIP

Perhaps the greatest need for change in Army doctrine was the need for active leadership in doctrine development. The historical reality is that the majority of doctrinal work and the real thinking was done by the staff; the leadership met only periodically to bless the staff work. This bottom-up system, while it produced some good results, brought about outcomes that effectively lacked authority and led to disunity within the Army. Arguably, too much of the doctrine developed was not understood by the leaders, who therefore did not get behind it or even support it. Without such direction from the top, there was little chance of overcoming the existing culture and bringing about real change.

This did not necessarily reflect a lack of interest, but rather time pressures. Too many of the leaders, wrapped up as they were in the crises of the day, became disconnected from the fundamental changes occurring in technology and operational concepts and succumbed to the classic problem of generals focused on fighting the last war. In order for the Army to be effective, its future needed to be determined and driven by the leadership.

FUNDAMENTAL REFORM

In 2000, the Army started on a path to major reform. As it entered the new millennium, there was little doubt that real change would be difficult. After all, history shows that any fundamental change to the military takes generations to accomplish, usually following a long period of resistance to the idea or the technology. With the exception of the creation of the U.S. Carrier Fleets in the 1920s and '30s and the U.S. Air Cavalry in the 1960s, there are few if any examples of rapid transformation of military forces. In addition, the Army faced the burden of trying to change while tackling serious problems, in particular major resource limitations. Not an easy task and perhaps not the right thing to do. But it had no choice: standing still was not an option.

Change must start with a general acceptance of the need for that change. Most people are quite comfortable with the status quo, and the idea of a new order of things is normally not well received. As the senior leadership of the Army faced the prospect of launching a change agenda, there was less than unanimous agreement on the wisdom of proceeding. In some quarters there was a view that the problems were not that bad and that, in time, improvements would be made. There was also a dominant belief that the Army lacked the resources and the energy to address the challenges faced and that greater government support was an essential precondition for instituting major change. There was little acceptance of the reality that the Army's credibility on the resource front was not good and that demonstrated change was an essential precondition for gaining support. However, after much debate the collective leadership acknowledged, albeit grudgingly, that the problems were serious and that they had a responsibility to do something.

Source: Combat Camera

THE SEARCH FOR UNITY

The Duke of Wellington is said to have stated, "It is not the business of generals to shoot one another." But unity among a military's leadership cannot be guaranteed, and, no matter how clear or prescient a leader's vision, no one can effectively change an organization by force. The reality is that all organizations have the ability to resist. An Army is no different.

Development of a shared vision for the Army, first and foremost among the senior leadership, was an essential first step in the change process. Accordingly, the Army leadership engaged in a planning process that generated a coherent vision and a strategy for implementing it. The endeavour started out with just the most senior leaders, but over time grew to include all generals and colonels in the Army. Those strategic planning sessions became major professional debates, enabling all leaders to engage in the intellectual exercise of debating the purpose and substance of that proposed vision until reaching consensus. Developing the vision required an open approach to debate on the subject and a degree of compromise on everyone's part. The secret was to compromise in a way that enhanced the unity of the team without eroding the soundness of the core vision. The result was a stronger, more achievable "shared" vision. At the end of this process, the Army Strategy, the blueprint for change, was published with a high level of support from the Army's senior leadership.

The approach taken following a prolonged planning period is counter to the conventional wisdom that a new leader must move quickly to implement major change. However, the Army's culture is extremely strong and there could have been considerable resistance. Positive conditions needed to be put in place among the Army's senior leaders if the change agenda was to have any success. The choice was simple: either take the time, or fail. It was also important to create sufficient ownership of the strategy that it would survive several Army Commanders, thus ensuring success.

Over time, the vision and the strategy needed to be understood and endorsed throughout the Army. To that end, regular town hall meetings were held across the country, giving briefings on the change plans and engaging soldiers at all levels on the issues of the day. Ensuring understanding of the initiative was always a challenge, confirming the adage that the most important things in instituting change are communication, communication and communication.

THE ARMY STRATEGY

Development of the Army Strategy started with the assessment of the global context in which the Army expected to operate. Analysis indicated that it was changing: the relative stability of the Cold War period was a thing of the past. The leadership envisaged a changing battlespace where operations occurred on many different planes.[10] That battlespace would be dominated by systems integrating information technology, which was revolutionizing everything from reconnaissance to the accuracy of weapons. It also recognized that in this volatile world the government would require a military force that could be strategically effective.

Army Vision

The Army will generate, employ and sustain strategically relevant and tactically decisive medium-weight forces. Using progressive doctrine, realistic training and leading-edge technologies, the Army will be a knowledge-based and command-centric institution capable of continuous adaptation and task tailoring across the spectrum of conflict. The cohesion and morale of our soldiers will be preserved through sharing a collective covenant of trust and common understanding of explicit and implicit intent. With selfless leadership and coherent management, the Army will achieve unity of effort and resource equilibrium. The Army will synchronize force development to achieve joint integration and combined interoperability with the ground forces of the United States, other ABCA countries and selected NATO allies. As a broadly-based representative national institution with a proud heritage, the Army will provide a disciplined force of last resort and contribute to national values and objectives at home and abroad.

Advancing with Purpose
The Army Strategy
May 2002

The Vision. The vision was that of a new Army which was a strategically relevant and tactically decisive medium-weight force—an Army that could fight but that was shifting from mass to information-based warfare.

The Army would be based on three complementary concepts:

- **Strategic Concept.** The Army would be founded on a new strategic concept that would give it maximum strategic value to a joint force and potential coalition partners—a force that would be rapidly deployable, modernized, interoperable and sustainable. The force structure would be balanced to accomplish a broad range of potential missions in a more complex future security environment. Operational risk would be mitigated through attachment of Army forces to capable and complementary allied formations, and national command would be maintained.

- **Tactical Concept.** The Army would have a supporting tactical concept based on achieving increased agility. That would be accomplished by moving to a command-centric, knowledge-based doctrine which would achieve integration of information with manoeuvre at lower levels and devolved decision-making authority. Firepower would be enhanced through increased precision and responsiveness and by improving protection against symmetric and increasingly likely asymmetric threats through integration of defensive measures and shared situational awareness. The sustainment burden would be eased by simplifying and lightening the overall force structure.

- **Force Generation Concept.** Lastly, the Army would have a supporting force generation concept. The Army would be optimized for complex terrain while remaining adaptable for other missions, with a more flexible, modular approach to the integration of capabilities. Functional capabilities would be rationalized and a managed readiness system would be introduced at Army level to ensure efficiency and effectiveness in force generation. In addition, improvements would be made to the training system to maintain sufficient formation-level expertise while focusing on realistic preparation of units for operations. Perhaps most significantly, the Army would improve the alignment of the Regular and Reserve components, ensuring that the Army of Tomorrow would be fully integrated as one army.

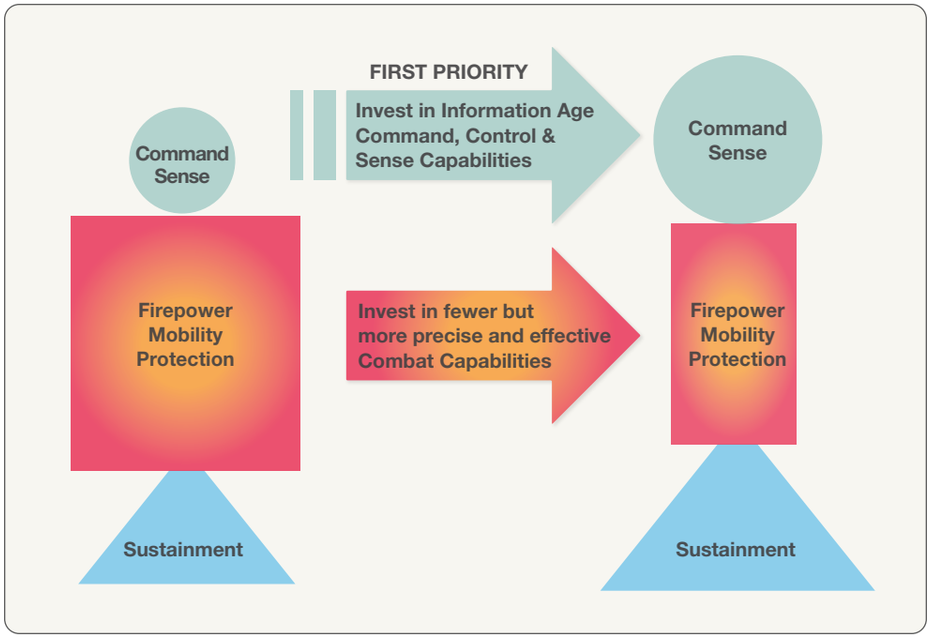


Figure 4

Implementation of this strategy would mean a fundamental change to the Army (see Figure 4). By investing in information-age command, control and sense capabilities, the Army could move into the information age and acquire agility. Investing in fewer but more precise and effective combat capabilities would increase precision and responsiveness in firepower and produce a lighter, more deployable structure. The Army would require a greater sustainment capability, as dictated by the newer technologies but offset by a leaner force structure. This change would take time, but once the Army of Tomorrow was realized, Canada's Army would be very different. Ideally, it would be leaner but more capable and of greater value to government and our allies.

The Army of Today

An army optimized for symmetrical warfare based on open terrain and a contiguous battlespace with the unit (700 personnel) as the primary building block largely within standardized multi-purpose formations representing a depth of multi- purpose capability.

The Army of Tomorrow

An army optimized for asymmetrical warfareon complex terrain and a non-contiguous battlespace with the sub-unit (100 personnel) as the primary building block within scalable, more flexible, formations representing a breadth of multi-purpose capability.

This was clearly a strategy that incorporated risk, but the Army's senior leadership considered it an acceptable risk given the challenges faced and the potential for success.

TRANSFORMATION CONCEPT

Achieving this change was not going to be easy (see Figure 5). First of all, given that much of the foundational conceptual and doctrinal work had not been done, building the Army of Tomorrow could not start immediately. Accordingly, an interim army model was to be developed in which gradual and pragmatic changes would be made, setting the conditions for implementing the Army of Tomorrow model.

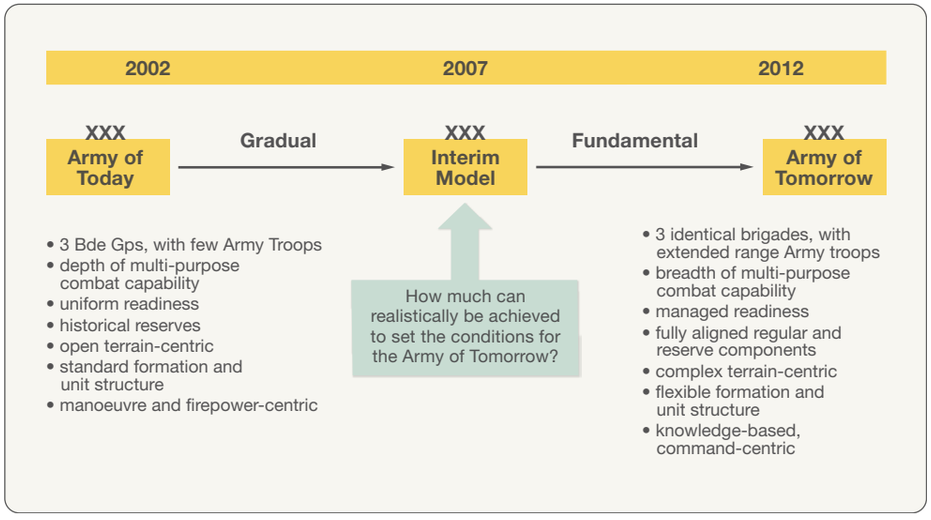


Figure 5

In this transformation concept (see Figure 6) focusing on force generation was a priority, since it was critical that the army business become regularized and predictable. Another priority was the implementation of key capital projects to provide the capabilities essential for realizing the new tactical concept.

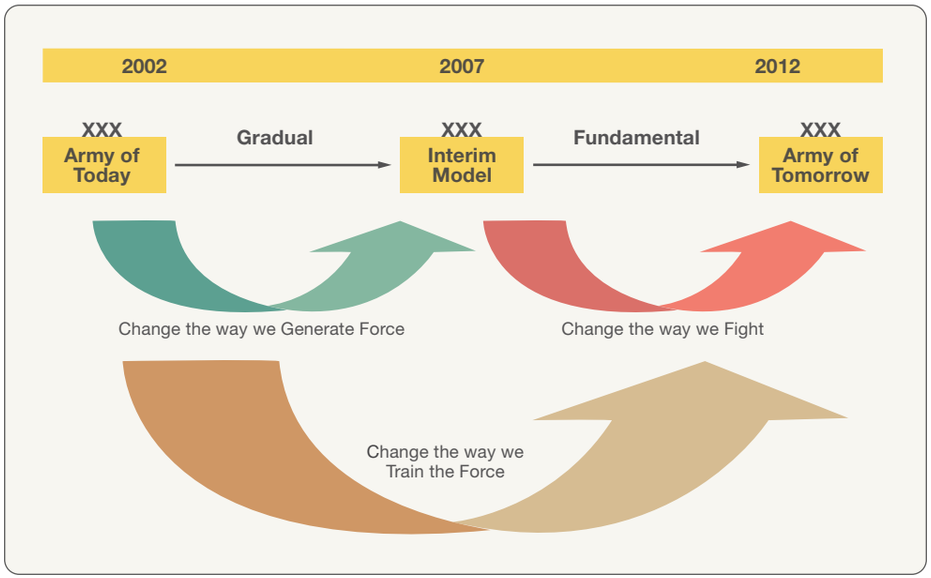


Figure 6

Once this was achieved and certain capabilities were in service, the Army would shift the manner in which it fought by moving to an information-based concept. Throughout this period, adjustments to the training system and the way the Army trained would be required.

Implementing change would take place in line with the manage readiness system, ensuring regular builds to capability, aligned with training and readiness plans (see Figure 7).

THE CHALLENGES OF IMPLEMENTATION

This was an ambitious plan, but such an initiative was deemed essential to shaping the Army for the future and resolving many of the issues it faced. However, life is not that simple, and events conspired against the Army's plans.

The first major setback was the 9/11 attack in New York. After a year spent building consensus and developing the strategy, the intent was to launch the Army strategy in September 2001. Given the readiness and subsequent operational considerations following 9/11, many of those plans had to be placed on hold, delaying implementation by months and reducing the momentum required to ensure a successful launch. By 2003 the implementation of transformation was well underway and considerable support for the strategy had been achieved, including at the senior levels of DND. The Army started to see a shift in its economic fortunes. Unfortunately, critical time had been lost and many of the key initiatives had not truly taken root.

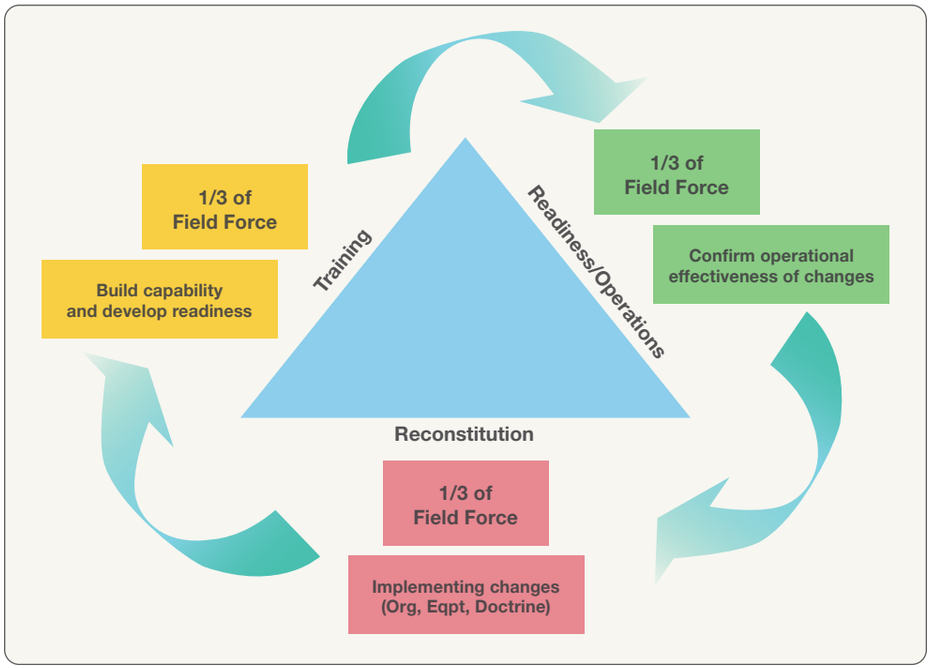


Figure 7

The decision in early 2003 to commit forces to ISAF had a major impact on strategy implementation. The Army's priority understandably became current operations and, most significantly, the resource pressures abated as the need to support the Army became a government priority. While transformation progressed on a number of fronts, much of the plan was never fully realized. Faced with a very special type of war, the Army adapted to meet those unique requirements. Plans and capabilities that did not support the mission were, at best, put in abeyance; at worst, they were disposed of. Although the core of the Army's Strategy, "Advancing with Purpose," has arguably been retained, much of the change envisaged has not.

THE LESSONS

After a decade in Afghanistan, the Army is again rethinking its doctrine. With the reduction in operational tasks, many of the resource pressures have re-emerged and the Army is again faced with many of the same challenges from a decade ago. It is likely many of the solutions will similarly re-emerge. Notwithstanding the evolution of doctrine in the 1990s and, in particular, the limited success of the Army Transformation initiatives, there are some lessons to be drawn from this period which may be applicable to today's thinking.

One of the aims of doctrine development must be to maintain the Army's credibility. Doctrine is about much more than just how the Army fights; it is a vital part of maintaining the Army's relevance. The Army is a strategic component of the nation, and the challenge for the Army

leadership is to ensure that it remains relevant to and valued by the government. The work undertaken in developing the Army Strategy, and in particular the difficult decisions made by the Army in a period of restraint, raised the credibility of the institution and made subsequent initiatives possible. Credibility must be core to any doctrinal work.

Doctrine is not just a process; it is a critical stewardship responsibility of the Army leadership. Doctrine must be driven by clear and coherent guidance from the top. The Army staff plays an important role in keeping the leadership current on emerging issues and capabilities and developing the specific doctrine manuals and TTP. But leaders must lead, and that means they must be engaged with and alert to the changing environment, capabilities and concepts. If they are not, the Army will be preparing to fight the last war.

Leaders must maintain a future focus. The future always competes with today and, under the pressure of real-time crises, it is easy to defer future thinking. But there will never be a better time, and leaders must make the time to guide the Future Army work. It took a tremendous amount of personal and institutional energy to develop the Army Strategy in the midst of so many real-world and institutional problems, but it had to be done. Ultimately, the Army benefited from that investment.

Leadership unity and continuity is critical in doctrine development. Real change takes a generation to achieve, and that requires a consistent approach. Only if a generation of leaders is committed to the change can success be attained. A high degree of unity was achieved during the development of Army Strategy, ensuring a positive start—which, however, waned over the period of operations in Afghanistan.

Change starts with one step. Even if the organization cannot see the future clearly, it needs to get the ball rolling. There was a great deal of fear before the Army started the change process, but once it was underway much of the fear subsided. Taking action focuses people on the plan, and that action develops its own momentum.

If changes in doctrine are not well embedded in capability and culture, people revert to what they know and believe. The reality is that there is nothing like a war to interfere with the development of military doctrine. Afghanistan proved that. Reversion is understandably most evident under the pressures of operations. It can be overcome, but only if a leadership is very focused on pragmatic issues and forces specific supportive change.

SUMMARY

In the 1990s, Army doctrine was developed in a context of significant changes to the Army driven by internal challenges and a shifting strategic environment. Even though the vision of the Army Strategy was not realized, there is much to learn from the history of its development. Perhaps most important of all, it demonstrates that doctrine development is the foundation of maintaining the Army's relevance to the nation. As such, it is not something to be left to chance. Rather, it must be achieved through a long-term process of leadership and discipline.

ENDNOTES

1. During the subject period, the author served as Director of Land Requirements, Director General Programme Coordination, Commandant of the Canadian Land Forces Command and Staff College, Commander of 1st Division & Army Training Authority, Commander of Land Forces Doctrine & Training System and Chief of the Land Staff.
2. Military doctrine is the expression of how military forces contribute to campaigns, major operations, battles, and engagements. It is a guide to action, rather than hard and fast rules. Doctrine provides a common frame of reference across the military. It helps standardize operations, facilitating readiness by establishing common ways of accomplishing military tasks. Doctrine links theory, history, experimentation and practice. Its objective is to foster initiative and creative thinking. Doctrine provides the military with an authoritative body of statements on how military forces conduct operations and provides a common lexicon for use by military planners and leaders. (Source: Wikipedia, http://en.wikipedia.org/wiki/Military_doctrine.)
3. Challenge and Commitment: A Defence Policy for Canada, 1987. Considerable growth in the CF's size and capability was projected, but it never materialized.
4. The 1994 Federal Budget (http://www.budget.gc.ca/pdfarch/1994-brf-eng.pdf) started the cuts to Defence that saw the budget reach a low of $9.4 billion.
5. The United Nations Protective Force (UNPROFOR) was initially established in Croatia to ensure demilitarization of designated areas. The mandate was later extended to Bosnia and Herzegovina to support the delivery of humanitarian relief and monitor "no-fly zones" and "safe areas." The mandate was later extended to the former Yugoslav Republic of Macedonia for preventive monitoring in border areas.
6. The Implementation Force (IFOR) was a NATO-led multinational peacekeeping force in Bosnia and Herzegovina under a one-year mandate from 20 December 1995 to 20 December 1996 under the codename *Operation Joint Endeavour*.
7. The Stabilization Force (SFOR) was a NATO-led multinational peacekeeping force deployed to Bosnia and Herzegovina after the Bosnian war.
8. During the period 1992–2003, the Army's international deployments were consistently over 3,000 personnel, and in some years they reached 6,000. This represented between one third and one half of the Army's deployable field force.
9. Quote attributed to Lieutenant-General Mike Jeffery. Cited in John Ward, "Soldiers squeezed by tight army budgets, commander says," *Globe and Mail*, 23 Feb 02.
10. The principal planes were physical, moral, cyber and electromagnetic.

Source: Combat Camera

The Lieutenant-General Peter Devlin Writing Award for Command and Leadership

The article by

Captain Michael J. Pratt

(*Lieutenant-General Sir Arthur Currie: The Canadian Corps and the Manoeuvrist Approach*)

is the winner of the LGen Peter Devlin Writing Award.

The Lieutenant-General Peter Devlin
Writing Award for Command and Leadership
is presented to the AOC student who submits,
in the estimation of the *Canadian Army Journal Board*,
the best service paper on command and leadership.

LIEUTENANT-GENERAL SIR ARTHUR CURRIE:
The Canadian Corps and the Manoeuverist Approach

Captain Michael J. Pratt

Source: City of Vancouver Archives, Fonds AM54, Item: bp 13.2

General Sir Arthur Currie

Current Canadian Army doctrine indicates that land forces conduct "operations using an effect-based philosophy" supported by manoeuvre warfare, or the manoeuverist approach, and subsequently mission command.[1] In his article "Trust, Manoeuvre Warfare, Mission Command and Canada's Army," Lieutenant-Colonel Charles Oliviero asserts that the adoption of the manoeuverist approach and mission command in Canadian doctrine was simply a grafting of other nations' doctrine developed from the study of German doctrine during and post-Second World War with no Canadian historical context.[2] This paper will argue that Canadian adoption of the manoeuverist approach and mission command is not simply copied from our allies without the consideration of Canadian experience, but has a basis in the actions of past Canadian commanders. Specifically, this paper will demonstrate that Lieutenant-General Sir Arthur Currie, through the use of mission command and a focus on operational objectives, followed the principles of what is now known as the manoeuverist approach.

This paper will explore the development of Currie's operational technique during the Great War and how it compares to that of the manoeuverist approach. Additionally, the paper will focus on one of the key components of the manoeuverist approach—mission command—to illustrate Currie's command technique and demonstrate that it was a rudimentary version of mission command. Through this analysis, the paper will ultimately conclude that current Canadian doctrine was not simply cut and paste from allies with no inherent understanding of Canadian experience with the manoeuverist approach and mission command. Before one can compare Currie's operational technique and command style to that of the manoeuverist approach, however, an understanding of current Canadian doctrine is required.

THE MANOEUVRIST APPROACH AND MISSION COMMAND

According to Canadian doctrine, the manoeuverist approach

> *seeks to attack the adversary's will to fight, and thus undermine and even shatter his cohesion, usually but not necessarily, by avoiding trials of strength and targeting the adversary's vulnerabilities or weakness. An adversary's will, and thus cohesion, may also be affected by shaping of his understanding.*[3]

The main focus of this approach is the destruction of the enemy's cohesion, resulting in his inability to continue fighting as a coordinated whole, rather than physical destruction through incremental attrition. This attack on will and cohesion is ultimately achieved through one or more of the following three approaches, in order of preference: pre-emption, dislocation, and disruption.[4]

These approaches alone do not produce the manoeuverist approach. Combat power and resources are applied to these approaches while following several guiding principles. These principles include concentrating on the adversary's vulnerabilities, employing mission-type orders, agility, focusing on the main effort, exploiting tactical opportunities, acting boldly and decisively, and commanding from a position to influence the main effort.[5] In order to successfully execute operations along these lines, it is necessary to command the operations using a particular style—Mission Command.[6]

As stated in *Command in Land Operations*, mission command "requires a style of command that promotes decentralized decision-making, freedom and speed of action, and initiative."[7] Unity of effort and common understanding of both the commander's intent and the purpose of the military action throughout the force is critical for mission command to be effective. This is achieved through the consistent use of a mission statement, concept of operations and task when delivering orders at all levels, from the operational commander to the individual soldier.[8] This is commonly referred to as mission-type orders.

Mission-type orders as well as the allocation of appropriate resources, minimal use of control measures and allowing subordinates the freedom to decide the best course of action to achieve their missions and tasks within their delegated responsibility provides the backbone to the mission command philosophy that enables the manoeuverist approach.[9] Further enhancing this command philosophy with a strong regimental system allows stronger cohesion, a deeper trust and mutual understanding that is engendered from the "personal relationships that develop with service together."[10] With this doctrinal basis of understanding, Currie's operational and command techniques can now be explored to determine whether he did in fact practise what is now known as the manoeuverist approach.

CURRIE'S TACTICAL SOLUTION TO LENS: EXPLOITING THE GERMAN COUNTERATTACK

To explore Currie's operational technique for the capture of Hill 70, it is important to discuss the development of the doctrine he used to successfully defeat the Germans. In January of 1917 Currie attended a battlefield study at Verdun. Following this study, he began to lecture within the Canadian Corps headquarters about his findings. From these lectures changes were made to how the corps fought its next major battle under Lieutenant-General Sir Julian Byng—Vimy Ridge.[11] The new tactics specifically used were the creeping artillery barrage tightly coordinated with flexible platoon level manoeuvre within the infantry advance—the set-piece attack. The innovation did not stop at the set-piece attack.[12] Currie also shifted the focus of objectives, moving away from trench lines to focus on natural features.[13]

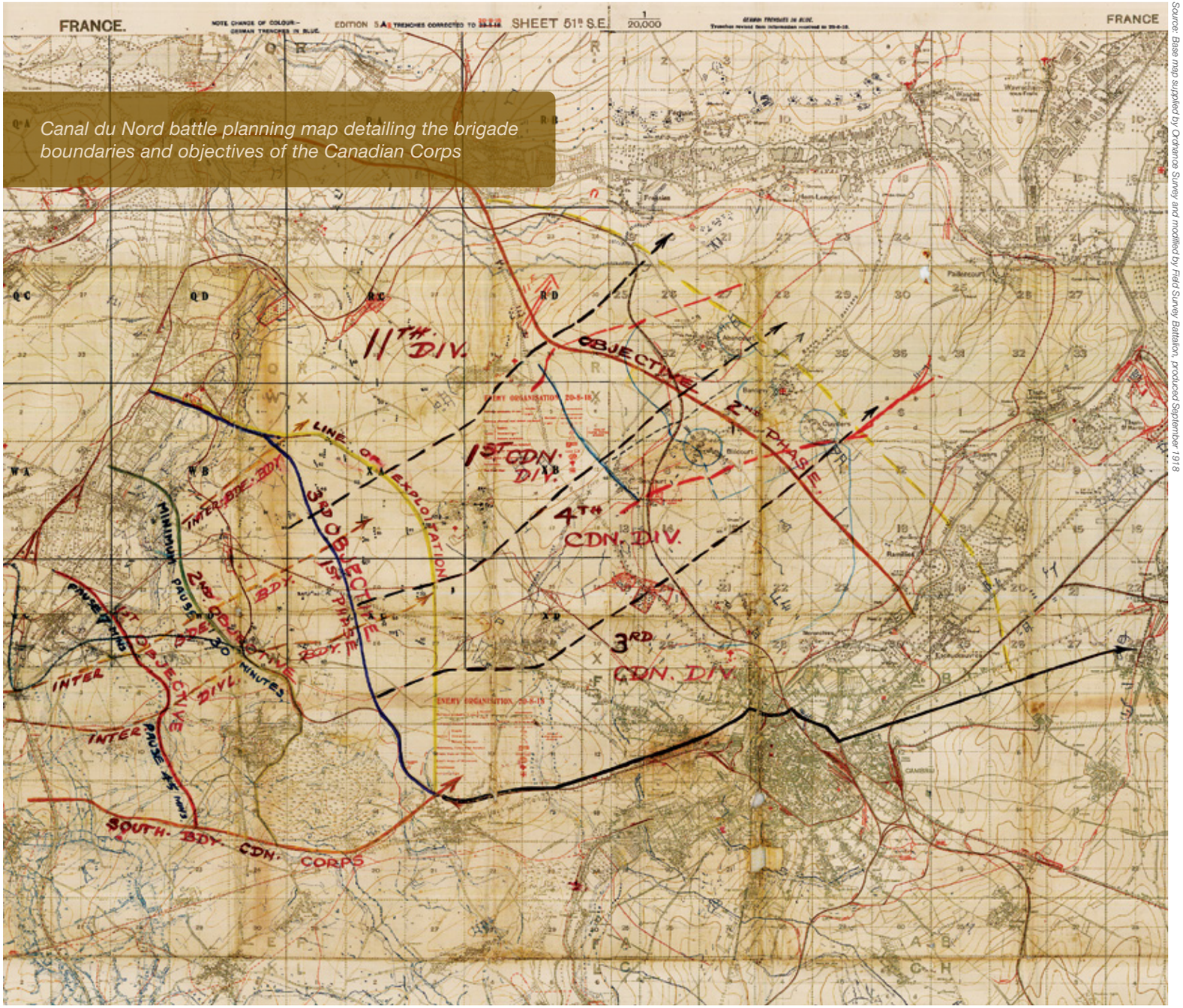
These changes set the stage for July 1917, when Currie, newly promoted to command the Canadian Corps, received orders to capture Lens. He further refined his new tactics, recognizing characteristics of the German counterattack, which to this point in the war had been their strength. Knowing that the Germans would launch an artillery barrage on their lost position in advance of the counterattack, Currie ensured that the Canadian Corps would consolidate forward of the position, putting his troops in an unexpected location and making the German fire ineffective. Additionally, he had his own artillery target the assembly areas for the German counterattack force, destroying the force before it was able to launch.[14]

With the order to capture Lens, Currie went forward himself to evaluate the battlefield.[15] He saw that capturing Hill 70 first would allow for Lens to be captured with far less loss of life[16] as well as providing long views into Lens and the German defences. This second fact alone would make his forces holding Hill 70 intolerable for the Germans in Lens.[17] Once he convinced his superiors that capturing Hill 70 was necessary for the capture of Lens, Currie planned the attack and waited until weather conditions were perfect, leading to the successful capture of the objective. As anticipated, the Germans launched fierce counterattacks against the Canadian Corps over the next three days. All 21 of these counterattacks were destroyed.[18]

Currie demonstrated that he was adept at avoiding enemy strength and focusing on their vulnerabilities by first capturing Hill 70. His understanding of the German counterattack allowed him to exploit a vulnerability that had previously been seen as a strength, allowing him to pre-empt and dislocate the Germans as they counterattacked. Although this clearly demonstrates some of the key aspects of the manoeuverist approach, Currie's focus on limited objectives, and thus the limitation of his subordinate commanders' freedom of action, does not fully depict a command style commensurate with mission command and the manoeuverist approach. As his first battle as the Canadian Corps Commander, it is also not necessarily indicative of his fully developed operational and command techniques seen toward the end of the war.

CURRIE'S OPEN WARFARE: PUSHING PAST THE SET-PIECE ATTACK

Following the success at Hill 70 and later Passchendaele, Currie and his staff began analyzing the operations of 1917.[19] This study resulted in the development of the open warfare concept. This style of attack built on the combined arms nature of the set piece attack, incorporating tanks and airplanes, although the airplanes were mainly used in support of the artillery.[20] Additionally, the rapid tempo introduced by this new tactic necessitated commanders to rely more heavily on the "training, initiative and ability of [their subordinates] to instantly grasp their plans and push them through successfully."[21]



Canal du Nord battle planning map detailing the brigade boundaries and objectives of the Canadian Corps

Source: Base map supplied by Ordnance Survey and modified by Field Survey Battalion, produced September 1918

The open warfare style can be characterized by three distinct phases. The first phase was the traditional set-piece attack in which the infantry and tanks advanced forward under the cover of a heavy field artillery barrage. The second phase continued out beyond the range of the field artillery, but still within the range of the heavy howitzers, making it an extension of the set-piece attack. The final phase was characterized by the continued advance of the infantry and tanks beyond the cover of the artillery. This was essentially the open warfare phase, in which commanders on the ground were given the freedom to continue fighting forward or remain under the protective fire of the heavy howitzers. What made this unique from German doctrine was the fact that the exploitation past the final objectives of the second phase were limited by pre established lines representing suggested objectives.[22]

Further enabling the success of this style of attack, Currie provided his subordinate commanders an outline of the "operation and his plans for carrying it out." They were then free to make plans of their own to achieve the tasks laid out for them by Currie and his planning staff. They were also afforded the opportunity to propose amendments to the plan in order to meet their tactical needs.[23] Through this process, Currie was able to increase the tempo of the battles the Canadian Corps was involved in.

Currie's focus on the main effort, given by the final objectives indicated in the second phase of his open warfare attacks, combined with his mission-type orders, meant that his subordinate commanders understood his intent and possessed the freedom to plan their own battles. The addition of the open warfare phase with suggested objectives gave the subordinate commanders deeper insight

into his overall intent while allowing for the exploitation of tactical opportunities. Through his use of mission command, Currie was able to generate a style of attack following many of the principles of the manoeuverist approach. With the reduced need for his own personal detailed planning necessitated by the set-piece attacks of 1917, he was able to focus more at an operational level of the war.

THE LAST HUNDRED DAYS: AN OPERATIONAL FOCUS

Through his insight and tactical prowess, Currie was able to influence the operational level of the war throughout the Western Front within the last hundred days of the war.[24] Upon hearing of a secret offensive on Amiens, he volunteered the Canadian Corps, citing the fact that he and his staff had already been planning for such an offensive. Using the Canadians would further ensure the secrecy of the operation. Using deception, Currie was able to surprise the Germans and defeat them. He then convinced Field Marshall Sir Douglas Haig to pull the Canadians from the line at Amiens and shift them to the Drocourt-Quéant Line.[25] The Germans' surprise at Amiens was equaled upon the appearance of the Canadians at the Drocourt-Quéant Line only 18 days later, at full strength again, crashing through the Hindenburg Line defences and shattering the Germans' morale.[26] Currie's successes were in large measure possible because of the experience of his subordinate general officers.

The Canadian Corps, unlike British corps, remained mostly homogenous during the war in that they tended to be kept as a single corps.[27] The fact that all the general officers under Currie had prewar military experience also helped in his ability to fight as he did.[28] It was this working together for much of 29 months that allowed Currie to trust them to the level required for him to successfully manage control of his "new, fast-paced type of warfare" through his issuance of mission-type orders and dictating tempo.[29]

Through his focus on operational effects and the insistence on committing the Canadian Corps towards these ends, Currie was able to influence Allied objectives and increase the operational tempo of the war. This had a dramatic effect on the cohesion and will of the German defenders. Currie's surprise attack at Amiens, shortly followed by the attack on the Drocourt-Quéant Line showed a level of agility that ensured the destruction of the Germans' morale and disrupted their defensive line by destroying the hinges that held it together. His trust in his subordinates to achieve his intent allowed him to enact his open warfare method, leading to the major assault and rout of the Germans at the Canal du Nord.

CANAL DU NORD: BREAKING THE GERMAN DEFENCE

When faced with the problem of the Canal du Nord, Currie again went forward to assess the situation. Seeing an impassable marsh due to flooding along the Canadian Corps' front, he advocated for a piece of First Army's front, which contained a 2,600 yard stretch of dry canal.[30] It was through this narrow opening that he intended to push the Canadian Corps, fanning out to a 10,000 yard frontage to the east and north, allowing them to roll up the Marquion Line and envelop Bourlon Woods, ultimately isolating Cambrai.[31] His plan was initially opposed by his superior, General Henry Horne, as he deemed it too dangerous, but Horne eventually abdicated and allowed Currie to carry out his plan.[32]

Currie was now free to enact his plan, using the open warfare style he had now perfected. In his usual way, he issued orders "based on a sound, daring, general plan of attack into which subordinate commanders could fit changes, depending on their tactical requirements."[33] His subordinate commanders trusted his judgement while acknowledging the risks. The commander of the 1st Canadian Division, Major-General A.C. Macdonell, reflected that "notwithstanding its difficulties I felt the Corps Commander [Currie] had solved the problem boldly and correctly. The very boldness of his plan intrigued me and I was all for it."[34]

Currie acted boldly and decisively in his plan to exploit the vulnerability offered by the gap in the canal. He avoided the strong natural defence the canal offered to the Germans and penetrated deep into their position, rendering their defence on the Canal du Nord untenable and forcing their withdrawal.[35] Through his command technique, which anticipated what we now know as mission command, his operational technique had evolved from the beginning of the war, culminating with a true manoeuverist approach at the Canal du Nord.

CONCLUSION

Currie's operational technique evolved throughout the Great War from a deliberate, limited objective set-piece attack to the open warfare he used during the last hundred days. Highly effective at avoiding enemy strength and exploiting vulnerabilities, Currie was able to influence the operational level of the war on the Western Front. This in turn allowed him to shatter the will and cohesion of the German defenders through pre-emption, dislocation and disruption. Trusting his subordinates to achieve his intent, his mission command type leadership enabled him to incorporate many of the principles of the manoeuverist approach into his operational technique. This paper has shown that the Canadian Army's adoption of these two concepts in its doctrine was not simply a grafting of German doctrine from the Second World War onto its own way of thinking. Currie's command and operational techniques reflected modern mission command and manoeuverist approaches.

ABOUT THE AUTHOR...

A Service Paper submitted in partial fulfillment of the requirements for AOC 32, Syndicate 3, Canadian Army Command and Staff College, 19 May 2015.

ENDNOTES

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2. Charles S. Oliviero, "Trust, Manoeuvre Warfare, Mission Command and Canada's Army," *The Army Doctrine and Training Bulletin* l, no. 1 (August 1998): 24.
3. *Land Operations*, 5-65.
4. Ibid., 5-65, 5-67.
5. Ibid., 5-73–5-74.
6. B-GL-300-003/FP-001, *Command in Land Operations* (Ottawa: DND Canada, 2007), 2-4.
7. Ibid.
8. Ibid., 2-7.
9. Ibid., 2-5.
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12. Christopher Pugsley, "Learning from the Canadian Corps on the Western Front," *Canadian Military History* 15, no. 1 (Winter 2006): 21.
13. Barrett, "General Sir Arthur William Currie," 54.
14. Ian M. Brown, "Not Glamorous, But Effective: The Canadian Corps and Set-piece Attack, 1917–1918," *Journal of Military History* 58, no. 3 (July 1994): 425–427.
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24. Barrett, "General Sir Arthur William Currie," 55.
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Source: Canada. Dept. of National Defence/Library and Archives Canada/ PA-001087

The Lieutenant-General Michael Jeffery Writing Award for Battle Studies

The article by

Captain Richard T.D. Parent

(*The Second Lebanon War: An Analysis of the Shortfalls of Israeli Joint Fires and the Success of Hezbollah Information Operations*)

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The Lieutenant-General Michael Jeffery
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is presented to the AOC student who submits,
in the estimation of the *Canadian Army Journal Board*,
the best service paper on a historical battle.

THE SECOND LEBANON WAR:

An Analysis of the Shortfalls of Israeli Joint Fires and the Success of Hezbollah Information Operations

Captain Richard T.D. Parent

> The victory we are talking about is when the resistance survives. When its will is not broken, then this is victory… When we are not defeated militarily, then this is victory.
>
> —*Sheikh Hassan Nasrallah,* 20 July 2006

The Second Lebanon War was a 34-day campaign undertaken by Israel against Hezbollah, an Iranian proxy terrorist organization based in southern Lebanon, which resulted in the first major war to end without a clear military victory by Israel in its nearly six-decade history. The conflict was triggered by the abduction of two Israel Defense Forces (IDF) soldiers following a complex Hezbollah ambush on the morning of 12 July 2006, which left an additional three IDF soldiers dead and three wounded. Israel's Prime Minister, Ehud Olmert, declared the ambush and subsequent abduction an act of war and promised that Israel's response, named Operation CHANGE OF DIRECTION, would "be restrained, but very, very, very painful."[1]

The conflict would be the culmination of Hezbollah's two-decade campaign against Israel from southern Lebanon and validation of the organization's strategic objective to "retain its capacity to continue firing rockets into Israel in spite of any and all retaliatory measures undertaken by the IDF in a bid to weaken the Israeli's public resolve for the confrontation."[2] With an operational design based upon the presumption that Israel no longer had a tolerance for war and its inevitable butcher's bill,[3] the resultant focus on the employment of rocket artillery systems from complex and prepared firing points, coupled with a deliberate information operations campaign, would set the conditions for Hezbollah's legitimacy as a military force and promote their political influence within Lebanon.

Israel, on the other hand, would fail to define and achieve realistic strategic objectives, which did little to scope and focus the operational goals and tactical actions of its forces. The inability of Israeli decision makers to define a relationship between tactical military action and strategic political objectives[4] resulted in a focus on the application of standoff precision firepower in an effects-based campaign against symbolic Lebanese targets and Hezbollah's military capability. The plan was not to directly or fully destroy Hezbollah's capabilities, but to produce effects that would force Hezbollah out of southern Lebanon, cause them to disarm, and force the return of the two abducted soldiers. Despite the subsequent air campaign against what Israel deemed Hezbollah's strategic Centre of Gravity (CoG), joint fires alone failed to provide any enduring result, resulting in the commitment to a major ground offensive on 17 July. As termed by Matt M. Matthews, Israel's mixing of a "brew of high-tech fantasies and basic unpreparedness"[5] would then set the stage for a conflict that would be marked by praise for Hezbollah's tactical prowess and criticism of Israel's inability to leverage its marked advantage in fire support, which ultimately led to operational and strategic failure.

These overarching themes will form the foundation for this paper's analysis of the combatants' opposing operational techniques and the factors determining the outcome of the conflict. To this end, two topics will be addressed: the impact that fires had on the outcome of the campaign, and the effectiveness of Hezbollah in fighting the IDF on the moral plane. This will be achieved through a study of the fire support capabilities of both sides, followed by an analysis of the IDF's focus on the application of joint fires on the physical plane and Hezbollah's resultant ability to leverage the results on the moral plane. Ultimately, this paper will show that the IDF's ineffective application of joint fires failed to create enduring success during the Second Lebanon War and set the conditions for Hezbollah to dominate the psychological plane through a highly effective Information Operations campaign.

CAPABILITIES AND THE APPLICATION OF FIRE SUPPORT

On the evening of 12 July 2006, Israeli Air Force (IAF) strike aircraft supplemented by IDF artillery began a targeted campaign against known Hezbollah positions south of the Litani River. Targets included key logistics and transport infrastructure across Lebanon, Hezbollah's rocket capability, command and control (C2) nodes, and the organization's primary messaging platform, al-Manar television.[6] Israeli firepower at the onset of the war was predominantly applied through IAF air power from an impressive inventory of assets including 59 F-15A/B/C/D Baz (Falcon), 24 F-15I Ra'am (Thunder), 104 F-16A/B Netz (Hawk), 126 F-16C/D Barak (Lightning), and 102 F-16I Sufa (Storm) aircraft.[7] Over 14,000 armed sorties were flown which saw 21,600 air-delivered weapons employed, including 7,732 precision guided munitions, in the prosecution of 7,000 targets. These levels were unprecedented for a single air offensive in the IAF's history. Only the Yom Kippur War of 1973 with 11,223 sorties compares.

Forward deployed IDF artillery units, employing the 155-mm M109A5 Rochev and Doher platforms and M270 Multiple-Launch Rocket System (MLRS), augmented effects at standoff distances with an excess of 120,000 rounds being fired during the conflict. Combined, however, these pre-planned strikes proved ineffective in quelling the constant rocket attacks into northern Israel.[8] Overall, attempts to defeat Hezbollah logistical sites and defensive positions at the beginning of the war proved futile, as did a targeted attack on Hezbollah's leadership in Beirut. Matthews notes that a US official who closely monitored the war speculated that the IAF air strikes impacted only seven percent of Hezbollah's military resources in the opening three days of the war.[9]

Hezbollah, on the other hand, utilized their arsenal of rocket artillery as a primary means to achieve their operational and strategic end state of enduring the onslaught of Israel's military might and exploiting their assessment of a "brittle post-military society."[10] Despite their inherent limitations in accuracy and reliance on sustained and massed fires to inflict real damage, Hezbollah's rockets represented "psychological and political weapon[s] with strategic effects."[11] By showcasing that they were capable of launching uninterrupted barrages into Israeli territory despite the IDF's massive precision firepower, Hezbollah demonstrated to the world their resolve and endurance in the face of a technologically superior adversary. In fact, rates of

Source: http://mida.org.il Photo by Olivier Fitoussi

Israeli artillery fires on the Hezbollah targets at the Israeli-Lebanese border on July 18, 2006

rocket fire into northern Israel escalated in direct reaction to IAF air strikes in emphasis of their campaign theme. The first notable incident of this was in the opening days of the war when Hezbollah fired long-range rockets against the city of Haifa for the first time in response to an IAF strike against Beirut's southern suburbs mere hours before.[12]

To enable actions against Israel, it was assessed that by 2006 Iran and Syria had supplied Hezbollah with an arsenal of 12,000 to 13,000 short-, medium-, and long-range rocket systems and had trained Hezbollah fighters in their deployment and use. The majority of the rockets, some 80% to 90%,[13] consisted of the 122-mm Katyusha with a range of 20 km which were deployed to saturate southern Lebanon from prepared positions within three to four kilometres of the border. In anticipation of Israel targeting its firing positions using standoff precision strikes, Hezbollah systems were emplaced utilizing the tenets governing cover, camouflage, concealment, and deception (C3D). Rockets were emplaced within hilltop villages and towns, dug into hillsides, camouflaged as civilian trucks, and even mounted on pneumatic lifts used to raise and lower weapon systems from complex underground shelters.[14] Systems capable of ranges greater than 20 km included several hundred Iranian systems consisting of the Fajr-3 (240 mm, range 43 km), Fajr-5 (333 mm, range 75 km), and the long-range Zelzal-2 (610 mm, range 210 km). Syrian rocket systems employed by Hezbollah included the BM-27 Uragan (220 mm, range 70 km) and the Khaiba-1 (302 mm, range 100 km).

Source: Wikipedia. By Israel Defense Forces

A rocket launcher hidden underground

Between 13 July and 13 August 2006, Israel was struck with 4,228 rockets, averaging between 150 and 180 rockets per day during the first 10 days of the conflict, peaking at 350 on 18 July.[15] The looming threat of Hezbollah's capability to strike Tel Aviv produced a significant psychological effect on the Israeli populace, which was reinforced on 3 August when Hezbollah Secretary General Hassan Nasrallah said in a televised address that if Israel struck the centre of Beirut, "We will bomb the capital of your usurping enemy . . . We will bomb Tel Aviv." This suggested that Hezbollah had maintained Zelzal-2 rockets in reserve, despite the IDF's top military leader, Chief of the General Staff Lieutenant General Dan Halutz's earlier report to Prime Minister Olmert following the initial strikes on 12 July that "all the long-range rockets have been destroyed. We've won the war."[16] This now infamous quote is utilized by scholars and historians to reinforce the fallacies in Israel's anachronistic approach to the use of firepower.

THE SHORTFALLS OF IDF JOINT FIRES

It is now widely accepted that the defeat of Hezbollah required joint combined arms fire and manoeuvre, something the IDF was largely incapable of executing in 2006. In its proper application, fire support suppresses and fixes the enemy, enabling ground forces to close with and ultimately destroy them. Joint fires are also leveraged to isolate an enemy, cutting off avenues of withdrawal, supply, communication, and limiting their ability to consolidate. Manoeuvre, enabled by fire support, forces enemy reaction, and if the enemy attempts to relocate to more favourable terrain, they become visible and vulnerable to fire. If they remain in their positions and are suppressed, they can be subsequently defeated by ground manoeuvre.

Thus, in order to defeat hybrid opponents such as Hezbollah, integrated joint fires enabled by an efficient and responsive sensor-to-shooter link as its enabler are essential.[17] These underlying principles were not executed by the IDF and were a key factor in the inability to execute a successful campaign.

The IDF's heavy reliance on standoff precision weapons from artillery and air platforms was correctly assessed by Hezbollah in the years leading up to open hostilities. The analysis of Israel's limited "stomach for the casualties" associated with a ground invasion established the justification for Hezbollah's use of deception, concealment, and guerrilla warfare as a means to degrade the effects of standoff firepower. However, as Sarah E. Kreps states, the allure of airpower was seemingly justified by IDF leadership at the time. General Halutz, a former commander of the IAF, was the principal proponent of airpower as "a low cost—primarily in terms of casualties—way to defeat the adversary."[18] This victory from the air thesis was rooted in Israel's observation of recent successes of Western powers in conflicts such as DESERT STORM in 1991 and Kosovo in 1999, which resulted in the assertion that Israel would have "to part with the concept of a land battle . . . Victory is a matter of consciousness. Airpower affects the adversary's consciousness significantly."[19] This commitment to an Effects Based Operations (EBO) approach was also the direct result of the distaste for the casualty rates associated with the use of ground forces shared by all Western nations and the costly 18-year occupation of southern Lebanon still fresh in the Israeli public's psyche. Ultimately, General Halutz's assessment was that Israel could achieve its strategic goals through firepower alone, whereby the IDF would be exposed to a much lower risk of casualties.

Source: Wikipedia. By tomergabel - http://www.flickr.com/photos/tomergabel/2086915278/sizes/l/

Smoke over Haifa, Israel, after a rocket launched by Hezbollah hit the city near Bnai-Zion hospital

However, as early as 14 July, Israeli intelligence suggested to high-ranking military and political leaders that air power alone could not accomplish the mission. Despite the initial achievement of strategic surprise by Israel in aggressively striking targets in depth beyond southern Lebanon, it was experiencing diminishing returns as the conflict approached its first full week. Reports stated that the plan would neither win the release of the two Israeli soldiers in Hezbollah's hands nor reduce the rocket attacks on Israel to fewer than 100 a day.[20] The result was Israel's commitment of ground forces into southern Lebanon on 17 July and the showcase of the deficiencies of IDF Joint Fires capability. As Benjamin S. Lambeth states in his article "Forging Jointness Under Fire," the near total breakdown in the effective integration of air and land operations that had been allowed to develop between the IDF and the IAF, ultimately contributed to Israel's inability to achieve enduring results in south Lebanon in 2006.[21]

As a result of a period of relatively low-intensity policing operations conducted against the Palestinian intifada in Gaza and the West Bank, the operational integration between the IAF and IDF ground forces had become all but nonexistent. In fact, the IAF had removed the allocation of platforms from the close air support (CAS) role altogether,[22] resulting in the reliance on integral fire support in the form of artillery and rockets to enable ground manoeuvre. This delineation of tasks permitted the IAF to focus exclusively on deep strikes against pre-planned targets in the form of the Canadian and US equivalent of Air Interdiction (AI) or Deep Air Strike (DAS) tasks beyond the Fire Support Coordination Line (FSCL). Compounding the lack of air-land fires integration was the fact that the IDF's joint C2 system had not been exercised in a realistic training environment in nearly six years. This was further degraded by the IAF's micromanagement of air support during tactical ground operations so as to ensure positive control in the interest of avoiding collateral damage incidents.[23] The resultant coordination issues induced significant delays in the sensor-to-shooter link, which proved essential in the engagement of fleeting, time-sensitive Hezbollah targets. As a result, despite the presence of approximately 10,000 IDF soldiers in southern Lebanon, ground forces had managed to penetrate no further than four miles in three weeks of operations.[24] It was also around this weakness in tactics that the effects of Hezbollah information operations came into full effect.

THE SUCCESS OF HEZBOLLAH INFORMATION OPERATIONS

The foundation of Hezbollah's strength in the face of overwhelming Israeli military capability was their lack of traditional high-value assets.[25] Despite the IDF's focus on Hezbollah's rocket capability, C2, and infrastructure, the targeting of these systems required effects against elusive targets hidden amongst mosques, day care centres, and schools.[26] Not only did these strikes achieve limited success, but they also came at the cost of Lebanese civilian casualties and significant collateral damage. Hezbollah was able to exploit the aftermath of these strikes and emphasize the "egregious and disproportional"[27] result within the international media through an efficient and low-cost approach to Information Warfare.

Throughout the conflict, Hezbollah's capability to utilize the media as a combat multiplier resulted in the portrayal of Israeli attacks against civilians as inhumane and, as Sarah Kreps states, "became a rallying cry for Hezbollah individuals in the region and beyond."[28] In fact, in a parallel to current operations by other Networked Terrorist Groups,[29] such as the Islamic State in Iraq and Syria, Hezbollah was able to utilize their public affairs campaign to leverage support from across the Arab world which resulted in the successful recruitment of untold hundreds of foreign fighters to their cause. The transmitted images and video even had the effect of shaping regional moderate fence-sitters such as Egypt, Jordan, and Saudi Arabia, which had initially voiced criticism of Hezbollah's actions at the outset of the conflict, but soon faced anti-Israeli protests within their respective countries.

Ultimately, Hezbollah was able to defeat a superior force both in size and capability, by applying the tenets of Manoeuvre Warfare on the psychological plane simply by catering to the international community's distaste for unnecessary and disproportionate collateral damage and loss of civilian life. This "civilian-victim narrative," as coined by LTC Michael D. Snyder,[30] holds true in any operation against a hybrid threat. As the barrage of strikes continued, especially in Qana on 30 July, where 28 civilians were killed in an IAF strike,[31] so too did the images broadcast by the world's media and which ultimately led to the backlash that paved the way for intervention by the international community through the ceasefire outlined under UN Resolution 1701.

CONCLUSION

In conclusion, this paper has shown that the IDF's ineffective application of joint fires failed to create enduring success during the Second Lebanon War and set the conditions for Hezbollah to dominate the psychological plane through a highly effective Information Operations campaign. The study of this conflict reinforces the unique set of challenges that exist when combatting an asymmetric, hybrid adversary and highlights the reality that a country's material and technological advantage does not translate into success on the battlefield against a determined and elusive opponent. It also brings to the forefront the strength of Information Operations as a decisive tool of modern warfare and the dangers of misplaced emphasis on joint fire support in isolation from ground manoeuvre.

ABOUT THE AUTHOR...

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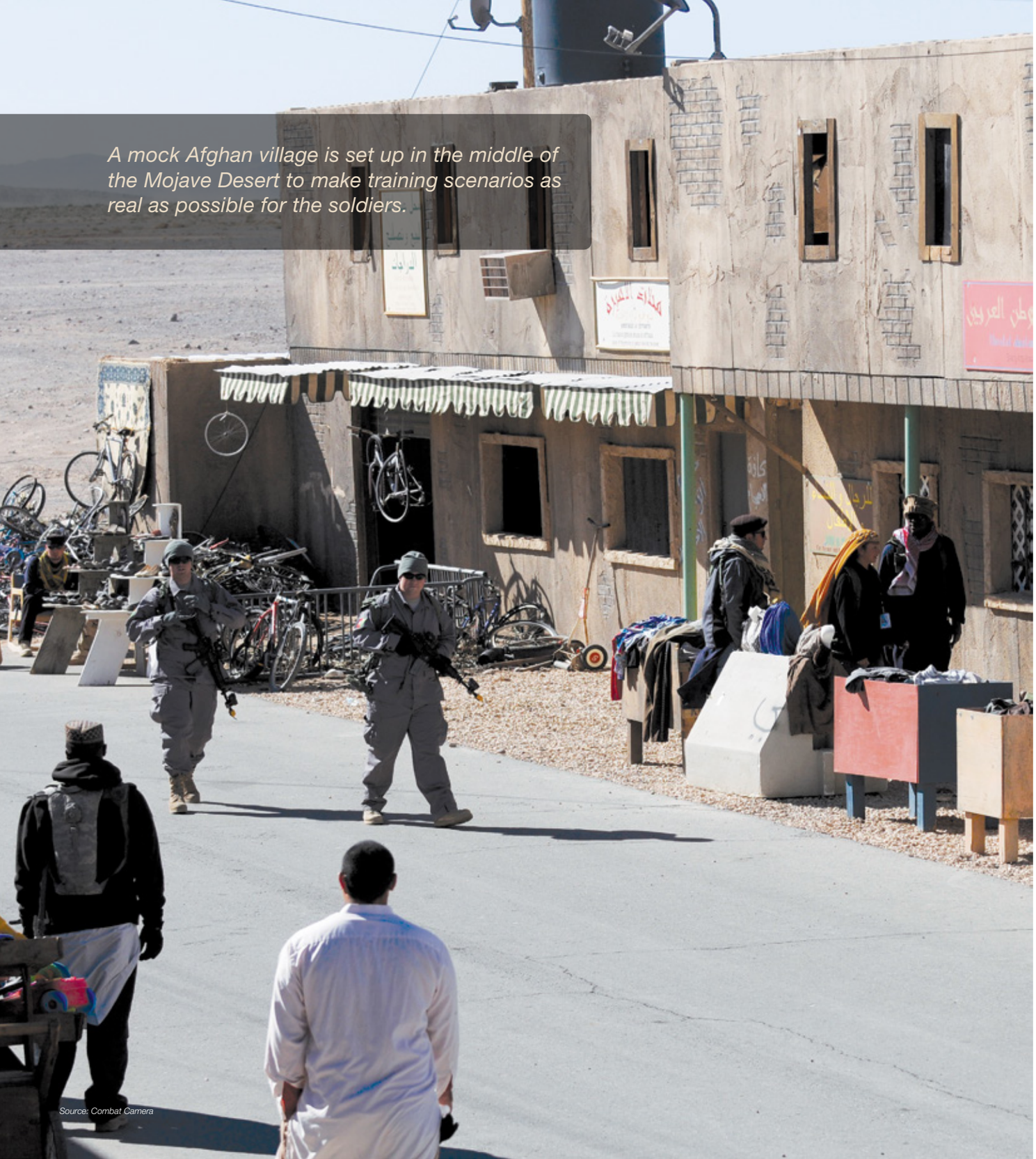
Source: Public Domain



A mock Afghan village is set up in the middle of the Mojave Desert to make training scenarios as real as possible for the soldiers.

Source: Combat Camera

THE BLACK ART OF RED TEAMING:
15 Axioms

Matthew A. Lauder

Red teaming[1] has received significant attention from a number of North Atlantic Treaty Organization (NATO) nations over the last decade. For example, the United States (US) Army established a number of red team courses at the University of Foreign Military and Cultural Studies (UFMCS) at Training and Doctrine Command (TRADOC),[2] and the US Army and Marine Corps require red teams to be employed by Brigade and Division headquarters (HQs) in operational theatres.[3] The United Kingdom (UK) Ministry of Defence (MOD) recently published its second red teaming guide,[4] and NATO has also established a concept for red teaming, although under the brand of "Alternative Analysis."[5-6] The Canadian Armed Forces (CAF) has also employed red teams to support various missions, including Operation PODIUM[7] and Operation ATHENA,[8] and has used red teams to support other planning and foresight activities.[9] In addition, red teaming professional development (PD) activities have been held at the Royal Military College of Canada (RMCC) for senior officers and Department of National Defence (DND) civilian personnel.

However, while significant investment and red teaming has occurred in recent years across NATO countries (including Canada), this author believes there is an overall lack of understanding of red teaming in the Canadian defence community.[10] Many military officers and civilians I have talked to consider red teaming to be just another form of Opposition Force (OPFOR) or a type of advanced war game. In addition, some dismiss it as a distraction or, even worse, a deliberate attack on conformity that unnecessarily consumes much-needed resources in a time of constraint. As a result, and in the view of the author, red teaming, at least in the Canadian context, has not been utilized to its fullest potential possible in support of defence planning and operations.

The objective of this paper is to promote a more comprehensive understanding of red teaming amongst members of the Canadian defence community. This will be achieved by highlighting 15 axioms of red teaming (which are based on Defence Research and Development Canada [DRDC],

Toronto Research Centre's red teaming activities conducted between 2008 and 2014)[11] and proposing a revised definition of red teaming for use by the Canadian defence and security community.[12-13]

RED TEAMING CONTEXTS

Before proceeding with a discussion of the 15 axioms, a brief outline of the four red teaming contexts, and their associated red teaming activities, must first be provided. In essence, the four red teaming contexts in which DRDC, Toronto Research Centre has been involved include: (1) professional development (PD),[14] (2) planning and operations, (3) capability gap analysis, and (4) concept development and experimentation (CD&E).

PROFESSIONAL DEVELOPMENT AND TRAINING SUPPORT

Red teaming professional development (PD) can be divided into two sub-categories. The first sub-category is that of red teaming education. With the assistance of RMCC, several red teaming educational sessions were held between 2010 and 2011. However, two RMCC-led sessions are particularly noteworthy. The first activity was a round table held in Ottawa in January 2011. This activity involved senior civilian scientific, academic and military leaders debating the value of red teaming in government decision making, specifically within a defence context. Under the banner of "Red Teaming University," the second activity was a four-day red teaming symposium and conference held at RMCC in March 2011. This event was specifically designed to expose the audience to the concept and value of red teaming, and brought together civilian and uniformed members from across the Canadian and American defence community. A third professional development activity worth noting was held in 2009. Designed to serve as an introduction to red teaming methods in support of operational planning for Joint Task Force Games (JTFG) / Vancouver 2010 Winter Olympics (V2010), this activity was hosted by the Games Red Team (GRT) and involved both civilian defence and security representatives, law enforcement officials, and military members from Canada and the US, including Greg Fontenot (Colonel, US Army retired), then director of the Red Teaming program at UFMCS.[15-16]

The second sub-category is that of training support. Since 2008, DRDC has been involved in the employment of red teams in various exercise environments, notably at the tactical level. In an exercise context, the purpose of red teams, more commonly referred to as *red cells*, is to increase training value through enhanced realism. Unlike traditional Opposition Force (OPFOR) role players, which often do not receive training specific to their roles and have limited employment, red cells (ideally) are involved in the entire exercise process, including the conception, design and execution of the exercise as well as specific training to role-play civilian and enemy forces during the exercise.

PLANNING AND OPERATIONS

Red teaming has been used on several occasions to support military planning and operations.[17] For example, a highly structured form of red teaming was twice used in support of course of action (COA) war-gaming exercises in 2009 for mission rotations in Afghanistan. A limited form of red teaming, which involved academic and subject-matter experts (SME) generating arm's-length reports, was used in support of small mission planning, notably for specific areas of North and Central Africa. In 2010, this author was deployed to Afghanistan to support Combined Joint Task Force 82 (CJTF 82) Decision Support Red Team (DSRT) under Operation ENDURING FREEDOM (OEF) in Regional Command East (RCE). Lastly, red teaming was employed in support of JTFG/V2010, specifically to identify, examine and mitigate a range of threats.[18] Although a domestic operation, JTFG/V2010 represents the most extensive, robust and systematic application of red teaming activities by the Canadian defence community in support of a military operation.

CAPABILITY GAP ANALYSIS

Red teaming has been used to support capability gap analysis and to identify capability development requirements. For example, structured red teaming was used in support of International Task Force 55 (ITF 55), which is a 4-eyes group that supports chemical, biological and radiological (CBR) defence capability development. Specifically, red teaming techniques were used to identify and assess critical nodes in the adversary biological threat-event continuum (what is commonly referred to as *the left-of-boom space*), as well as blue-force responses, for the purpose of enhancing prevention of and preparedness for a CBR event in domestic or expeditionary contexts. Similarly, red teaming was used by the Canadian defence community in addressing the "Defeat the Chemical, Biological, Radiological, Nuclear and explosive (CBRNe) Terrorist Threat Science and Technology (S&T) Hard Problem." Like that of ITF 55, red teaming in support of the CBRNe Terrorist Threat S&T Hard Problem was used to examine the pre-event space, specifically to identify and examine the human and technological capabilities required to mitigate and prevent an event in a domestic or expeditionary context. However, rather than a single (i.e., one-off) activity, a *program* of red teaming was conducted over a period of two years to more fully appreciate the pre-event space, in particular to identify possible points of pre-event interdiction. This red teaming program included the design and execution of red team working groups (RTWG) as well as tabletop exercises (TTX) and peer-review activities. Lastly, red teaming techniques were used in support of Royal Canadian Air Force (RCAF) future security environment (FSE) capability gap analysis activities, specifically examining air force requirements for operating in the Arctic in the 2030 to 2040 timeframe.

CONCEPT DEVELOPMENT AND EXPERIMENTATION

Unfortunately, very few examples of red teaming used in support of concept development and experimentation (CD&E) exist in the Canadian defence context, although red teaming has been exploited more effectively in US CD&E efforts.[19] Two recent Canadian examples include the application of red teaming techniques to assess non-kinetic targeting collateral damage estimate (CDE) methodology development and the Religious Leader Engagement (RLE) conceptual framework. However, it should be noted that red teaming was applied in a very limited, informal and post hoc manner, that is, at the back end of the CD&E process as a limited and compartmentalized form of war-game. It is argued by this author that the value of red teaming techniques may be more fully realized when applied across the CD&E process, especially at (but not limited to) the front end of the CD&E process to support problem-space exploration and issue identification.

FIFTEEN AXIOMS OF RED TEAMING

The following is a list of 15 axioms of red teaming gleaned from DRDC's involvement in red teaming across the four contexts over a seven-year period (2008–2014). It should be noted that these axioms are not necessarily in order of priority; rather, they hold equal weight.

1. **Red teaming is not (necessarily) about the enemy.** One misconception that needs to be dispelled right from the start is that red teaming is exclusively about the enemy, or potential adversaries.[20] Red teaming is not only about the enemy. Yes, red teams can and do represent or role-play the enemy, depending upon the form and purpose of the red teaming activity. However, red teams also represent the views and perspectives of all the parties (social agents) found in the battlespace, be they friendly or neutral (blue, green, white, etc.).[21] The term "red team" is not derived from who is being role-played or represented; rather, it is derived from the fact that the red team *intentionally challenges* the viewpoints and assumptions of a particular audience (i.e., to overcome cognitive and organizational bias, group-think and complacency). In other words, the "red" in red teaming speaks to being challenged (*red* = *challenge*), not a particular player, such as the enemy.

2. **Red teaming is not a specific technique.** There has been some debate as to what is and is not red teaming.[22] Although some practitioners argue that red teaming is a specific technique (e.g., to detect and exploit computer network vulnerabilities or the use of agent-based simulation to test courses of action),[23] this author (like that of the red team courses at UFMCS, TRADOC) argues that red teaming should be seen as a broad conceptual category encompassing a range of challenge techniques (i.e., it is an umbrella for a number of techniques).[24-25] For example, red teaming includes various challenge techniques ranging from futures and alternative analysis through covert testing and threat emulation. In other words, red teaming is a family of challenge techniques.

3. **Red teaming is a formal and specifically trained undertaking.** What separates red teaming from traditional OPFOR or Enemy Force (ENFOR) is that red teams are formal groups that are formally and specifically trained (usually through a red teaming course, such as those offered at UFMCS) to do the job of challenging convention.[26] They are trained to seek out and challenge the status quo, which implies that blue force assets cannot merely be re-tasked to do the red team endeavour (i.e., the end-user without proper training).[27] The issue is that, without proper training, the red team will not be able to effectively disengage from, and overcome, conventional perspectives and cognitive bias.

4. **Red teaming is an organized, deliberate and sanctioned activity.** Although there may be some value in impromptu challenging of the status quo, red teaming is an organized, deliberate, and sanctioned activity.[28-29] That is, red teaming does not just happen; rather, red teaming activities are planned and conducted with specific objectives in mind, and are also approved by command authority. Impromptu challenging of the status quo, no matter how well meaning, runs the risk of nurturing internal conflict. Moreover, without official sanctioning by command authority,red team outputs can be readily dismissed by the blue force.[30]

5. **Two general forms of red teaming.** Although red teaming can be understood as a broad conceptual category that includes a variety of challenge techniques, it can also be divided into two general (or elemental) forms: (a) Threat emulation red teaming (TERT) (i.e., physical and mimetic), and (b) Decision-support red teaming (DSRT) (i.e., didactic and dialectic).[31-32-33] TERT is a highly accurate and detailed acting-out of role-playing of the real world (e.g., the use of armed and civilian role players in field exercises). In contrast, DSRT is a narrative-based, analytical activity (e.g., US Army red teams are primarily an analytical-based, decision-support capability). Although applied in different and, arguably, complementary ways, both forms are used to challenge the status quo and overcome bias and group-think.[34]

6. **Expertise and credibility are critical to red teaming.** Specifically, this author is referring to expertise and credibility of the red team regarding the topic(s) to be addressed, as well as the techniques being employed.[35-36-37] Without expertise and credibility, the blue force will reject the outputs of the red teaming activity. It should be pointed out that expertise does not have to be organic to the group (although ideal, this author believes it unreasonable to assume the red team will be an expert in every topic); rather, the red team needs to have the means or a mechanism to pull in external subject-matter experts (SME), when appropriate.[38] It should also be noted that credibility is not only derived from SMEs, but also how the problem-set and the recommendations are bounded. By that, this author means the red team, when working through a problem and making recommendations, must work within *real-world* constraints. If not, the red teaming endeavour may be looked upon by the blue force as fanciful and dismissed as absurd and ludicrous (i.e., out of touch with reality).

7. **Red teaming should be a program of activity.** Rather than an isolated, one-off activity, a program (or enterprise) of red teaming should be utilized. A program approach allows for the red team to nurture a trust relationship with the end-user, which helps establish and build expertise and credibility. A program approach also allows the red team to conduct activities that increase in intensity and complexity over time. Although one-off activities are better than not red teaming at all, it is the opinion of the author that they can be overwhelming, which often leads the blue force to dismiss red teaming outputs.

8. **Balance between prescription and adaption.** As noted above, red teaming is an organized and deliberate activity. As such, many activities will be highly structured and prescriptive. However, red teams must also be adaptable and adjust to unforeseen situations, as well as opportunities to challenge the status quo.[39] In particular, red teams must be able to modify the techniques used to fit the situation, and also be prepared to adjust the level of intensity to meet the needs of the blue force.[40]

9. **Ideal red team size.** Be forewarned, a "one-size-fits-all" number of personnel for red teaming does not exist. It will depend on the context, client, and available resources. In operational planning contexts, such as decision support red teaming at a brigade or division HQ, the author's experience has shown that between three and seven people are ideal. In essence, this number allows the red team to more fully integrate into and interact with the blue force.[41] The only certainty about numbers is that, before red teaming program is launched, the red team leader should conduct an assessment of staffing resources requirements, and red teams should be designed to meet the particular needs of each audience and environment.

10. **No red team friendly environments.** Unfortunately, there is no such thing as a red team friendly environment, only degrees of resistance. Often, the blue force is highly resistant to red teaming, as they tend to perceive the activity as a nuisance or a threat.[42] The best course of action is to spend a significant amount of time at the front end of the red teaming activity to build a strong trust relationship between the red team and the blue force. This will pay dividends in the long run.

11. **Red teaming is about mutual respect.** The value of red teaming can only be realized when the relationship between the red team and the blue force staff is characterized by mutual respect.[43] In other words, respect is a two-way street. As noted above, blue force staff must see the red team as expert and credible.[44] Likewise, the red team must respect the ability and competence of the blue force. A lack of mutual respect will undermine the red teaming endeavour.

12. **Red teams don't wear parachutes.** Another way of articulating this point is by saying, "nothing beats shared pain."[45] The idea here is that red teams need to be involved in addressing an issue from the start. Simply coming in at the end of a planning cycle to throw in the red team's "two cents" is looked upon by the blue force as counterproductive. Red teams should not be seen as coming in at the last second to save the day (or to screw up a perfectly good plan); rather, they should be involved and interact with the staff throughout the planning cycle (or throughout the activity that is being red teamed). This approach allows for the socialization and buy-in of red teaming input, ensuring greater uptake by the blue force.

13. **Seagulls need not apply.** Nothing undermines red teams like showing up after the operation and pointing out the errors and miscalculations of the staff and saying, "I told you so." Although rare, I have seen this happen before, as well as the disastrous outcome.

14. **Top-down support is critical.** One of the most important aspects to successful red teaming is to have top-down support, or what I have previously called "positional authority."[46-47] In other words, the blue force commander must sanction the red teaming effort and must make the blue force members aware that the red team functions at the highest level possible.[48]

15. **Red teams are not a panacea.** Red teams are not a "silver bullet," and they are not going to solve all of the issues faced by the blue force.[49] In fact, they should not be pointing out or solving problems; rather, they should be facilitating solution development.[50] At the end of the day, the blue force staff "owns the plan," and it is up to them to decide the best course of action. The red team's role is simply (although, it should be stressed that the task of red teaming is never simple) to help the blue force overcome bias, group-think and complacency and better (i.e., holistically) appreciate the problem-space.

A REVISED DEFINITION OF RED TEAMING

Based upon previous research,[51-52] as well as the axioms gleaned from the last five years, the following working[53] definition is proposed for use by the Department of National Defence (DND) and the CAF:

> Red teaming is an organized, sanctioned and deliberate activity undertaken by a trained and credible team that challenges an organization through the application of critical techniques and methods. The goal of red teaming is to help the organization overcome complacency and group-think and nurture foresight.

Although developed specifically for the Canadian defence community, this definition can be used by the broader public and private sector, and at all levels of an organization (i.e., tactical, operational and strategic). More importantly, the definition is broad enough to be applied across the full spectrum of activity for an organization, including innovation, planning, training and professional development, logistics and operations, as well as management.

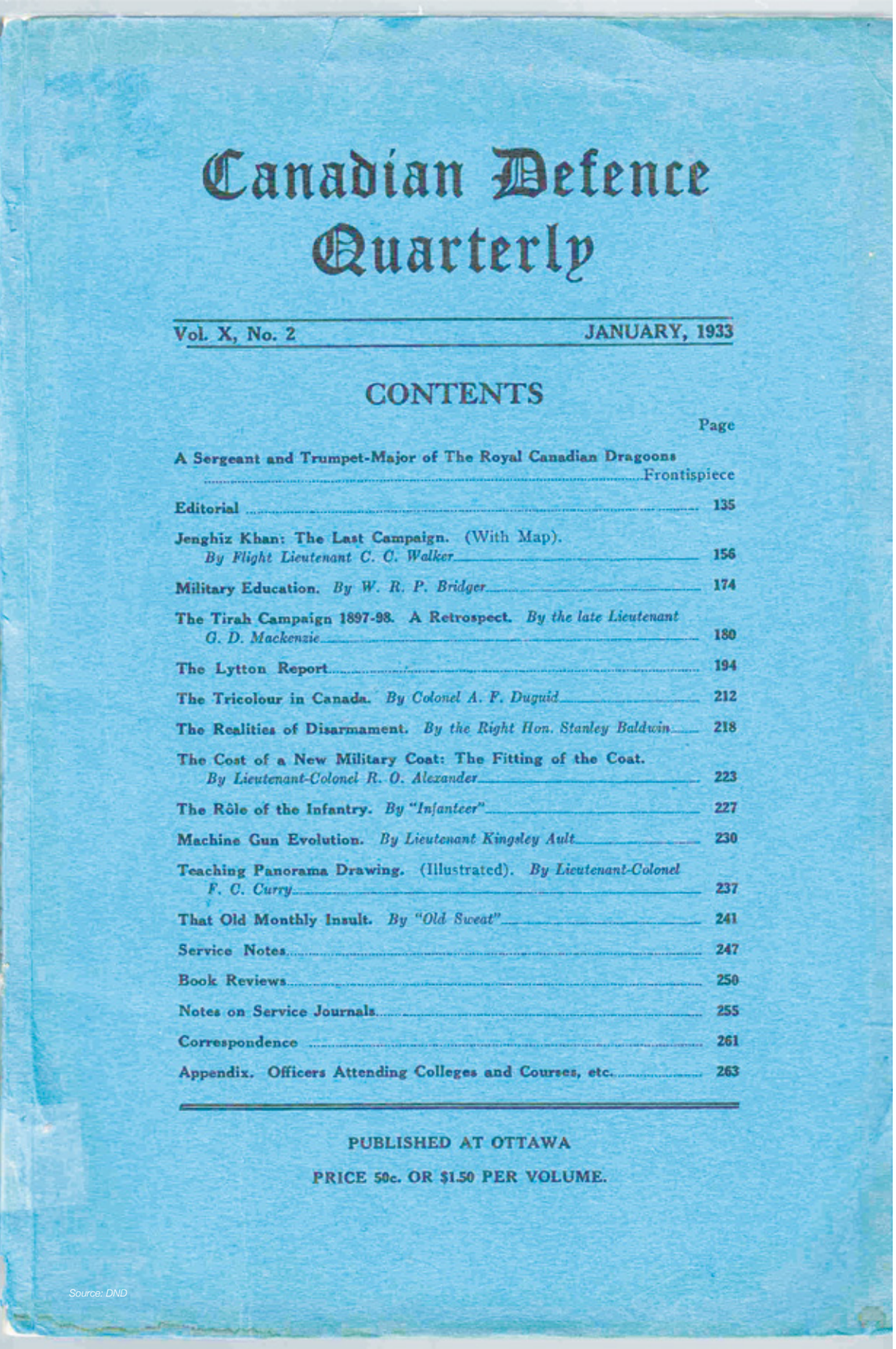
SUMMARY

Although red teaming has been utilized by the Canadian defence and security sector in the recent past, and red teaming has also been fully embraced by the US military and intelligence community as well as the UK and NATO, there remains a lack of understanding and appreciation of the activity in the CAF. Based upon DRDC experience in conducting and supporting red teaming activities over the last five years, 15 axioms have been identified. While all 15 axioms are important and have equal weight, four—at least in this author's opinion—deserve reinforcement. First, the "red" in red teaming refers to challenging the status quo in order to overcome organizational bias, group-think and complacency, and not necessarily from the perspective of the enemy. Second, two forms of red teaming exist: (a) Threat Emulation, and (b) Decision Support. Third, to be successful, red teaming needs to be sanctioned at the highest level possible of an organization. And lastly, red teams must be seen as expert and credible.

ENDNOTES

1. Red teaming is generally understood to be "a structured and iterative process executed by trained, educated, and practiced team members … [that] provides the commander with an independent capability to continuously challenge OE concepts, plans, and operations from partner and adversary perspectives." See Fontenot, G. (2005). Seeing Red: Creating a Red-Team Capability for the Blue Force. *Military Review*.
2. US Army Training and Doctrine Command. *Red Teaming*. Fort Leavenworth, Kansas: US Army.

3. Broderick, B. (24 June 2012). Does the Marine Corps Need Red Teams? Accepting Contrarian View Points. *The Marine Corps Gazette.* Retrieved from http://www.mca-marines.org/gazette/article/does-marine-corps-need-red-teams.
4. Development, Doctrine and Concepts Centre. (2013). *Red Teaming Guide (2nd Edition).* London, UK: Ministry of Defence.
5. North Atlantic Treaty Organization. (23 April 2012). *Bi-Strategic Command Concept for Alternative Analysis* (NATO publication No. TSC FEF-0040/TT-8108/SER: NU0018). Belgium: NATO.
6. The first Alternative Analysis Course was offered from 28 January through 08 February 2013, and was conducted by Allied Command Transformation (ACT) – NATO in collaboration with UFMCS.
7. Operation PODIUM was the military contribution in support of security operations for the Vancouver 2010 Winter Olympics.
8. Operation ATHENA was the military mission in Regional Command South (RC South), Afghanistan.
9. Lauder, M.A., Eles, P. & Banko, K. (2012). The Glaucus Factor: Red Teaming as a Means to Nurture Foresight. *The Canadian Army Journal, Vol. 14.1, 45–59.* Retrieved from http://publications.gc.ca/collections/collection_2012/dn-nd/D12-11-14-1-eng.pdf.
10. It can be argued that this lack of awareness is not limited to the Canadian defence community, but exists more broadly across NATO. However, for the purposes of this paper, I will discuss the Canadian context.
11. This paper is limited to red teaming activities or events led or supported by the Adversarial Intent Section (AI) / Socio-Cognitive Systems (SCS) Section at DRDC, Toronto Research Centre.
12. It should be noted that this paper is not intended to be a detailed and exhaustive account of red team practices or techniques. Rather, it is a brief overview intended to highlight the most salient lessons from seven years of red teaming. This paper should be used as a general guide for red teaming best practices.
13. A version of this paper was presented at the Red Teaming Conference hosted by UFMCS and the Red Team Support Group in San Antonio, Texas, in April 2012. The author thanks Colonel Jeannie Arnold and Lieutenant Colonel Eric Johnson of the US Army Red Team Support Group for the invitation and hospitality.
14. It should be noted that by red team professional development, the author means the training of defence community members in red teaming techniques (i.e., to be red teamers) and by training support the author means the use of red teams in support of individual training (IT) or collective training (CT) (i.e., within an exercise environment). Red teams in exercise environments are more commonly referred to as red cells.
15. Special thanks to Greg Fontenot, Daryl Combs, and John Roach for their hard work in the area of red teaming, as well as their support of red teaming in the Canadian defence community.
16. Wilner, A.S. (2010). Terrorism in Canada: Victims and Perpetrators. *Journal of Military and Strategic Studies*, Volume 12, Issue 3. Retrieved from http://jmss.org/jmss/index.php/jmss/article/viewFile/312/339
17. A more detailed discussion of red teaming in support of planning and operations can be found in the following articles: Lauder, M.A., Eles, P. & Banko, K. (2012) and Lauder, M.A. (2009). Red Dawn: The Emergence of a Red Teaming Capability in the Canadian Forces. *The Canadian Army Journal,* Vol. 12.2, 25–36.
18. Joint Task Force Games. (20 May 2008). *Red Team for JTFG*, 3350-1.
19. For further information on the employment of red teaming to support CD&E, see Fontenot, G. & Combs, D. (Summer 2008). Fighting Blue: Why First Class Threat Emulation is Critical to Joint Experimentation and Combat Development. *American Intelligence Journal,* 24–29. In the US, red teaming has been used to support the CD&E process, but typically at the back end of the process, that is, during the war-gaming and/or validation phase.
20. The author believes that it is this misconception that has largely marginalized red teaming, or has otherwise prevented it from broad application and acceptance by the defence and security community.
21. Lauder, M.A. (2009).
22. Defense Science Board Task Force. (2003). *The Role and Status of DoD Red Teaming Activities.* Washington, DC: Office of the Under Secretary of Defense for Acquisition, Technology and Logistics.
23. Abbass, H., Bender, A., Gaidow, S. & Whitbread, P. (February 2011). Computational Red Teaming: Past, Present, and Future. *IEEE Computational Intelligence Magazine.*
24. US Government. (March 2009). A Tradecraft Primer: Structured Analytical Techniques for Improving Intelligence Analysis. US Government.
25. Mulvaney, B. (July 2012). Red Teams: Strengthening through Challenge. *Marine Corps Gazette.*
26. Fontenot, G. (2005).
27. Lauder, M.A., Eles, P. & Banko, K. (2012).
28. Fontenot, G. (2005).
29. Gladman, B. (July 2007). The 'Best Practices' of Red Teaming. *Defence R&D Canada*, TM 2007-29.
30. While command sanctioning is critical to the red teaming endeavour, it is not a guarantee that it will be successful.
31. Lauder, M.A., Eles, P. & Banko, K. (2012).
32. Fontenot, G. & Combs, D. (2008).
33. Bunker, R.J. (2012). Force Protection and Suicide Bombers: The Necessity for Two Types of Canadian Military Red Teams, *Canadian Military Journal*, Vol. 12, No. 4.
34. For more information, see Lauder, M., Eles, P. & Banko, K. (2012).
35. US Marine Corps. (March 2009). The Red Cell. US Marine Corps.
36. Fontenot, G. (2007).
37. Malone, T.G. & Schaupp, R.E. (Summer 2002). The "Red Team": Forging a Well-Conceived Contingency Plan. *Aerospace Power Journal.*
38. Craig, S. (March–April 2007). Reflections of a RED TEAM LEADER. *Military Review*.
39. Lauder, M.A. (November 2008). Some Thoughts on Red Teaming. *Defence R&D Canada*, TN 2008-199.
40. Lauder, M.A., Eles, P. & Banko, K. (2012).
41. It should be noted that the red team should (ideally) not be seen as a separate or distinct entity, but rather an integral part of the blue force.
42. Mulvaney, B. (2012).
43. Mulvaney, B. (2012).
44. Malone, T.G. & Schaupp, R.E. (2002).
45. Ham, C.F., Fontenot, G., Pendall, D. & Closter, L. (September 2010). Red Team Reign: Red Team Support to Joint Task Force Decision Processes, *Red Team Journal.*
46. Lauder, M.A. (2009).
47. Fontenot, G. (2005).
48. Craig, S. (March–April 2007).
49. Ham et al. (2010).
50. Swanson, S. (2012). Enhancing Red team Performance: Driving Measurable Value and Quality Outcomes with Process Improvement, *Small Wars Journal.*
51. Lauder, M.A. (2009).
52. Lauder, M.A., Eles, P. & Banko, K. (2012).
53. It is a working definition because it is recognized that, as our collective experience and knowledge of red teaming develops, the definition will evolve.



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THINKING ABOUT WAR:

The *Canadian Defence Quarterly* and the Uncertainties of Mechanized Warfare in the 1930s

David Moule

During the interwar years, the Canadian Army was a skeleton military force—an institution on life-support. By 1919, Canadians, both citizens and politicians, were tired of war. With the conclusion of "The War to End All Wars," defence budgets were slashed to prewar levels, and the purchase of new equipment was scaled back. The onset of the Great Depression in 1929 forced a further reduction in defence expenditures, which in turn reduced opportunities for individual and collective training. In the mid-1930s, when defence expenditures were at their lowest, opportunities for collective Militia training disappeared altogether. Furthermore, given the apparent atmosphere of peace in Europe, Canadians allowed themselves to be lulled into a false sense of security. No real thought was given to the role Canada's Army should play in defence of the nation. Even less thought was given to its possible roles in conflicts outside Canada's borders. For Canadians overwhelmed with issues of Canadian and imperial defence, ignoring the problem became less challenging than confronting it. As a result, Canada's soldiers, both Permanent and Militia, fought a constant uphill battle to keep their professionalism alive.

While opportunities for education and professional development were available to a select few, the individuals who passed through the various staff courses and British Staff Colleges found that they were unable to apply what they had learned. In a military constantly searching for a role without financial or political backing, preparing for the present was extremely difficult and preparing for the future well-nigh impossible. What spending cuts and public neglect could not eliminate, however, was the ability of Canadian soldiers to reflect on their past wartime experiences and think about their roles for the future. Thinking, after all, is free. So for the vast majority of Canada's Permanent Force (PF) and Non-Permanent Active Militia (NPAM), self-study became the primary means of fulfilling their duties as soldiers and preparing themselves for war.

The most readily available self-study tool for Canadian soldiers during the interwar years was the *Canadian Defence Quarterly* (CDQ). This Canadian service journal was a major forum, where issues pertaining to Canadian and imperial defence could be discussed and disseminated. Between 1929 and 1936, Canadian military thinkers used the CDQ as a medium for discussing principles of mechanized warfare based upon mobility and all-arms cooperation. As a result, by 1935, a general consensus had emerged within the pages of the CDQ which saw Canadian military theorists favouring armour—with support from mobile infantry units—as a primary manoeuvre element and offensive arm. As Army organization and tactical doctrine began to crystallize in 1936, these theories informed discussions on the tactical roles of armoured and mechanized forces and their employment in large-scale offensive operations. These discussions further developed the principles of mobility and all-arms cooperation as means of escalating the offensive tempo of attacking forces.

THE UNCERTAINTIES OF MECHANIZED WARFARE, 1929–1936

> In these days it is no easy matter to keep abreast of changes in army organization. One may have a good working knowledge of war establishments, but these are often obsolescent within a short time of their issue. Research and experiment proceed unceasingly and give every promise of further change in the future. But while to decide on a new organization or type of equipment may be one thing, to implement that decision in its entirety throughout the army is quite another.[1]
>
> —*Major Maurice A. Pope, Canadian Defence Quarterly*

The interwar years were a period of rapid change regarding the prospective roles of Armoured Fighting Vehicles (AFV) in modern warfare. These developments not only created new assault units—which had to be understood in the context of offensive and defensive doctrine in their own right—but also raised questions surrounding the organisation these units and their use in conjunction with mechanized cavalry and infantry. Indeed, as argued by Williamson Murray, the "development of armoured capabilities took place within a larger framework of doctrinal change, modernization, and technological innovation that affected all military capabilities."[2] Owing to the frequency of technical developments involving AFVs, however, the assimilation of these new weapons and the organizational changes that followed were anything but linear.

These technical and doctrinal developments had their period of greatest flux between 1929 and 1936, and this heightened the uncertainty surrounding the future roles of mechanized forces. In addition, both the budgetary constraints arising from the onset of the Great Depression and the adoption of a wait-and-see policy towards British experiments on mechanization had a major impact on Canadian interwar military thought. Despite these constraints, however, Canadian military thinkers grappled with the uncertainties of mechanized warfare through a process of self-study and active debate. And the *Canadian Defence Quarterly*, as a vehicle for stimulating military thought and discourse, was central to this process.[3] Its pages kept Canadian soldiers up-to-date with British mechanized trials and organizational changes, which in turn gave them a structure on which to frame their thinking. This enabled CDQ contributors to develop their own theories on doctrinal and organizational changes, using a forward-thinking analytical process to try to assimilate British lessons and apply them to an ever-increasing body of Canadian thought. Despite frequent changes to the organization of the British and, by extension, the Canadian Army, CDQ writers successfully developed a fairly uniform set of ideas relating to mechanization. In this regard, Canada's military thinkers did not merely subscribe to the organizational and doctrinal shifts occurring within the British Army—nor did they try to offer radically divergent views. Instead, they used the CDQ as a forum to discuss principles of mechanized warfare based upon mobility and all-arms cooperation. By 1935, a general consensus had emerged from the pages of the CDQ that saw Canadian military theorists favouring armour as a primary manoeuvre element and offensive arm.

Between 1929 and 1936, the difficulties in theorizing about the future of Canadian arms were exacerbated by the financial realities facing the Canadian military. While Canadian defence budgets had seen a general decrease since the end of the First World War, the onset of the Great Depression in 1929 "led to an economy campaign which further reduced the already attenuated provision for the fighting services."[4] By the 1931–1932 fiscal year, Army expenditures had fallen to $9,700,464, with only $1,993,752 earmarked for NPAM training and $4,920,362 reserved for the PF.[5] As James Eayrs notes, "to get along on that amount, all NPAM training at camp was done away with; there was just enough to allow city regiments to train for four or five days at their own local armouries, providing they did so without pay."[6] During this period (1931–1932), "only a few more than 2,000 men of the Active Militia went to camp, as compared with about 18,000 in preceding years; the average period in camp, moreover, was only four days against ten."[7] From 1932 onwards, these emaciated defence budgets remained relatively constant, which meant that any prospective Canadian military developments would have to be undertaken on a purely theoretical basis. For practical data on modern military advancements, Canada's soldiers invariably looked to their military model: Great Britain. Owing to a combination of military and budgetary necessities, a wait-and-see policy emerged with respect to British organizational developments that was characterized by ever-shifting technical and doctrinal trends concerning mechanized forces. In a time of financial austerity, "the British Army carried out the essential tactical and operational tests of mechanized forces in manoeuvres that revealed the problems as well as the potential of armoured, mechanized forces."[8]

Beyond the limitations occasioned by stringent defence budgets, Canada's reliance on the British mould stemmed from the fact that political and military realities made interoperability between the two nations' armed forces a necessity. As Lieutenant-General Maurice A. Pope argued, "our army was indeed British through and through with only minor differences imposed on us by purely local conditions."[9] When this was coupled with an atmosphere of unpredictable experimentation and budget cycles, Canadian Army planners found it difficult to make long-term doctrinal and organizational changes with radically innovative results. Canadian military thinkers accordingly took a more tempered approach towards the future functions of mechanized and armoured forces. Although uncertainty reigned, a number of CDQ contributors sought to learn what they could about developments in armoured warfare and to discuss the importance of these developments before maturing their own theories.

In 1928, the original Editor of the CDQ, Colonel H.H. Matthews, wrote that "every encouragement should be given to frequent discussion, practical study and sane thinking-out of the many sided requirements and possibilities of mechanization which will have to be forced and solved by military leaders of the future..."[10] This message remained constant throughout Major (later Lieutenant-Colonel) Ken Stuart's tenure as Editor (1928–1939), though many contributors to the CDQ were careful not to put too much emphasis on modern developments until their final potential and form were realized. As Major F.R. Henshaw noted in 1929: "many of the works published during the past few years dealing with mechanization and war of the future have been hysterical and unpractical; while they have contained some truths and half truths, their contentions, on the whole, have been so absurd that it has been impossible to take them seriously."[11] In notes on a lecture given to PF officers in 1934,

Lieutenant-Colonel R.O. Alexander argued that Canadian officers should learn to be "mechanized minded," as "mechanization can be taken to embrace the whole field of scientific invention and its adaptation to war requirements." However, Alexander went on to caution officers not to become extremists with respect to mechanization, but to "weigh such inventions on the scales with the unchanging factors [principles] and [to] be practical."[12] So, while readers of the CDQ were encouraged to keep abreast of military developments and actively discuss their potential, a stronger emphasis was placed on the general principles of warfare as they related to mechanization. It was advocated that this be done through "reading, study, and military conversation, something you must do for the improvement of your own mind."[13] To provide a context for this study, much of the CDQ's commentary sought to keep readers up-to-date on the different changes taking place in the British Army with respect to mechanization.

Throughout the late 1920s and the 1930s, the British Army continually trained and tested various organizations of armoured and mechanized forces. As argued by Jamie W. Hammond, "apart from the few Canadian officers who attended Camberley [Staff College], or were fortunate enough to view British exercises, the only knowledge of this training came to Canadian officers through the interpretations which appeared regularly in the CDQ."[14] The first major mechanized trials occurred in 1927 with the British Experimental Armoured Force, which was disbanded in 1929. These experiments were developed "with a view to bringing out the best organization and method of employment of vehicles likely to be available within the next few years, and at the same time testing out these vehicles under various conditions in the field."[15] In an 1929 editorial, Stuart noted that "much has been learned of the capabilities and, equally important, the limitations of armoured fighting vehicles. The scoffers have been compelled to admit that tank formations, properly handled and on suitable ground, have tremendous hitting power, while the rabid enthusiasts have been obliged to modify their claims in the cold light of fact as revealed by the experiment."[16] For Canadian soldiers, however, the final composition of these armoured formations still remained to be seen.

Following the disbanding of the Experimental Armoured Force, Britain moved to test a mechanized infantry brigade comprising three infantry battalions with armoured machine gun carriers and one light tank battalion. Stuart felt that these "light tank battalions are probably intended to break the crust of an enemy's position or to deliver counter-attacks, and the transporting of machine guns in armoured carriers should improve battle mobility."[17] This core premise of mobility and cooperation between infantry and AFVs formed the basis of Canadian military throughout the 1930s. Despite further frequent changes in British organization and tactical doctrine, contributors to the CDQ were able to offer a steady flow of discussion around these fundamental principles.

In a 1930 article discussing current trends in armoured warfare, Major Henshaw wrote that "tanks are admirable assault weapons." He went on to note that "the speed and inconspicuousness of light tanks render them particularly useful for attacking infantry and guns, once they have been located," and that medium tanks, "owing to their superior armament and reasonably high speed, are capable of dealing with any form of opposition and their length and weight can enable them to pass over or through considerable obstacles."[18] With these technical considerations in mind, Henshaw argued that "it may often be possible to afford greater assistance to the attacking infantry by sending tanks around to assail the enemy's flanks and rear than by having them co-operate directly with the infantry assault, especially when the enemy's front is heavily protected by tank obstacles and anti-tank weapons."[19] In such a role, Henshaw argued that the most suitable position for the majority of armoured units was accompanying a formation's general reserve.[20] He wrote that "only after the cavalry and other mobile arms have found the enemy and the infantry have got him securely in their grip, probably after hard and prolonged fighting, could a tank attack on a large scale be staged with any hope of decisive results."[21] According to Henshaw's initial assessment, armoured forces had emerged as a manoeuvre element in the offensive role, while infantry forces were viewed as an arm suited to fire-support.[22] To enable infantry to act in conjunction with armour, Canadian theorists favoured the adoption of mobile, motorized or mechanized infantry units.

Source: Canadian Defence Quarterly

Carden-Loyd Machine Gun Carrier Platoon of the Royal Canadian Regiment, Wolseley Barracks, London, Ontario, 1932

In the summer of 1931, despite meagre defence budgets, the Canadian PF found sufficient funds to undertake a series of trials with Carden-Loyd Machine Gun Carriers.[23] As Stuart argued, "this type of vehicle, by reason of its armour, mobility and manoeuvrability, is endowed with protected offensive power and consequently can carry out certain tasks which vulnerable man cannot do; it cannot replace vulnerable man, but it can be of great assistance to him."[24] For Stuart, adoption of this type of vehicle would allow the infantry to fulfill a crucial support role along with newly-emerging armoured organizations. Stuart strove to disseminate these theories to a wider audience, recommending works like those by the prominent British theorist, Major-General J.F.C. Fuller, which advocated "pushing light machine guns forward protected by infantry with a view to the occupation of a position from which the enemy can be pinned down by fire, and not to assault him except by means of the bullet. While the enemy is thus held frontally, the armoured fighting vehicles, protected by artillery fire, move round one or both flanks or penetrate."[25] While some argued that the infantry was still a viable arm for the assault,[26] it would appear that the majority of CDQ contributors felt that the "object of infantry action" was "to close with the enemy and to hold him in order to allow another

arm to destroy..."[27] Beyond the destruction of enemy positions during the "break-in" battle, Canadian theorists also saw the potential utility of armoured and mechanized forces during the "break-through" or exploitation stage of offensive operations.

In 1932, the CDQ held its annual Essay Competition with the aim of stimulating discussion on the dangers posed by highly mobile armour and infantry to rearward services.[28] The first Essay Question—open to both PF and NPAM contributors—asked competitors to "discuss the problem of protection of headquarters and the rearward services of a field force in modern war and...outline your suggestions as to the means by which the protection of these vital links of army organization can be secured."[29] A second question, restricted to members of the NPAM, asked authors to discuss mechanization solely "in its application to the organization and training of the Non-Permanent Active Militia in Canada."[30] Three winning submissions were printed in subsequent issues of the CDQ.

The winner of the "open" essay was Major E.L.M. Burns, who argued that "no rear services or Headquarters have any weapons effective against armoured vehicles," and that "armoured cars [or light tanks] will generally make use of their mobility and take a wide sweep and attack the communications well in the rear."[31] Burns went on to argue that "the more mobile kinds of armoured fighting vehicles may attack the line of communications between the area occupied by the fighting troops and the base; the objectives chosen will depend largely on topographical features."[32] Experiments of a similar nature were conducted in Canada with a limited number of armoured machine gun carriers. During these experiments, "an effort was made to test their use in exploiting success in attack."[33] While the results of these trials were open to debate, the officer commanding the experimental force noted that "given the opportunity, there are many reasons favouring pushing well ahead to positions from which their fire would prevent an enemy from rallying."[34] As a result, while Canadian military theorists lacked the technical means to experiment with medium or light AFVs proper, the principles governing their use were becoming increasingly apparent as contributors to the CDQ ramped up their discussions over the issue.

In a review of *The Future of Infantry* by British theorist, Captain B.H. Liddell Hart, Stuart emphasized some of the author's key points regarding mobile warfare. He wrote that even "'light infantry,' fighting dismounted, cannot replace the need for a modernized cavalry 'because they cannot strike quick enough or follow through soon enough' for decisiveness in battle. Hence the need for a 'tactical arm of decision,' which our author [Liddell Hart] would provide in the proportion of one mixed tank brigade for every two infantry brigades."[35] These "mixed tank brigades" were composed of light and medium tanks in various configurations. In an editorial discussing these same points, Stuart argued that the changes we have outlined have

> many interesting possibilities regarding the organization, composition and employment of our advanced troops. Past use of armoured cars for close and medium reconnaissance was designed to 'bridge the gap' until a suitable light tank was produced. That light tank is now available; the impact of its introduction merits our serious consideration.[36]

That "consideration" was discussed in the two winning essay submissions in the "restricted" category of the above-mentioned 1932 Essay Competition.

In the first submission, Major W.J. Baird argued that "the nearest thing we have in Canada to armoured car units are two Motor Machine Gun Brigades." Baird accordingly suggested "that these be hereafter known as Armoured Car Companies, and that they be supplemented by the conversion of some cavalry regiments into armoured cavalry..."[37] Baird went on to argue, however, that the NPAM should adopt the light tank as its main AFV, suggesting that "the Machine Gun Corps be converted to a Light Tank Corps."[38] In contrast, the second submission under 2nd Lieutenant Wm. Wallace Goforth argued that the armoured car (or armoured machine gun carrier) should remain the primary AFV of the NPAM, as its use "is not limited to reconnaissance and protection during preliminary movement of the main forces. Even in battle armoured cars should perform a function of great value as a mobile reserve to check and frustrate the incipient thrusts or surprise raids of enemy tank formations, when these have passed the broken zone of battle and thereafter the rearward communications."[39] Goforth went on to argue that "this factor requires more careful consideration in any programme of mechanization for the Canadian Militia than the tank, if for no other reason than that improvised armoured cars would always be available on the first threat of war..."[40] According to Goforth, these "improvised armoured cars" should form a "motor guerrilla swarm" that "would neutralize the advantage of an enemy's mechanized formations. They would also provide an excellent, if unorthodox, screen for movements of the main defending force."[41]

While views similar to Goforth's were later expressed by Burns, who based his personal theories on "motor guerrilla swarms" on those of Fuller,[42] they fell short in visualizing the desired composition and organization of offensive armoured forces. Stuart wrote that "whereas we find ourselves in general accord with Major Baird's arguments and conclusions, we confess to a divergence of opinion in respect to some of Mr. Goforth's statements, arguments and conclusions."[43] Stuart went on to write that "a reading of Mr. Goforth's conclusions give one the impression that, in his view, the direct defence of Canada is the most probable rôle of Canada's land forces. We find it impossible to subscribe to that view."[44] For many Canadian theorists, military thought was based on preparations for major land operations in defence of the greater British Empire.[45] Despite the uncertain future of Army organization, it was clear that these operations hinged upon the use of armoured tanks as assault weapons.

In a 1935 article, Stuart wrote that "there is a considerable divergence of opinion regarding the degree to which Armoured Fighting Vehicles will carry out the functions of the vulnerable and less mobile arms in a war of the future. It is agreed, however, by all, that the AFV must have a place in the composition of any modern land force."[46] As experiments were still ongoing, the actual composition of these forces remained unclear to Canadian military thinkers. Yet the principles upon which they should operate had, at least theoretically, become concrete in the minds of many of Canada's interwar theorists. These principles centred upon mobility and all-arms cooperation and led to the idea that new armoured and mechanized units should form the backbone of assault formations as elements of manoeuvre in both

"break-in" and "break-through" operations. By 1935, however, these principles, in terms of their practical application, had yet to be diffused to the broader Canadian Army. A series of theoretical sand table exercises was published in the CDQ in 1935 from which the use of mechanized or armoured forces was largely absent.[47] Budgetary constraints and uncertainty in Army organization had simply not allowed tactical doctrine and organization to match the progress of military thought in the CDQ. With the reorganization of the Canadian Army in 1936, however, practical applications that reflected the theoretical developments that had occurred in the use of armoured and mechanized forces between 1929 and 1935 could be better put into practice. And, as trends in mechanization and armoured theory began to stabilize, Canadian theorists acquired a stronger foundation on which to structure their thinking. This in turn enabled them to mature their ideas on the use of armoured and mechanized forces in modern warfare.

REORGANIZATION, 1936

> Since the war a great many of us have been engulfed in what might be termed a tactical and organizational haze. And the fact that the whole post-war period has been utilized as an era of experimentation in these directions by Great Britain has tended to thicken rather than clear the haze. As a result, however, of the training carried out in England this year, it is now possible to see various oddments brought together into a fairly well defined pattern both in the spheres of tactical and organizational doctrine.[48]
>
> *—Major Ken Stuart, Editor Canadian Defence Quarterly*

The period following 1936 marked a major turning point for both the organizational development and the intellectual growth of the interwar Canadian Army. While the early 1930s were characterized by uncertainty regarding mechanized and armoured warfare, 1936 saw British and Canadian organization and tactical doctrine start to solidify into a more or less stable form. This stability coincided with a general surge in Canadian defence expenditures. By October 1936, owing to rising global tension and glaring inadequacies in the Canadian military with respect to its capability and organization, the new Liberal Government under Prime Minister Mackenzie King "had at last determined to come to grips with the problem of rehabilitating the defence establishment..."[49] As a result, from the 1935–1936 fiscal year onwards, Canadian defence budgets rose steadily through to 1939 and the outbreak of the Second World War.[50] These expenditures were modest, however, and "of the three services, the Militia fared worse in the Government's policy of cautious and selective rearmament."[51] As the bulk of Army funding was consumed repairing the damage wrought by the Great Depression, large-scale tactical exercises did not commence until 1938.[52] As a result, Army force development, despite increased financial backing, was still largely theoretical. Far more important, in terms of technical development, was the massive reorganization of the Canadian Army's combat arms.

By 1936, the Militia had altered the composition and roles of its cavalry, thereby creating the basic mechanized and armoured units needed to fight a modern war. In the years immediately following these organizational changes, Canadian military thinkers took to the pages of the CDQ to continue their discussion of the tactical functions of mechanized units in armoured warfare. As Army organization solidified, Canadian military thinkers matured the theories expounded during the early to mid-1930s to further discuss the roles of armoured and mechanized forces and their employment in large-scale offensive operations. These discussions reinforced the principles of mobility and all-arms cooperation as means of accelerating the offensive tempo of attacking forces.

As noted above, between 1929 and 1936, Canadian theorists had come to the general consensus that mechanized and armoured forces were a principal offensive arm and manoeuvre element in modern warfare. Working in conjunction with mechanized infantry, armoured forces would provide the hitting power to break into a well defended front, along with the mobility needed to turn this "break-in" into a rapid and mobile "break-through." Beginning in 1936, the British translated these speculative roles into concrete organizational structures, establishing what were essentially two separate divisional configurations: the mobile division and the infantry division. The mobile division consisted of two mechanized cavalry brigades of light tanks, one tank brigade of medium tanks, two motorized infantry battalions and two artillery regiments. "Its purpose was to exploit through any breach in the enemy's line and deep into his defences."[53] Thus, the old cavalry division would be replaced by a mobile division boasting greater speed, range of action and striking power, which was to be employed in cooperation with other equally mobile troops.[54] The actual breaching of the enemy's main defensive line was to be undertaken by the infantry division. By 1938, these divisions had been reorganized to include three infantry brigades without any inherent armoured support. This support would be provided externally by the heavy Infantry Tanks of the Army Tank Brigade,[55] which were to be utilized "acting independently but in tactical co-operation with the efforts of the other arms."[56] These formations were to use their armour and fire power to break the crust of an enemy's defences "and so give to attacking infantry another, and by far the most effective means of overcoming hostile machine guns..."[57] The introduction of these crucial organizational changes paved the way for the 1936 reorganization of the Canadian Militia, which gave Canadian Army planners the foundation they needed to create their own mobile units, around which mechanized and armoured formations would be structured.

According to the CDQ, the 1936 reorganization of the Canadian Militia was "the most important decision in Canadian defence policy since 1923, when the Department of National Defence was formed..."[58] The most significant element of this reorganization was the conversion of a number of cavalry and infantry regiments to mechanized units, thereby creating six army tank battalions and four armoured car regiments.[59] In conceptual terms, this gave CDQ contributors a solid organizational skeleton on which to frame their thinking. In consequence, discussions within the CDQ further advanced theories developed during the early to mid-1930s on the tactical employment of modern forces and offered conceptualizations on how they would be used in large-scale offensive operations.

Just as tactical theory began to mesh with organizational changes, many of the CDQ's contributors sought to expand the discussion on the potential contribution of AFVs and mechanized infantry to increasing offensive tempo. While the role of infantry as an assault arm had diminished somewhat during the early 1930s, by 1936, Stuart was arguing that "the infantry arm at last appears to be coming into its own. And rather than witnessing the elimination of that arm from the modern battlefield, we are viewing the culmination of a co-operative process which, by a judicious combination of armour, fire power, mobility, manoeuvrability and manpower, should place the infantry for many years in an unassailable position."[60] As an offensive arm, the role of infantry was one of consolidation and fire-support, and the introduction of the Army Tank Brigade was intended "to increase the power of movement [of infantry] on the battlefield in the face of fire..."[61] Because these formations were designed to operate with slower moving infantry, it fell to the mobile division to conduct pursuit operations during the "break-through" stage of battle. Since both the mobile division and the Army Tank Brigade had a faster rate of advance than the infantry, Canadian theorists argued that an equally mobile arm was needed to act as a liaison between the two, thus enabling a rapid transition between "break-in" and "break-through" operations without the need for a pause.

Prior to 1936, Canadian military theorists had argued that armoured machine gun carriers performed a vital role in mechanized warfare as manoeuvre and fire-support elements. These machines were supposed to assist in the assault either by pushing their machine guns well forward to deal with hostile points of resistance or operating beyond the enemy's main defensive lines as a harassing or consolidating force. These views remained constant throughout much of the 1930s, but in 1936, Stuart argued that "another suitable and important rôle of the machine gun unit equipped with armoured carriers would appear to be that of acting as a 'connecting file' between the Infantry Tank and the rifleman."[62] He went on to point out that when tanks were cooperating with infantry in the attack armoured machine gun carriers should "follow close up to the tank attack and so take over the objective from the tanks with the minimum of delay." Stuart outlined two major reasons for such an approach, writing that

> in the first place, it will enable the tanks to rally almost as soon as the objective has been captured[,] thereby reducing to a minimum that dangerous period when the tanks must cruise round the objective waiting for the infantry to come up. Secondly, when the infantry [do] come up, their occupation of the position will be covered by the framework machine gun dispositions already set up by the armoured machine gun carriers.[63]

Aside from Stuart's editorials, CDQ readers were offered a glimpse of some of the practical applications of these concepts through sand table demonstrations that dealt with brigade-sized forces in the attack. While theory had outpaced practice between 1929 and 1935, it was becoming apparent by 1936 that the theoretical work developed over the course of the interwar years had slowly begun to filter into the broader Army establishment.

The CDQ's second round of sand table demonstrations, which dealt with the brigade, battalion, company, and supporting arms in the attack, sought to define the use of tanks, infantry and armoured machine gun carriers in a practical, albeit theoretical, situation. In this Tactical Exercise Without Troops, the Brigadier of the attacking force voiced a desire to capture a battalion objective as quickly as possible. Therefore, he proposed to use tanks

> in advance of the left attacking infantry bn. [battalion] to search out mgs [machine guns] and other small centres of resistance. The tanks will, of course, go faster than the infantry and there will be a gap in time between their arrival on the objective and the arrival of the leading infantry. I shall bridge that gap by instructing the left bn to have its forward mgs in their armoured carriers, follow up as quickly as possible and take over the objectives captured by [the] tanks.[64]

The tactical scheme was followed by a question and answer session that asked "how do you consider forward guns will operate, now that their platoons are equipped with armoured machine gun carriers?" The sample answer stated that

> they will probably cross the starting line at the same time as the forward [infantry] companies. If there were tanks co-operating in advance of the infantry[,] the leading tanks might be expected to reach the infantry objective before the leading infantry[,] whereupon the armoured machine gun carriers should push forward and establish themselves on the objective, thus allowing the tanks to rally without having to wait in an exposed position until the men on foot arrive.[65]

Essentially, the deployment of armoured machine gun carriers as a "connecting file" between armour and infantry would give attacking forces the means to quickly consolidate positions as soon as they were won. In turn, this would enable even heavy armoured units to capitalize on their mobile striking power and continue their advance further into an enemy's rear areas—a concept familiar to many of the CDQ's readers and contributors.

These concepts were further developed by Burns, who argued that "theoretically, there should be a class of troops more mobile than the decisive arm, to be used for obtaining information, for protection where great resisting power is not essential, and for pursuit when the resistance of the enemy has been broken."[66] He further argued that "the general idea should be that the principal arm has a normal rate of progress (which, of course, ought to be high) and the auxiliary arms should be able to function so as not to oblige the principal arm to mark time too long while they are getting ready to do their job."[67] This would increase the offensive tempo for attacking forces. While it was true that the mobile division was the main force tasked with exploitation, the Army Tank Brigade, in theory, would take advantage of favourable conditions to push deeper into enemy territory as the armoured machine gun carriers secured a firm base for the infantry. Although Burns believed that the heavy Infantry Tanks of the Army Tank Brigade were inadequately organized and too cumbersome to effectively exploit

"break-in" operations,[68] the principles of mobility and all-arms cooperation played a central role in Burns' theories on the tactical employment of armoured vehicles in modern warfare.[69] These principles also formed the foundation of Canadian military thought as articulated in the pages of the CDQ throughout the 1930s.

CONCLUSION

As a result of national neglect, financial stringency and uncertainty brought on by ever-changing military developments, self-study became key to the professional and intellectual development of the Canadian Army during the interwar years. During this period, the most readily available self-study tool was the *Canadian Defence Quarterly*. Within the journal's pages, contributors to the CDQ sought to stimulate the minds of Canada's amateur and professional officer corps to help prepare them for the uncertainties of mechanized and armoured warfare. While these soldiers were not the most eminent military theorists of their time, they did seek to develop and discuss forward-thinking solutions to the problems they encountered. By stimulating military thought and discourse, the CDQ played an essential and fundamental role as an effective self-study tool and thus contributed to the intellectual and professional development of the interwar Canadian Army.

Between 1929 and 1936, Canadian military thinkers used the CDQ as a forum to discuss principles of mechanized warfare based upon mobility and all-arms cooperation. As a result, by 1935, a general consensus had emerged within the pages of the CDQ which saw Canadian military theorists favouring armour—with the support of mobile infantry units—as a primary manoeuvre element and offensive arm. As Army organization and tactical doctrine began to solidify in 1936, these theories were applied to discussions concerning the tactical roles of armoured and mechanized forces and their employment in large-scale offensive operations. These discussions further developed the principles of mobility and all-arms cooperation as means of increasing the offensive tempo for attacking forces.

While the discussions in the pages of the CDQ may not have spawned a distinctive Canadian way of waging war, they did elicit a distinctive Canadian way of *thinking* about war characterized by a tempered approach to analyzing the future functions of mechanized and armoured forces. Yet this tempered approach was by no means indicative of stunted intellectual development. Despite the limitations wrought by national neglect, financial austerity and a wait-and-see policy regarding British military developments, contributors to the CDQ thought actively and critically about the uncertain future of Canadian arms. By doing so, CDQ contributors developed their own theories on doctrinal and organizational changes, using a forward-thinking analytical approach to try to assimilate British lessons and apply them to an ever-increasing body of Canadian thought. As a result, many of them were able to construct well-reasoned arguments based on principles and theories developed over the course of the 1930s.

Source: Canada. Dept. of National Defence / Library and Archives Canada / PA-180365

Arrival of Renault FT light tanks supplied by the United States Army to the Canadian Armoured Fighting Vehicle Training Centre (Canadian Army Training Centres and Schools), Camp Borden, Ontario, Canada, October 1940

ENDNOTES

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5. Stacey, *The Military Problems of Canada: A Survey of Defence Policies and Strategic Conditions Past and Present* (Toronto: The Ryerson Press, 1940), Appendix C: Defence Expenditure, 1929-1939, 165.
6. James Eayrs, *In Defence of Canada: From the Great War to the Great Depression* (Toronto: University of Toronto Press, 1964), 304.
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8. Brian Bond and Williamson Murray, "The British Armed Forces, 1918-39" in *Military Effectiveness Volume II: The Interwar Period*, eds. Allan R. Millet and Williamson Murray (Winchester: Allen and Unwin, 1988), 112.
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15. Major L.C. Goodeve, D.S.O., R.C.A., p.s.c., "Mechanization," *Canadian Defence Quarterly* Vol. 6 No. 3 (April 1929): 342.
16. K. Stuart, "Editorial," *Canadian Defence Quarterly* Vol. 6 No. 3 (April 1929): 292.
17. Ibid.
18. Major F.R. Henshaw, M.C., p.s.c., R.C.E., "The Employment of Tanks," *Canadian Defence Quarterly* Vol. 7 No. 3 (April 1930): 354-355.
19. Ibid., 356.
20. These views were also expressed by Captain G.G. Simonds. See Simonds, "An Army That Can Attack – A Division That Can Defend," *Canadian Defence Quarterly* Vol. 15 No. 4 (July 1938): 413-417.
21. Henshaw, "The Employment of Tanks," 357.
22. According to Hammond, however, "Henshaw, though clearly supportive of mechanization, stops short of the Fuller and Hart argument of total conversion." See Hammond, "The Pen Before the Sword," 96-97.
23. "Service Notes," *Canadian Defence Quarterly* Vol. 8 No. 2 (January 1931): 264.
24. Stuart, Editorial, "The Anti-Machine Gun Problem," *Canadian Defence Quarterly* Vol. 8 No. 2 (January 1931): 148.
25. Stuart, review of "The Fighting Forces, July 1931," *Canadian Defence Quarterly* Vol. 9 No. 1 (October 1931): 145.
26. Between 1931 and 1933, Stuart and a writer under the pseudonym "Infanteer" debated the future roles of infantry in mechanized warfare. "Infanteer" argued that it was unnecessary, when assigning the role of assault to the infantry, "to assume that he must be armed with A.F.V's. in order to fulfill it. In much of the country over which fighting must take place A.F.V's. could not operate. Who then destroys the enemy in such country if the infantry does not do so fighting as infantry?" Infanteer, "The Rôle of Infantry," *Canadian Defence Quarterly* Vol. 10 No. 2 (January 1933): 228.
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40. Ibid., 436.
41. Ibid., 440.
42. See Burns, "A Step Towards Modernization," *Canadian Defence Quarterly* Vol. 12 No. 3 (April 1935): 298.
43. Stuart, Editorial, "C.D.Q. Essay No. 2. (Restricted). 1932," *Canadian Defence Quarterly* Vol. 10 No. 4 (July 1933): 395-396.
44. Ibid.
45. For example, in 1936, Burns argued "that we in Canada should plan our defensive organization so that if another part of the Empire needs our armed help, we can send a proper force, just as we confidently expect armed aid from other parts of the Empire if we ever need it." Lieut-Col. E.L.M. Burns, O.B.E., M.C., R.C.E., "The Defence of Canada," *Canadian Defence Quarterly* Vol. 13 No. 4 (July 1936): 382.
46. Stuart, "The Repair, Recovery and Replenishment of Mechanical Vehicles in the Field," *Canadian Defence Quarterly* Vol. 12 No. 4 (July 1935): 445.
47. See "Sand Table Demonstration: The Battalion and Company in Attack," *Canadian Defence Quarterly* Vol. 13 No. 1 (October 1935): 37-55, and "Sand Table Demonstration: The Battalion and Company in Defence," *Canadian Defence Quarterly* Vol. 13 No. 1 (October 1935): 56-72.
48. Stuart, Editorial, "The Infantry Tank," *Canadian Defence Quarterly* Vol. 13 No. 2 (January 1936): 133.
49. Eayrs, *In Defence of Canada: Appeasement and Rearmament* (University of Toronto Press, 1965), 137.
50. Stacey, *The Military Problems of Canada*, Appendix C: Defence Expenditure, 1929-1939, 165.
51. Eayrs, *In Defence of Canada: Appeasement and Rearmament*, 152.
52. Stephen J. Harris, *Canadian Brass: The Making of a Professional Army 1860-1939* (Toronto: University of Toronto Press, 1988), 198.
53. Douglas E. Delaney, *Corps Commanders: Five British and Canadian Generals at War, 1939-1935* (Vancouver: University of British Columbia Press, 2011), 66.
54. "Service Notes," *Canadian Defence Quarterly* Vol. 13 No. 2 (January 1936): 224-225.
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64. "Canvas Model or Sand Table Demonstration: The Brigade, Battalion, Company and Supporting Arms in the Attack," *Canadian Defence Quarterly* Vol. 14 No. 1 (October 1936): 54.
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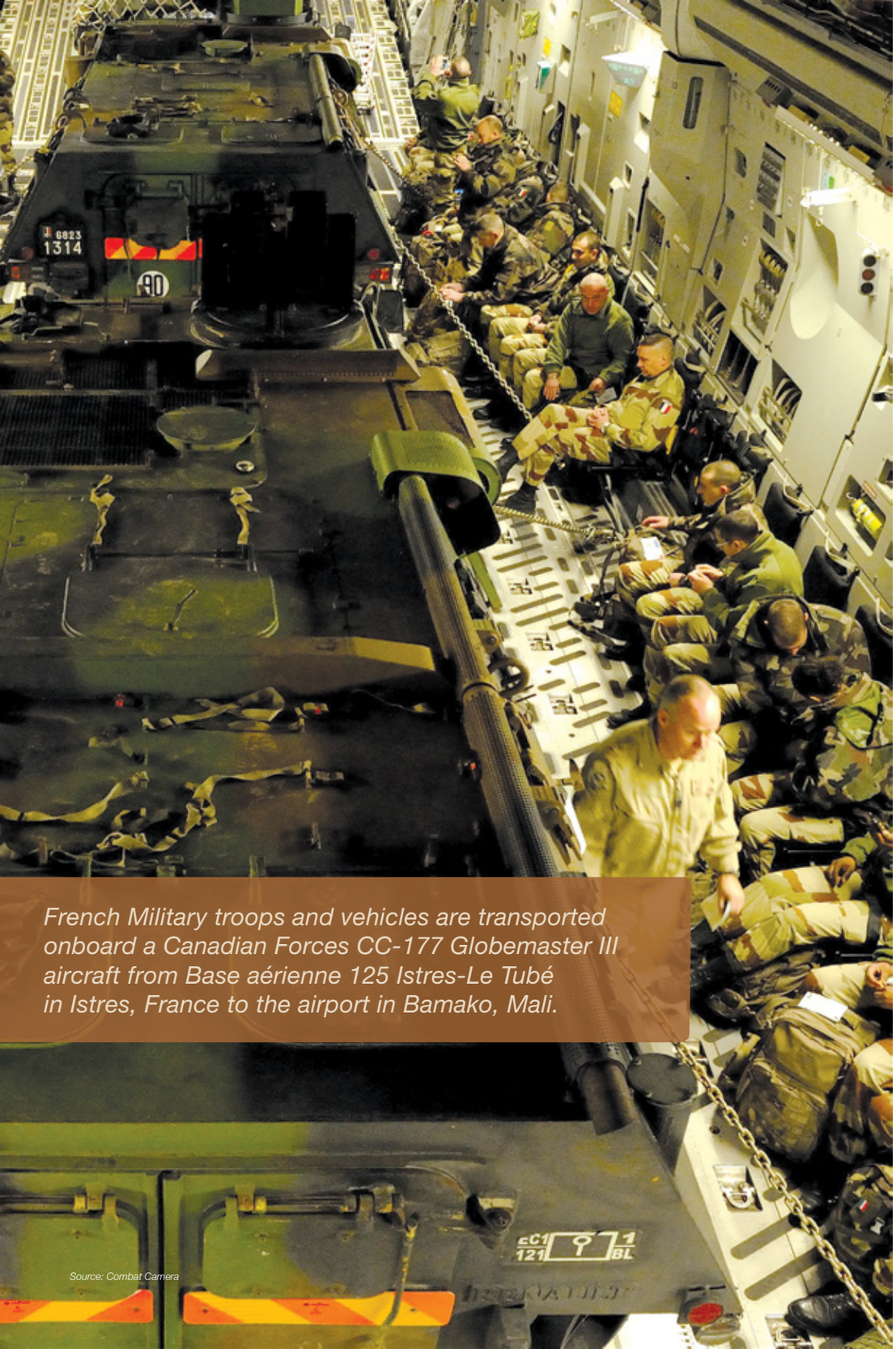
67. Ibid., 330.
68. According to Douglas Delaney, Burns believed "that the idea of separate infantry tanks, held in an army tank brigade was a 'retrogression in tactical ideas' and sure to reduce both the mobility and tempo of battle." See Delaney, *Corps Commanders*, 66.
69. For a separate account of Burns' interwar writing, see David Moule, "The Burns-Simonds Debate Revisited: The *Canadian Defence Quarterly* and the Principles of Mechanized Warfare in the 1930s," *Canadian Military History* Vol. 22 No. 1 (Winter 2013): 17-24.



French Military troops and vehicles are transported onboard a Canadian Forces CC-177 Globemaster III aircraft from Base aérienne 125 Istres-Le Tubé in Istres, France to the airport in Bamako, Mali.

Source: Combat Camera

CANADIAN EXPEDITIONARY BRIGADE GROUPS:

A Proposal for Reforming Canadian Mechanised Brigade Groups

Captain John H. Keess

> Human nature—goal—survive, survive on own terms, or improve our capacity for independent action.
>
> ….To shape and adapt to change one cannot be passive, instead, one must take the **initiative**.[1]
>
> *—John Boyd, Patterns of Conflict*

Armies normally prepare to fight one of two wars: the last war or the next war. Usually, it is the victors who plan to fight the last war; after all, they have tangible experience with and an emotional bond with their weapons, tactics and structures, which to them seem to approach perfection and merely require fine-tuning. The defeated, however, have every reason to change, adapt, revise and reinvent. Like the Allies in 1939, the Israelis in 1973 or the French in 1815, the dominant, recently victorious, force is usually blind to the recent lessons of history, a phenomenon characterised by B.H. Liddell Hart as being "arrogantly complacent."[2] Canada has been part of a victorious coalition for some time and has not changed its basic approach to organizing and employing its forces since the 1970s. We are at risk of building our own version of the Maginot Line while our geopolitical rivals prepare for *blitzkrieg*.

This paper will argue that the current model of the Canadian Mechanised Brigade Group (CMBG) is unsuited to today's Contemporary Operating Environment (COE), and that the Canadian Army (CA) should restructure its brigade groups into Canadian Expeditionary Brigade Groups (CEBG). These reorganised brigade groups would put less emphasis on simple firepower and more emphasis on their rapid strategic deployment capacity. I will begin by discussing the COE and briefly examining the recent Russian seizure of Crimea as an example of the short, sharp, "special war" campaigns that are lately proving to be a potent and pervasive threat in the modern security environment. I will then offer a detailed examination of the CA's guiding strategic document, *Advancing with Purpose*, and its implications for force structures, along with a detailed history of the CMBG and a discussion of its relevance in the modern world. Finally, the paper will conclude with a case study on the application of a deployable brigade structure, the 2012 French intervention in Mali, and an illustrative vignette on how a CEBG might be employed.

EMBRACE THE CHAOS: THE MODERN STRATEGIC ENVIRONMENT AND THE IMPORTANCE OF FLEXIBILITY

> Strategy 26: DENY THEM TARGETS: THE STRATEGY OF THE VOID
>
> The feeling of emptiness or void—silence, isolation, non-engagement with others—is for most people intolerable. As a human weakness, that fear offers fertile ground for a powerful strategy: give your enemies no target to attack, be dangerous but elusive and invisible, then watch as they chase you into the void.[3]
>
> —*Robert Greene, The 33 Strategies of War*

The key factor in the COE is unpredictability. This refrain is almost overstated in modern writings on international relations, but this repetition exists for a reason: unlike Fukiyama's unipolar, "end-of-history" world that was supposed to arrive with the end of the Cold War, we have instead seen a rise and expansion of complex and diverse conflicts. We have numerous descriptions of this new strategic reality, but perhaps the most apt is that authored by Thomas X. Hammes. In his 2006 book *The Sling and the Stone*, he advocates the concept of "fourth generation warfare," describing new adversaries who are able to tap into an increasingly networked world to bypass an adversary's strengths. "Both the epic, decisive, Napoleonic battle and the wide-ranging, high-speed manueuver campaign are irrelevant to them. Their victories are accomplished through the superior use of all available networks to directly defeat the will of the enemy leadership and convince them that their war aims are either unachievable or too costly."[4] In other words, any likely adversary will appear formless, concentrate critical effects at the correct time to present a *fait accompli*, and then disperse to evade any kind of meaningful retaliation. This is not an easy strategy to pull off, but it is a cheap and decisive one and it is one that has recently been employed to great effect.

Months before the Russian annexation of Crimea, John R. Schindler, a professor at the U.S. Naval War College, coined a new term, "special war," which describes a series of activities:

> an amalgam of espionage, subversion, even forms of terrorism to attain political ends without actually going to war in any conventional sense. Special war is the default setting for countries that are unable or unwilling to fight major wars, but there are prerequisites, above all a degree of cunning and a willingness to accept operational risk to achieve strategic aims.[5]

To be succinct, special war can be characterised as the blending of the tactical advantages typically enjoyed by insurgent forces fighting asymmetrically with the logistical, organisational and conventional potential belonging to state forces. Although we saw many of the *mechanics* and *tactics* of special war in earlier concepts, we have almost singlemindedly viewed this low-intensity combat as the domain of non-state actors, with the 2009 CF Future Security Environment assessment predicting that such campaigns of media influence, disruption, poltical dislocation and subterfuge "would only end up constraining the actions of state actors in a conflict" and that although asymmetric tactics might be blended with conventional doctrine to wage a hybrid war the main beneficiaries would be non-state actors.[6] Strategically, the opposite has proven true. Sponsoring chaos and sowing confusion has *expanded* the likelihood of action by state actors by keeping the perceptions of their intervention below the threshold of an "armed attack," breeding uncertainty among allies and other powers as to whether their intervention will violate the provisions of collective security. Witnessing this amalgam of local militias, hydrocarbon corporations and political movements while failing to realize that they are less independent actors than strategic tools engaged in a specific campaign plan is likely to confuse and disjoint our efforts in any future conflict. Our dispersed and decentralised responses will contrast with an adversary's single aim and masterful control. This kind of campaign is not a blend of irregular tactics and conventional doctrine—in some cases, it *is* doctrine.

The recent campaign to reclaim Crimea demonstrates that the new approach has been incorporated into Russian military thought and practice. Recent changes to formal Russian doctrine have put the accent on non-kinetic effects and their tight synchronisation with military force, leaving conventional, high-intensity conflict as a "failsafe" scenario to be avoided at all costs. Simply put, this represents the Russian military's acknowledgement that accomplishment of a political aim should come at the lowest possible cost.[7] In early 2014, this is precisely what happened in the Crimea. In November 2013, the pro-Russian president supported a major Russian policy objective by abandoning a co-operation agreement with the EU in favour of joining the Russian-sponsored Eurasian Union. Protests began that month but did not start to become truly serious until February 2014, when clashes between protestors and the central government became increasingly common. Yanukoych was outed by the protests on 22 February. Well-armed and supplied with modern equipment and unmarked uniforms, pro-Russian forces called "Little Green Men" began appearing at Sevastopol Airport on 27 February, and by the time Moscow authorised military intervention in Crimea the region was already under effective Russian control. Later that month, a highly-choreographed referendum to join Russia was staged that coincided nicely with a planned Duma vote on annexing the region.[8] In less than two months, the Crimea had gone from being an uncontested, if politically divided, region of Ukraine to a strategically important western province of Russia.

Although Russia denied involvement in the seizure of vital facilities, the uniforms, equipment, dress, training and organisation of the local "volunteer" forces in Crimea indicated otherwise. The use of Russian special forces and intelligence personnel was so pervasive and well-documented that the *New York Times* was able to convincingly demonstrate that the agents at work in the budding conflict in Eastern Ukraine were the same as those active in the Crimea. Moreover, analyses by experts in the field have endorsed the idea that the Crimean and Eastern Ukrainian campaigns were not simple opportunism but part of a long-term plan—not surprising when one considers that the medals for the recapture of the region had been minted before the troubles began.[9] The experts have reason to see the campaign as deliberate: the speed and accuracy with which the mission was carried out is consistent with firm objectives and a tight co-ordination of effects so as to deliver exactly the right pressure at exactly the right time. For example, deploying what were clearly Russian special operations forces

without insignia, at a time when the new Kyiv government was in crisis, helped confound the Western powers regarding the political and military ramifications. It is far easier to deploy troops against a formal armed incursion on the sovereignty of a partner state than against unidentified insurgents in an unstable polity. By the time the West was able to formulate a coherent response, the situation had congealed and any attempts at intervention would have come at an unacceptably high cost.

The key characteristics used by the Russian forces were their speed of deployment, their professionalism, and their understanding of their larger political objective. The Little Green Men knew that they were on the ground to establish a new political and strategic reality, not engage in decisive combat, and if the Ukrainian Army had attacked, "we have to stand here for only 24 hours, to tend the fire, and after that, a one million man army will be here."[10] In this instance, we see not an insurgency or a "near-peer" enemy, but a powerful, well-armed, legitimate state with access to global institutions avoiding the kind of high-intensity combat we thought they would employ, which would justify our organisational emphasis on firepower. Instead of taking on NATO's conventional forces in the head-on conflict NATO is preparing for, Russian forces merely need to infiltrate the political, strategic and informational domains. In focusing on the complex and expensive, we have overlooked many of the simple, cheap but effective alternatives. Much like knights investing in better armour and stronger horses, we are overlooking the transformative power of *burghers* armed with pikes and harquebuses.

HOW WE SEE OURSELVES: THE CANADIAN ARMY'S FORCE EMPLOYMENT CONCEPT IN A BRAVE NEW WORLD

> **Interviewer:** How real do you think is the threat that Russia will actually take military action on your soil?
>
> **President Grybauskaite of Lithuania:** …the first stage of confrontation is already taking place…we are already under attack.[11]

Advancing with Purpose, the Canadian Army's guiding strategic document, begins with a sound appreciation of the changing strategic landscape we must operate in. It courageously challenges the bipolar and unipolar assumptions by which we have operated for decades, noting that it will be the role of Canada's defence policy to *smooth* (and not *reverse*) the transition to a multi-polar world and maintain the order and circumstances that ultimately underwrite Canadian security: the rise of new regional powers and a plethora of non-state actors can be safely managed so long as we understand their aims, objectives and methods.[12] As non-state actors, many of them potentially harmful to Canadian interests, gain access to increasingly powerful technologies in a variety of fields, we need to remain *agile* and *adaptable*, not to mention *deployable* and *joint*, in a way that includes not only the three main branches of the Canadian Armed Forces (CAF) but Special Operations Forces (SOF) as well. This approach is based on extremely sound reasoning. As our enemies get lighter, faster and more sophisticated, should we not become more nimble, more adaptive, and more attuned to global trends?

Advancing with Purpose, though demonstrating sound strategic thinking, slips into a Cold War mindset when addressing operational and tactical problems: namely, that equipment and doctrine should be centred on our capacity for high-intensity conventional combat, maximising battlefield mobility and conventional firepower, not on developing our capacity for rapid strategic deployment into uncertain situations. The introductory section ends by referring to "the increasingly lethal means into which the Canadian Armed Forces may be called upon to deploy," and consequently dismisses non-lethal methods recently employed to great effect. While it is undoubtedly true that weapons are constantly getting better and more effective, the fact remains that the last full-on, peer-to-peer war in which Canada was involved ended in 1953; since then, our security challenges have been almost exclusively political, informational, variable-intensity and flexible in nature. Moreover, the antagonists we would most likely face in a serious, determined, attritional conflict are China and Russia, and Russia has developed a much more effective means of achieving its aims than conventional confrontation. China cannot be lagging far behind, nor can any potential adversary. Why should developed countries engage well-trained and well-equipped armies in attritional battles they know they will likely lose when, as in Crimea, alternative options at extremely low cost exist? Moreover, why build an army that merely gives rivals further incentive to avoid our strengths rather than building one that is designed to counter theirs?

The Army clearly understands the strategic requirement for flexibility and the need to react quickly to a wide range of threats around the world at short notice. But because we are more steeped in the study of operational and tactical problems our thinking is guided by our conventional desire to maximise our ability to successfully carry out tactical tasks. This thinking prioritises a vision that focuses on conventional notions of tactics at the expense of the Army's need to remain responsive to changing strategic realities. So while we talk about being an "adaptable and agile force, capable of being deployed by a variety of means," we are not engaging in detailed discussions on how we are to achieve these aims. This adaptable and agile "Army of Tomorrow" is not described as particularly nimble but rather is portrayed in terms of its impressive store of new equipment: a glossy, high-tech Command Post (CP) with "a robust, persistent information network linking soldiers, sensors, combat platforms and commanders," with no real indication as to how, where, or why an advanced ISTAR capability would help us defeat a special war campaign, or, most importantly, any reference to the ability of this system to scale down below a BG level. Of the five combat functions, most are merely enhanced by new equipment purchases that enable conventional mechanised operations: Command problems? You simply need better versions of the computer and communications equipment you have now. You need "a command and control system…[that] must have the attributes of range, survivability, and form the backbone of a digitized and network-enabled force." Sense? New ISTAR sensors.[13] Action? You need new direct-fire systems, new indirect fire with "multiple target guiding systems." Sustain, in the increasingly complex, multi-polar world with less access to guaranteed allied supply trains? Computerised maintenance tracking, and a new vehicle recovery platform. All these are refinements of systems that worked for us in an older strategic context, refinements calling for larger C2 systems that assume the slow, orderly deployment of a robust headquarters on schedules planned well in advance. It is worth

reminding ourselves that the most significant computing revolution of the past decade has not been more powerful desktops but the proliferation of well-designed, portable smartphones with a wide range of applications; the most effective power is power that is limited but compact, scaleable, portable and omnipresent.

It is important to note that such gaps in our thinking are to be expected: this is the kind of thinking we've been engaged in for the past forty years; we know it works, and experimentation is both expensive and uncertain. So unless we make concrete and determined intellectual efforts to challenge our base assumptions and remain disruptive in our thinking, we are likely to remain focused on building an optimised Cold War army that will be too remote from conflicts to make immediate difference, too small to have a global deterrent effect and too slow to react to the chaos exploited by modern actors. While it is impossible to predict when and where a government in a future crisis may want to deploy Canadian soliders, the *Canada First* Defence Strategy (CFDS) makes it clear that the CAF must be capable of:

> Providing international leadership is vital if Canada is to continue to be a credible player on the world stage. This will require the Canadian Forces to have the necessary capabilities to make a **meaningful contribution** across the full spectrum of international operations…. Projecting leadership abroad can take many forms…. One thing is clear, however: Canada cannot lead with words alone. **Above all else, leadership requires the ability to deploy military assets, including "boots on the ground.**[14] [Emphasis added]

As things stand, we are unlikely to realize this desired endstate of the CFDS. Our geostrategic rivals are planning quick, fast-moving campaigns, and if we cannot arrive quickly we are unlikely to make a truly meaningful contribution.

What is strange is that the CAF and the CA in particular already understand the need for rapid deployment, though not for their primary roles of power projection. In 2010, after a massive earthquake hit Haiti, the Disaster Assistance Response Team (DART) had its pre-selected, trained, prepared and, equipped reconnaissance team on the ground within 24 hours. They immediately began arranging for Non-combatant Evacuation Operations (NEO), supporting GoC whole-of-government efforts to bring immediate relief to the devastated country, and they prepared the ground for the DART's integral security, medical and engineering platoons. This immediate presence formed the basis for the much larger TF Haiti, which grew to over 2000 personnel under Op HESTIA.[15] Clearly, both the CAF and the GoC understand the need to provide humanitarian assistance in a rapid and effective manner and are prepared to organise components of the Armed Forces to do so. Why then do we not recognize a similar need regarding our primary and unique mission of force projection, particularly when it comes to helping our allies resist foreign aggression? As it stands now, our aid operations are more effective and adaptive than our purely military operations. We will almost certainly arrive too late to have an immediate effect, making the GoC impotent in enforcing the national interest. If we are able to arrive in force, it will only be for conflicts that mutate into long, poorly-defined insurgencies where such technological advantages can be negated. We are prepared only to watch or wallow in a quagmire. We must understand where, and most importantly, when our current organisation, innovative for its time, became what it is if we are to understand where to take our brigade groups in the future.

THE CANADIAN MECHANISED BRIGADE GROUP: AN INTRODUCTION

> Throughout the first fortnight of August [1914,] under brilliant skies the armies of France, Germany, Belgium and Britain marched from their detrainment points towards collisions with the enemy amid golden cornfields and wondering peasant spectators…All the belligerents were led into action by commanders armed with swords and mounted on chargers….the consequences were unsurprising, except to some generals.[16]
>
> —*Max Hastings, Catastrophe: Europe Goes to War, 1914*

The CMBG is a product of Cold War defence policies and is therefore organised to support a NATO territorial defence system that was dismantled over two decades ago. Designed largely to harmonize the reorganisation of the Canadian Armed Forces with NATO commitments following unification in 1968, the CMBG is well-suited to defending against the Warsaw Pact. Originally conceived as a Canadian Mechanised *Battle* Group, the CMBG in Europe was a weaker force than the previous Canadian NATO Brigade but did have the advantage of allowing for more symmetry in the structure of Canadian land forces, especially as its creation coincided with that of new francophone units and a rationalisation of anglophone units.[17] Although the forces had different names, this restructuring essentially created four distinct formations: a NATO brigade, based in Europe (the original "CMBG", later to be known as 4 CMBG); a Francophone brigade, based primarily out of Valcartier, which would eventually be known as 5 CMBG;[18] an Eastern Canadian brigade centred on Petawawa, to become known as 2 CMBG;[19] and a Western Canadian brigade based largely in Calgary and Edmonton, which would become 1 CMBG.[20] This structure would exist until 1993, when 4 CMBG was disbanded.

The composition of the CMBGs has varied since their incorporation, but at its core a CMBG is a self-contained brigade-level formation structured around infantry and armoured units that can be reorganised into battlegroups as necessary. 4 CMBG was originally much lighter, with two infantry battalions, an armoured regiment, an artillery regiment, an engineer squadron, and a service battalion (see Figure 1). CMBGs are now somewhat heavier, with a full engineer regiment and with the armoured regiment focused on reconnaissance (see Figure 2),[21] but their structure and role remain unchanged: essentially, to serve as standard line formations that can be rotated interchangeably.

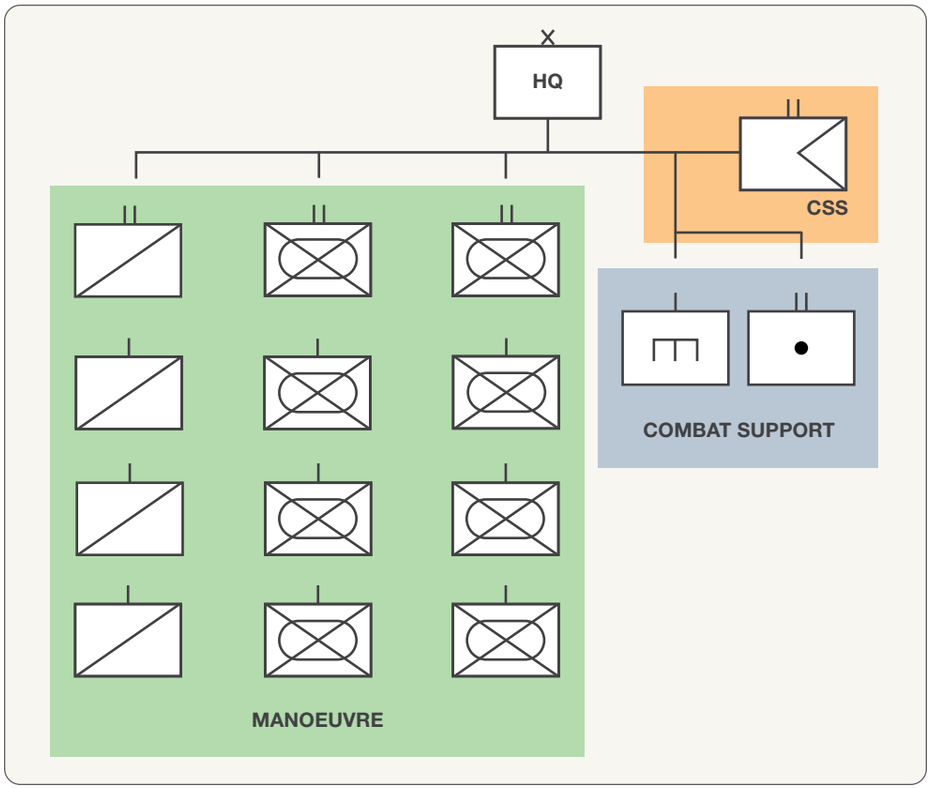


Figure 1: The outline of the CMBG in Europe in 1970, which formed the basis of rotational formations that became the mainstay of the Canadian land forces until now. Note that combat support and combat service support sub-units are not listed.

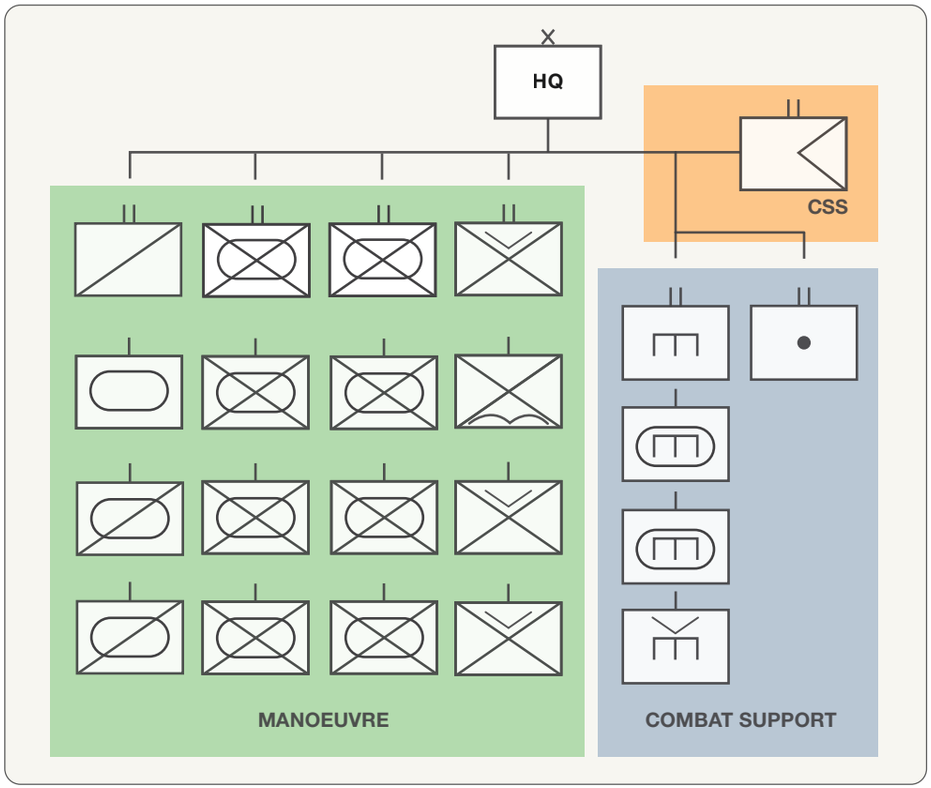


Figure 2: The outline of the modern, generic CMBG, which forms the mainstay of the Canadian land forces. Note that combat support and combat service support sub-units are not listed.

CMBGs have several advantages. Among them are their familiarity and tactical flexibility: with essentially identical elements across all of the CA's formations, the groups are essentially "plug and play" for staffs and commanders. Moreover, they contain plenty of combat power in the form of four manoeuvre elements: an armoured regiment, two mechanised infantry battalions, a light battalion with plenty of combat support, and a full artillery regiment. What they lack, however, are the very facilities that made them relevant at the formation level. A set of interchangable, mechanised brigades made sense when transport and housing facilities were ready and waiting for them in Europe. Since then, however, CMBGs have been employed primarily as force generators, typically mustering battalion-plus-sized battlegroups to meet changing commitments and deployed far from the support bases they were designed for. Although able to task-tailor specific forces for specific missions (Afghanistan is an excellent example), CMBGs risk being considered mere headquarters for force generation and not the line formations they ought to be.[22]

Most importantly, the current CMBG does not have the ability to deploy its own combat power strategically—which, in the modern world, makes most of their combat power irrelevant.

BACK TO ITS ROOTS: THE BRIGADE GROUP AS A GLOBALLY DEPLOYABLE FORCE

> He who is willing and able to take the **initiative** to exploit **variety**, **rapidity**, and **harmony**—as basis to create as well as adapt to the more indistinct—more irregular—quicker changes of rhythm and pattern, yet shape focus and direction of effort—survives and dominates.[23]
>
> *—John Boyd*

The development of the modern brigade group can be traced as far back as pre-revolutionary France, when, in 1763, the Royal Army began reorganising after the defeats in the Seven Years' War. Although the idea of infantry brigades dates back to Gustavus Adolphus in the 17th century—as an administrative division for controlling the battlefield movement of multiple battalions—the French took it one step further. Rather than divide a force for tactical employment, thinkers such as de Broglie and de Choiseul conceived of keeping it

together for operational and strategic movement, maintaining an army in distinct, all-arms divisions for strategic movement as well as on the battlefield. This denied the enemy the ability to force a decisive battle at his own choosing or to ascertain where the army intended to force a decision.[24] This ability to conduct manoeuvres with scaleable, independent, all-arms formations proved a major advantage and enabled mass revolutionary and Napoleonic armies to employ their unprecedented numbers effectively.

Thus, the concept of independent, self-deploying formations as all-arms, self-sustaining entities that can be concentrated and dispersed at will and assigned in appropriate numbers to strategic or tactical tasks is not a new one. The idea of what exactly such a formation looks like, how it moves and the tasks it must carry out has obviously changed over time: Napoleon's divisions and corps could live off the land in wars that stretched across the European theatre. During the Great War, that level of manoeuver was not seen, preventing the mobile use of independent divisions and confining them to slow, larger-scale movements aimed at maintaining a long, contiguous front, with little opportunity for decisive battles. 4 CMBG was well suited for action in a massive mobile and area defence of Western Europe. Today, however, conflict is built upon global networks, and brigade groups should consider the world its theatre.

In the current Canadian context, the world is unpredictable, meaning that deployments are potentially global in nature. Moreover, there is a plethora of technologies available for deployment, along with the platforms that the army is required to deploy. To put it simply, any kind of truly independent formation must have the capacity to deploy by a variety of means anywhere in the world and at short notice. No small task, but possible given the right kind of organisation. On this issue, we must begin by considering the key limitation of the CMBG: not its firepower, not its tactical mobility, not its command and control, but, crucially, its *strategic mobility*.

The key to restoring the brigade group's relevance is strategic mobility, and the key to establishing strategic mobility is light forces and, with respect to standing units, the Army's light infantry battalions (LIB) with their associated enablers: light engineers, including a parachute troop; FOO/JTAC and, possibly, an integral indirect capability provided by the RCHA; and, ideally, a currently unfilled requirement for a light, air-transportable armoured anti-armour platform such as the Panhard Mk.II VBL, which, for the purpose of this paper, will be referred to as Light Forces Battlegroups (LFBG). We can view LFBGs in much the same way as mechanised BGs and doctrinally consistent mixes of medium forces and enablers. Although I will elaborate further on this later, it must be recognised early on that "light forces" are distinct from "dismounted mechanised forces." Trained, maintained, equipped and mandated to operate independently without a reliance on AFVs, light forces maintain unique capabilities in terms of insertion and sustainment that cannot be maintained or replicated in mechanised formations. The unique and important contributions of light forces, though doctrinally unrecognised today, in fact have a long history in post-war Canadian defence planning.

The concept of using light, air-transportable infantry to give Canada an ability to deploy combat power at the strategic level goes back as far as 1946 when, as part of the joint Canadian–U.S. Basic Security Plan, Canada committed airborne forces to countering Soviet incursions in the north.[25] The Canadian Airborne Regiment (CAR) was created as part of Unification in 1968 as a rapid-reaction force, ostensibly to operate outside the normal CMBG rotation to Germany.[26] Although the CAR later brought its expeditionary attributes to 2 CMBG to create a new Special Service Force (SSF) officially drawing its lineage from the famed Canadian-US special forces brigade dating from Second World War; it was notably different from its namesake in that the SSF was only mandated to deploy rapidly in a non-combat role, such as peacekeeping or stabilisation. For primary combat roles, 2 CMBG was to operate as a rotational mechanised brigade group.[27] Since the disbanding of the CAR in 1995, the light capability of the CA has been in continuous limbo, with the LIBs existing without any defined role or coherent, CAF-wide Force Employment Concept (FEC).

Light battalions, featuring the actual component companies of the Airborne Regiment, were stood up in 1996 and given no real strategic direction on how they were to train or to what end. As a result, the light battalions of the three regular force regiments (and their associated light engineer squadrons) found themselves perfecting their aerial insertion and close terrain capabilities, largely on their own initiative, only to find themselves re-roled as mechanised battlegroups for use overseas—notably Afghanistan.[28] Although *Advancing with Purpose* mentions the light capability and a desire to build upon it, it does so only with regard to operating in traditionally difficult terrain where mechanised forces cannot go, not with regard to leveraging their strategic deployability.[29] There have been two important articles in recent editions of the *Canadian Army Journal* that emphasise the need to use light forces as rapid-deployment forces: Major Jean Vachon's 2013 article entitled "The Future of Light Forces" and Lieutenant-Colonel Paul Lockhart's "Light Forces for Rapid deployment and Theatre Entry." Vachon, like this author, emphasised the need for light forces to operate in a brigade context, particularly on rapid deployment and counter-insurgency (COIN) operations. He focused on the concept of a brigade-generated light battalion that could be used in a resource-poor environment. He also argued that light infantry should maintain a focus on cultural co-operation that would allow them to work with local populations to set up COIN campaigns for success and support SOF.[30]

Lockhart, in contrast, argued that light forces should focus more intently on theatre activation and preparing the ground for follow-on forces. He recommended for this role an expanded number of designated parachutists at the light infantry battalion level and greater integration of fire, mobility/counter-mobility, Combat Service Support (CSS), and command and signals at the battalion level. Both Major Vachon and Lieutenant-Colonel Lockhart raised interesting points and hugely broadened the discussion around the employment of light forces. This article, however, intends to expand on that discussion by examining the problem from a brigade perspective.

The organisation and employment of LFBGs must be seen as something closer to the battlefield mobility provided by combat engineers and less as independent unit manoeuvring. There are a number of reasons for this, the first being survivability. Light infantry has significantly less survivability than its mechanised counterparts. Canadian doctrine and thought, for example, positions the LAV III as part of the infantry section's integral firepower[31] and, unsurprisingly, there has been a lack of drive to acquire and deliver modern dismounted antitank systems into the hands of Canadian soldiers. Without the LAV, the light infantry is horribly exposed, and without significant air-transportable troop transport it lacks significant battlefield mobility.

Given the absence of modern light forces doctrine[32] in the CA, the distinctiveness and role of light forces is often ignored. There is a lingering temptation to equate dismounted mechanised forces with light forces. It should be understood that just as mechanised forces require specific training and skill sets—such as the maintenance and crewing of IFVs—light forces require training and equipment scales for parachute, airmobile, insertion, infiltration, close terrain and aerial resupply operations. These skills require significant inputs of both initial qualification and continuation training to establish and maintain forces, and it is simply unrealistic to expect a mechanised battalion to remain current, not just the LAV crew, but also parachutists, jumpmasters, pathfinders (with their attendant freefall and square canopy capabilities), close-terrain instructors and basic helicopter operations sustainment personnel. It is also overly ambitious to expect a CSS company to be prepared both to support a mechanised force with a conventional echelon system *and* to have an air cell ready to bundle combat stores in air drops, fastballs, sling loads and other means. While it may be desirable and possible to cross-train soldiers on both mechanised and light skill sets, we cannot reasonably expect units to maintain both sets of capabilities at a high standard.

That being said, light forces lend themselves primarily to rapid strategic insertion and local tactical actions, not independent tactical action in a mechanised brigade context. This makes them ideal to act with a primary aim of enabling strategic mobility, with combat manoeuvre in a mechanised context considered a secondary role. Although, for example, there remain *potential* capabilities that would enable rapid, mechanised warfare at the brigade level, namely, air assault—the CAF, by no stretch of the imagination, has the means to do this effectively. Air assault requires enough lift to place a force on the ground large enough to achieve the tactical objective, as well as overwhelming fire support to allow helicopters to deploy the force close enough to the enemy to engage it with its direct-fire weapons systems.[33] To do otherwise is tactically unfeasible, as without suppression the defender will simply shoot vulnerable helicopters while they are unloading their passengers. If the attacking force is dropped outside the range of its organic weapons, the defender can simply fix the attackers with their own direct and indirect systems while preparing a counterattack at their own time and choosing, if not simply destroy them with artillery. The CAF currently possesses no attack helicopters[34] and only a single squadron of CH-147s Chinooks, which, although capable of providing adequate lift for an air assault insertion, are not "owned" by the light battalions and thus cannot be counted on to provide the necessary lift for dedicated air assault units. Our current LIBs have extensive experience conducting "offset" airmobile operations in which forces are quietly inserted by air out of range of enemy weapons systems in order to execute raids, ambushes and disruption and destruction tasks; however, this is a relatively slow and deliberate operation that does not fit well with the rest of the CA's interpretation of "manoeuvrist" military theory. In short, it is a very useful capability but not useful enough to justify the maintenance of entire battalions in a chronically under-resourced army. Converting LIBs into mechanised battalions is an expensive proposition and would require the loss of significant capabilities that would seriously reduce the CA's flexibility in future conflicts; that being said, maintaining the units without a clear mandate is also wasteful and limiting. What is needed is a determined effort to maximise the contribution of our standing light forces to the rest of the army.

What light forces can do extremely well is move to places cheaply, quickly and effectively and begin influencing and developing the environment for forces with more combat power. This is strategically vital in an unpredictable world and would give the CAF an ability to marry the considerable strengths of the scalable and flexible infantry-armour battlegroups to the ability to operate in a new, rapidly changing environment within a relevant period of time. Given this *strategic* impact, theatre entry and support to other units should be deemed the primary role of the LFBG, with a strong secondary role of conducting limited, deliberate actions such as deep disruption operations *once the main force is on the ground*. This would put the LFBG in a new category somewhere between an independent manoeuvre unit and the combat support facet of the engineer battalions that are already part of the CMBGs. As this function falls somewhere between that of an independent manoeuvre element and a combat support element, this author will refer to the capability as a Strategic Insertion / Combat Manoeuvre, or SICM, capability.

In terms of basic layout, a CEBG with three manoeuvre, one SICM, two Combat Support (CS,) one CSS and an HQ capability would not look fundamentally different from a modern CMBG with four manoeuvre elements, two CS elements and an HQ (see Figure 3), meaning that this will have little or no impact on important administrative matters such as PYs, important career progression slots or the need to establish new trade designations. In fact, the components of the SICM are already working together, using the common practice of infantry battalions with"associated" enablers, such as light engineer troops with a parachute capability. This is not a matter of resources. It is a question of mandates, roles and focus: what needs to occur is a fundamental doctrinal shift that highlights the ability to move initial elements of a brigade group to the battlespace quickly and assemble a force package around units shaping the situation on the ground, rather than taking weeks or months to try to optimise an ad-hoc battlegroup that will likely delay so much that its "tailored" composition will probably lose its relevance by the time it arrives. This shift will enable light forces to be used at their peak capacity, to present a realistic picture of the combat power of a Canadian brigade group and, most importantly, to shift the deployment mindset from a basically administrative exercise to a response where Canadian combat power can shape and move with a situation, rather than simply reacting to it.

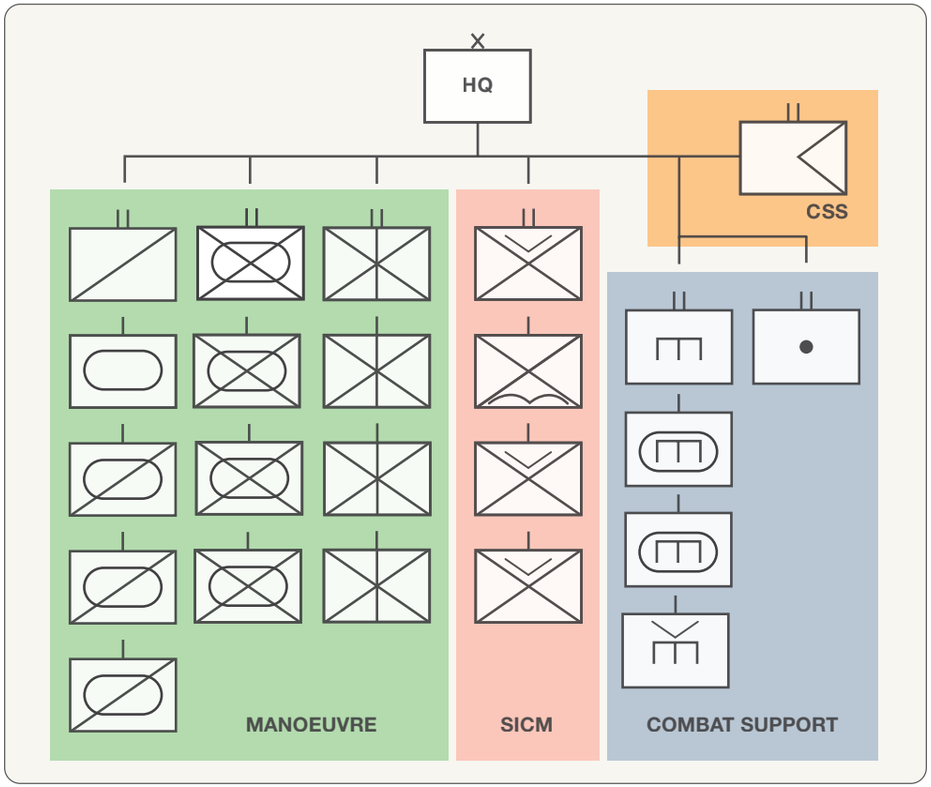


Figure 3: A proposed structure for a CEBG. Much as the component elements of a combat team parade and train with their parent units, so would the component elements of a CEBG.

A single mechanised infantry company, for example, would require upwards of ten lifts[35] on a CC-177 Globemaster III aircraft, assuming there was an airfield ready to receive them. And even then, the many components and enormous logistical requirements of a mechanised battlegroup would likely mean days of build-up before even preliminary operations could begin. With vehicle crew accounting for three out of every ten infantry section members and the support of the other section members needed to maintain, move and prepare the vehicles for combat, the members would be unlikely to start looking outwards into the AO without first looking carefully inwards at their vehicles. This is the *status quo* for our operations, and it is not good enough: those days will be precious, and without the ability to influence the AO the initiative will likely be lost.

Conversely, a SICM battlegroup mandated, trained, and prepared to deploy within 12 to 24 hours could quickly move into the theatre and be ready to operate, using a number of CAF airlift assets, within two to three days, giving Bde HQ vital time to task-tailor, organise and build up mechanised units and their appropriate support elements. For example, an LFBG could load a coherent light company parachute group, with enablers, onto 2 of the RCAF's 17 CC-130J aircraft or, conversely, a light infantry company group with a substantial CSS component on two CC-177 Globemaster IIIs. An additional company could follow behind in CC-150 Polaris aircraft for cross-loading on an intermediate friendly airbase, allowing for the better part of an LFBG to be on the ground and in operation in the time it would take to tender bids for a contract to airlift the mechanised units—and this is just one of many, many options open to light forces when it comes to insertion methods and air platforms.

Using utility vehicles, from ATVs to trucks, to conduct their sustainment operations and resupplying directly with aircraft that can quickly initiate operations out of numerous NATO and other allied airbases, light forces have the advantage of being able to build up a pace of operations at a rate that a mechanised force cannot come close to matching. To use the analogy of combat manoeuvre, one cannot expect engineers to capture an objective themselves, but a commander would be foolish not to designate, train and equip forces capable of overcoming the natural and man-made obstacles that deny the ability of his combat manoeuvre elements to press the attack. Our adversaries use space like a river and speed like a minefield, keeping us from influencing the objective. It's time that we considered designing our forces to overcome these barriers.

EMPLOYING THE SICM CAPABILITY: AN ALLIED CASE STUDY

> Such amorphous, lethal, and unpredictable activity by Blitz and Guerillas make them appear awesome and unstoppable which altogether produces uncertainty, doubt, mistrust, confusion, disorder, fear, panic,…and ultimately collapse…[36]
>
> —*John Boyd, Patterns of Conflict*

The 2013 French intervention in Mali, known as Op SERVAL, demonstrates the practicality and effectiveness of self-contained, rapid-reaction, brigade-sized formations at the strategic level. Ongoing tensions between the Turaeg minority in the north and the Malian government based in the south of the country erupted into open hostilities in January 2012. The main opposition militia, the *Movement national de liberation de l'Azawad* or MNLA, struck alliances with relatively new Islamist groups as the rebellion grew, seizing towns in the north of country before the conflict reached a stasis point later that year. In January 2013, however, that state of balance was broken, and the Islamists began advancing southward, threatening regional stability. France, unable to build a coalition of local states fast enough and with vital interests in the country, decided to intervene unilaterally.[37]

There are many aspects of France's intervention in Mali that are unique to that situation, including their extensive experience working in the region. However, the main contributor to the French success was their ability to deploy small groups of soldiers, down to the sub-unit group level, in a scalable and flexible manner that allowed for both early intervention and the ability to change the balance of forces on the ground with little friction.[38] This is reflected in their expeditionary culture: their units are able to self-deploy at the sub-unit level and train with the expectation of doing so. Although the first French forces on the ground were SOF and helicopters were already in the region on training and advisory missions, larger, conventional forces were able to hit the ground *within 24 hours of the mission being launched.*

The first units on the ground were *sous-groupements tactique interarmes*, or SGTIAs, a flexible, all-arms formation not all that different from the Canadian concept of the combat team.[39] But while the Canadian combat team has no ability to deploy independently, the SGTIA can be built quickly around units in theatre, or close to it, and operate outside the reach of the echelon system.

To offer one example, paratroopers in Chad were told on the afternoon of 11 January that they would be driving to Mali the next day, with scout platoons, armoured platoons and a support platoon forming around it as it prepared to move. This tailored, self-sustaining combined arms unit was ready to go within 12 hours of receiving warning orders to move.[40] High-readiness units in France began preparing to move and did so—to new locations in Mali *not already secured* by the SGITAs in the region. The French were therefore able to strike throughout the theatre, instead of being constrained by a few airheads, and to deploy enough troops quickly—over 3000 by 29 January, less than three weeks after the troops in Chad received their warning order. This allowed them to both stop the enemy advance cold and give them enough time to build a coalition of regional states to lead the intervention. By 8 February African troops had begun outnumbering French troops and France had achieved the majority of its political objectives.[41]

This intervention had all the hallmarks of the COE: difficult-to-predict local situations caused by new ideological movements and the spillover of violence and arms from other regional conflicts (in this case, Libya), a rapidly changing ground situation that would have been difficult to reverse once a new reality on the ground had metastasized, and the effectiveness of rapid intervention. Of course, France's deep and long experience in the region gave them several advantages, but we can make use of many French tactical and strategic concepts, in particular, the idea of deploying self-sustaining all-arms units at the company or battalion level built around a deployable core that abets the rapid insertion of the appropriate forces. We will use some of these concepts to see how a CEBG might be employed to ensure a quick and effective political outcome in the COE.

EXAMINING THE POTENTIAL: A THEORETICAL EMPLOYMENT OF THE CEBG

(The following scenario is entirely fictional and is used for illustrative purposes only.)

> Since Russia's strategy is opportunistic, reflecting the notion that any campaign is to be pursued only in the case of certain victory, it will not initiate the second, third, and fourth phases unless favorable conditions are clear.[42]

It is the summer of 2016, and the Latvian Crisis has just begun. Local tensions have exploded into all-out intercommunal riots in the east of the country. Latvia, which is 26.2% ethnic Russian,[43] has experienced ongoing tension for all of its modern history, but it is no surprise that the troubles are centred in the eastern city of Daugavpils, with a majority Russian population, and Rēzekne (see Figure 4), with only a very slight Latvian majority. A hardening of views brought about by the ongoing tension generated by the Ukrainian Civil War has spawned intercommunal riots. With winter approaching, the tension has continued and, with the 2016 US presidential election fully underway, armed pro-Russian groups were seen acting in a co-ordinated, well-equipped and professional manner. In what seemed to be an action aimed at supporting the "autonomous" groups behind the troubles, Gazprom began doubling the selling price of natural gas to the Baltic states—not, however, to Germany or Poland—an apparent attempt to divide NATO politically. Moreover, four Russian formations—what appeared to be elements of the 4th Armoured Division, 76th Airborne Division and two independent motor rifle brigades, the 4th and 31st—were seen massing on Latvia's eastern border. At the same time, the manipulation of foreign intelligence services and the active interference of pro-Russian elements within the security services severely disrupted the implementation of a national security plan. This careful co-ordination of economic, military, intelligence and political measures was a perfect example of "special war", and it was clear that a quick, dedicated campaign to establish a new political reality was underway. On 31 October, NATO decided to implement a series of military measures to both stabilise and support the legitimate government of Latvia and to prevent and deter both direct and indirect support to armed groups in eastern Latvia.

NATO had essentially two tasks: firstly, to build a large enough presence in Latvia to both reassure the Baltic states that NATO remained committed to the indivisibility of security and to allow Latvian forces to reorganise and disarm the militias with confidence and caution; and, secondly, to contribute to a screen to monitor the eastern border. The Canadian contribution, named Op RALLY, envisioned Canadian troops beginning to contribute to security within three days and a sizable combat force on the ground in two weeks. This required two separate deployments: one to support the screen, which could be based out of Davagpulis Airfield, and a second wave to build up a sizable amount of combat power, based out of Jēkabpils Air Base, further west.

Figure 4: The initial disposition of key terrain and Russian conventional forces at the beginning of the conflict

With time of the essence, the decision was made to insert the screen under the command of a recce-heavy RCD battlegroup with integral SICM assets, known as Group SCREEN. The second phase would see a brigade-led buildup—in two parts known as Groups BEAR 1 and 2—of a reinforced mechanised battlegroup spearheaded by the remaining SICM battalion, 3 RCR, much as 2 CER would have handled a brigade-level river crossing. Lastly, a motorised infantry battalion, 2 RCR (it is assumed for the sake of this paper that the second battalions of all the regular force infantry regiments will have been re-roled as TAPV units), would be kept in reserve with its own SICM sub-unit, much as a commander would keep a breaching reserve when facing conventional obstacles, known as Group CUB.

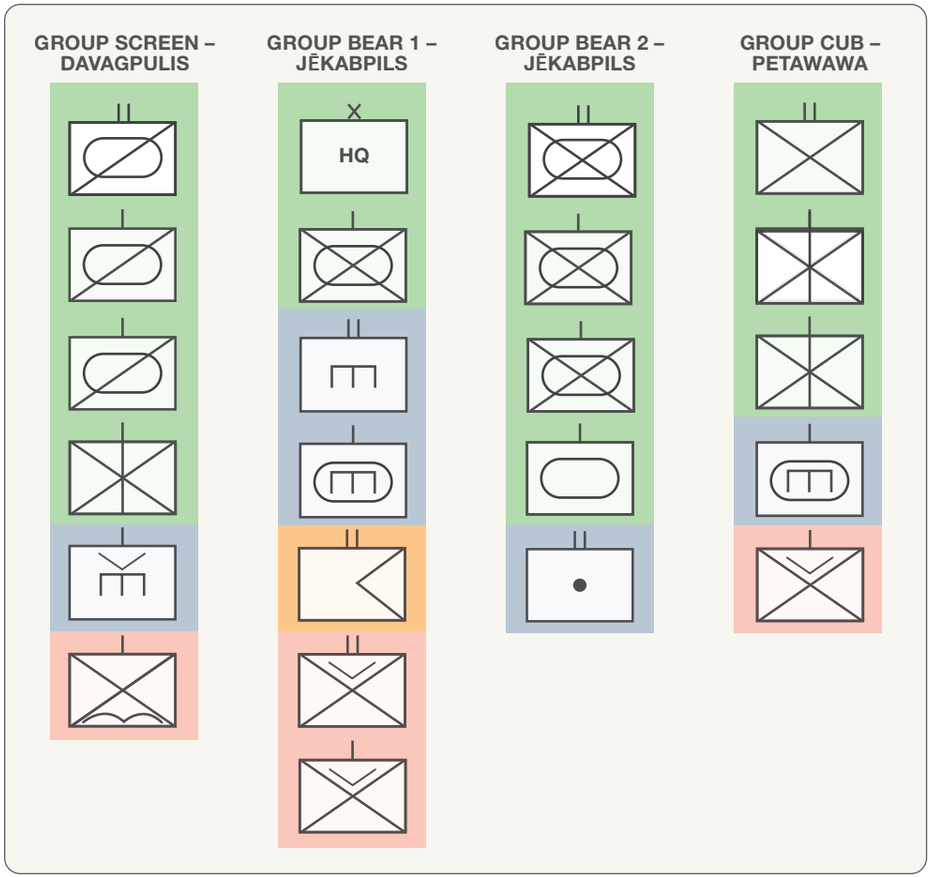


Figure 5: The deployment structure for intervention in Latvia, with the parachute company supporting the initial screen insertion, an airmobile company with battalion headquarters supporting the forward elements of the brigade's deployment of its main body, and the third rifle company ready to support an independent insertion of the bde reserve.

The insertion of Group SCREEN was executed with some difficulty, but training at both the unit and brigade level ultimately proved decisive. The parachute company had trained extensively in a SICM role with brigade reconnaissance and had some experience with both of the brigade's SICM-associated engineer squadrons. From the earliest announcement of a Canadian commitment to the NATO reinforcement of Latvia, there had been heavy protests in the suspected arrival areas of the Canadian troops, with agitators baiting protestors and counter-protestors into riots, the sabotage of local electrical and road systems and even small-scale guerrilla attacks against key installations. The SICM company, however, was able to provide effective local security and even managed to construct a temporary improvised airstrip after a crude, homemade rocket damaged the main runway of Davagpulis Airfield. Though slightly behind schedule, the recce screen was established on 7 November.

The main force hit the ground in two waves. BEAR 1 hit the ground with a large SICM element under its own battalion command and organised the important set-up and follow-on forces for the brigade and support elements. This allowed the brigade staff to prepare the ground with respect to the logistics and arrival plans for the reinforced combat team, which became operational on 14 November. The defensive positions, routes, and waiting areas were ready for the Leopard-LAV battlegroup, as the SICM battalion had been employed in mark these areas for the CEBG's follow-on units. The battlegroup was effective almost immediately

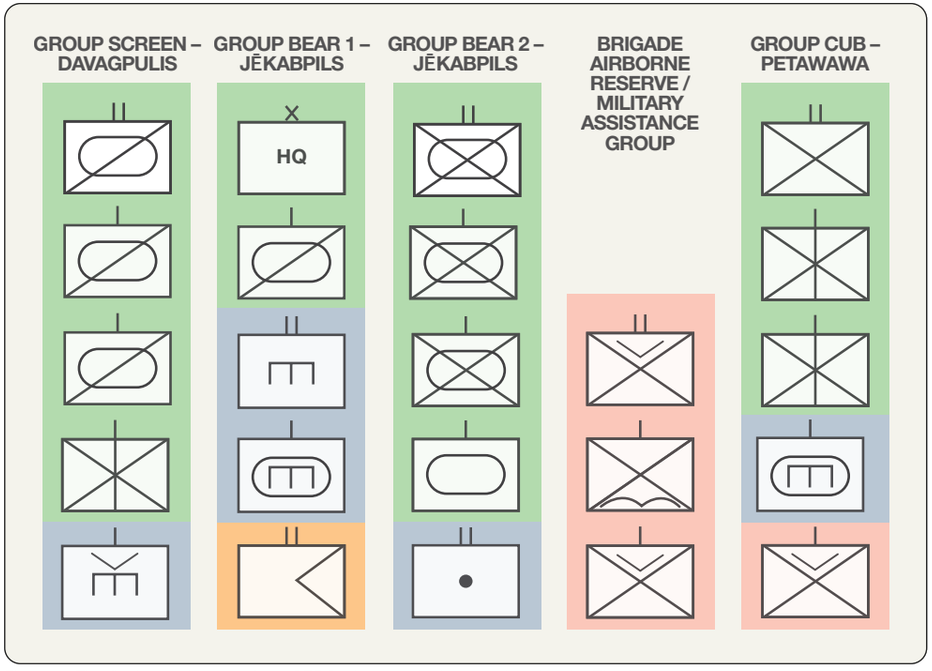


Figure 6: The final organization of the CEBG after the deployment into Latvia. The forward deployed elements of the SICM battalion have adopted the role of a manoeuvre element now that insertion facilities are available and running. Only the uncommitted SICM company attached to the bde reserve remains roled as a strategic insertion asset in the event that a second, independent entry is required.

and made an important and timely political impact. With the bulk of the CEBG on the ground, the SICM battalion was pulled back to serve as a brigade airborne[44] reserve, capable of conducting independent or SOF co-operation operations or supporting the advance of another manoeuvre element. Importantly, they also served an important role as a military assistance mission to the Latvian Land Forces, re-training and re-equipping recalled reservists to form a more robust national army.

Force CUB remained in Canada, ready to reinforce either Group SCREEN or Group BEAR or, given its own integral SICM capability, to deploy elsewhere in the region. Fortunately, it never had to be used. Unlike Crimea and the Ukraine, the carefully planned special war was disrupted by the early arrival of significant combat power that gave the local forces confidence, and the political backing felt by Riga enabled a balanced, considered, but firm response to the encroachment on Latvian sovereignty.

CONCLUSIONS: FORM FOLLOWING FUNCTION

> He who is unwilling or unable to take the initiative to exploit variety, rapidity, and harmony … goes under or survives to be dominated.[45]
>
> —*John Boyd*

Strategic mobility has long been a Canadian preoccupation, and for good reason. From its very beginning, the country has been a thinly-populated series of settlements separated by staggering physical boundaries: the Canadian Shield in the east of the country, bordering the Great Lakes, then westward into marsh and prairie and, finally, to mountains in the West, with forests and barely-hospitable tundra in the north. Communication and mobility ultimately *made* Canada. Even after achieving a degree of political independence in 1867, Canada remained, without a means of reliable, cheap and convenient communications, " not a cohesive nation but rather a bunch of isolated village communities connected by tenuous threads…. 'at best the Siberia of Great Britain."[46] So it is thus not surprising that Canada undertook to build a national railway as its first truly large national project and quickly used it for power projection when Canadian and British contingents went West to suppress the North-West Rebellion of 1885. Canada showed a remarkable ability to prepare and deploy military forces around the world as early as the Second Boer War in 1899, demonstrating an early but strong understanding of the need to respond meaningfully to its commitments to allies, a tradition kept in 1914, 1939 and 1950.

The Cold War, however, changed much of this. With a well-defined enemy and, in NATO, a well-defined and static primary alliance, routine, not flexibility, became the byword for organising military forces. It is not surprising, therefore, that Canada's first truly combat-ready permanent army, established during this period, inherited this spirit of predictable and efficient organisation rather than the pioneer traditions of flexibility and strategic mobility that underpinned previous national military efforts. The world, however, has changed. Global actors have perfected the ability to pursue campaigns on numerous levels simultaneously, across a number of domains, with speed and flexibility, little warning, and lasting results. Against such a fluid strategy, even the most well-trained, well- equipped and efficient combat formation means nothing if not deployed quickly. So it is a matter of some concern that an army so well-acquainted with the effects of information operations, even to the point of integrating them into its firepower doctrine,[47] is not designed to match the speed of those operations with rapid strategic deployment. Instead of focusing on the capabilities of our adversaries, we have built the entirety of our operational and tactical doctrine around a solid core of a conventional Cold War enemy. As such, we have focused on firepower, armour and raw strength, epitomized by the square combat team at the centre of our individual and collective training. Yet our rivals have been very uncomfortable, and have fundamentally changed their doctrine, organisation and outlook. We are excellent boxers showing up to a judo match.

Canadian soldiers have proven their ability to fight in a multiplicity of conflicts in many different locations over the years. The fearsome reputation that Canadians have gained results from a willingness to innovate. Less than twenty years after Canadian mounted infantry swept through South Africa, Canadian machine-gun companies were fighting a brutal trench war in France; two decades after that, Canadian armoured columns were employing innovative radio navigation to punch up the Falaise road. Canadians, despite being members of a relatively small country in terms of power, have consistently made an impact far greater than their numbers would suggest by adapting, changing, and remaining flexible. We have been in stasis for forty years, and it is time that we looked to our tradition of innovative thinking to help us a forge a future worthy of the reputation inherent in the words "Canadian Army".

ABOUT THE AUTHOR...

Captain John Keess is currently the Company Second-in-Command of Oscar Company, 3rd Battalion, Royal Canadian Regiment. Since joining the Canadian Armed Forces in 2005, he has served with the 2nd Battalion and 3rd Battalion of the Royal Canadian Regiment, deploying to Kabul on Operation ATTENTION in 2012 and to Central and Eastern Europe with Operation REASSURANCE in 2014. He has a BA degree in Military and Strategic Studies from the Royal Military College of Canada and an MA in History from the University of New Brunswick.

ENDNOTES

1. John Boyd, "Patterns of Conflict," <PDF from Wikimedia.org>, (1986), 10–12.
2. B.H. Liddell Hart, *History of the Second World War*, 21.
3. Robert Greene, *The 33 Strategies of War*, (Viking: London, 2006), 343.
4. Thomas X. Hammes, *The Sling and the Stone in the 21st Century*, (St. Paul: Zenith Press,) 208.
5. John R. Schindler, "The Coming Age of Special War," <20committee.com> , 20 September 2013.
6. Chief of Force Development, "The Future Security Environment, 2009–2030," (Report: Department of National Defence, 2009), 92.
7. Berzins quotes Techekinov and Bogdanov to outline eight distinct phases of the "new generation warfare:
   1) "non-military asymmetric warfare"
   2) "special operations to mislead political and military leaders"
   3) "intimidation, deceiving and bribing government and military officers"

4) "destabilising propaganda to increase discontent among the population"

5) "establishment of no fly zones…imposition of blockades"

6) "commencement of military action, immediately preceded by large-scale reconnaissance and subversive missions"

7) "combination of targeted information operation…combined with the use of high-precision weapons"

8) "roll over the remaining points of resistance"

Janis Berzins, "Russia's New Generation Warfare in Ukraine: Implications for Latvian Defense Policy." *National Defence Academy of Latvia, Center for Security and Strategic Research.* (Policy Paper No. 2: April 2014), 6–7.

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13. Ibid, 15.

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15. Maj Dave McQueen, "The DART and Op HESTIA: The Canadian Forces Helping in Haiti: For Op HESTIA, – Deputy Commanding Officer, the Disaster Assistance Response Team (DART)", (Report: Department of National Defence), 15 October 2010.

16. Max Hastings, *Catastrophe: Europe Goes to War, 1914.* (London: William Collins, 2013), 159.

17. Jack Granatstein, *Canada's Army: Waging War and Keeping the Peace.* (Toronto: University of Toronto Press, 2002), 361–363.

18. 5 CMBG was originally known as 5 Combat Group from 1968, 5 Canadian Brigade group from 1977, 5 Canadian Mechanised Brigade from 1989 and 5 Canadian Mechanised Brigade Group from 1992.

    Canadian Army, "5th Canadian Mechanised Brigade Group," http://www.army-armee.forces.gc.ca/en/5-cmbg/index.page

19. 2 Combat Group was stood up in 1966 and would later take on an interesting, somewhat eccentric, role when employed as the Special Service Force (SSF) between 1977 and 1995. The SSF was intended to act as a rapidly-deployable force *in peacetime* but was meant to act as a standard CMBG in *wartime*. For the purposes of this article, it will be assumed that the SSF was essentially a CMBG with an interesting, albeit secondary, rapid deployment capability.

    Canadian Army, "2 Canadian Mechanised Brigade Group," http://www.army-armee.forces.gc.ca/en/2-cmbg/index.page

20. Canadian Army, "1 Canadian Mechanized Brigade Group." http://www.army-armee.forces.gc.ca/en/1-cmbg/index.page

21. Canadian Army, "2 Canadian Mechanized Brigade Group."

22. *Advancing with Purpose* states that the CA operating at the battlegroup and brigade group level, *up to the divisional level*, is a "key characteristic.", 10.

23. Boyd, 174.

24. R.R. Palmer, "Frederick the Great, Guibert, Bülow: From Dynastic to National War," in *Makers of Modern Strategy: From Machiavelli to the Nuclear Age,* ed. Peter Paret (Princeton/: Princeton University Press, 1986), 106.

25. Granatstein, 316.

26. Ibid, 363.

27. Canadian Army, "2 Canadian Mechanized Brigade Group."

28. Paul A. Lockhart, "Light Forces for Rapid Deployment and Theatre Entry," *The Canadian Army Journal,* Vol 14.3 (Fall 2012), 85.

29. *Advancing with Purpose,* 21.

30. Jean Vachon, "The Future of Light Forces," *The Canadian Army Journal*, Vol 15.1 (Spring 2013), 61–62.

31. V. Sattler and M. O'Leary, "Organizing Modern Infantry: An Analysis of Section Fighting Power," *The Canadian Army Journal*, Vol 13.3 (Fall 2010), 29.

32. Although PAMs for airborne (parachute and airmobile) operations do exist, these are branch-specific manuals and do not offer a light forces doctrine that would allow commanders to use them effectively in a formation context.

33. Janis Berzins, "Russia's New Generation Warfare in Ukraine: Implications for Defense Policy," *The Journal of Military Operations*, Vol. 2.2 (Fall 2014): 6–7.

34. It is possible to role the CH-146 Griffon as a Close Combat Attack (CCA) aircraft with machine guns, but we should note that this is a very different role than what is needed, ie, the ability to deliver precise and targeted fire on a variety of enemies, including enemy armour.

35. A standard mechanised infantry company has 16 LAV IIIs, requiring eight lifts, and a minimum of two lifts would be required for personnel and equipment.

36. John Boyd, "Patterns of Conflict," <PDF from Wikimedia.org>, (1986), 101.

37. Michael Shurkin, *France's War in Mali: Lessons for an Expeditionary Army*, (Santa Monica: RAND, 2014), 6-9.

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39. Ibid, 12–13.

40. Ibid, 13–14.

41. Ibid, 14–15.

42. Berzins, 7.

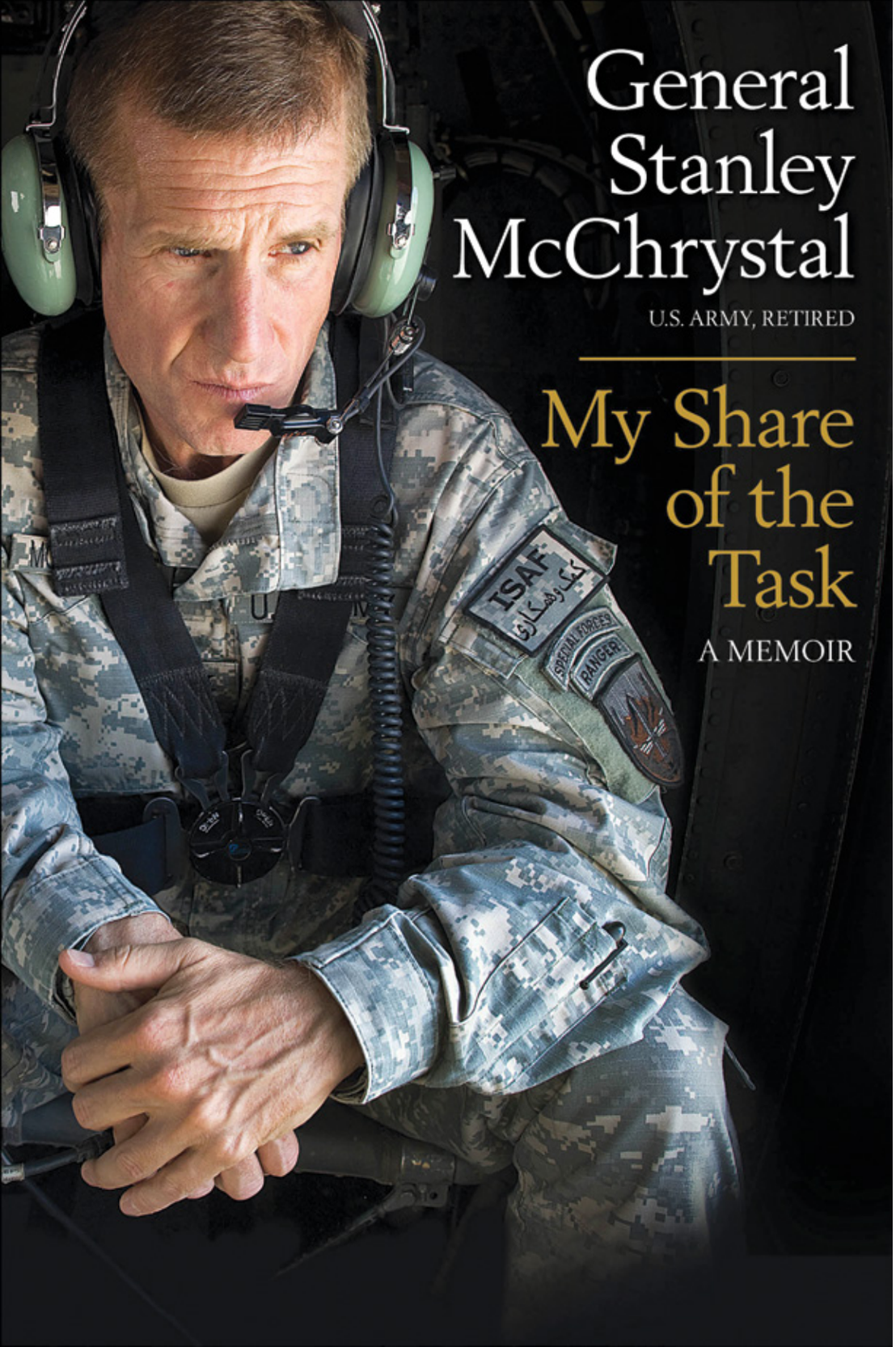
43. "World Factbook: Latvia," <cia.gov> , 20 June 2014.

44. "Airborne" being used in the Canadian doctrinal sense, in that it includes both parachute and helicopter operations.

45. Boyd, 174.

46. Pierre Berton, *The National Dream: The Great Railway 1871–1881.* (Toronto: McClelland and Stewart, 1970), 21.

47. Director of Army Doctrine, "B-GL-300-007/FP-001, *Fire Support in Land Operations*," 2012, 1–3.



THE MCCHRYSTAL MEMOIR AND PRINCIPLES FOR ATTACK THE NETWORK (ATN)

James W. Moore, LL.M., Ph.D.

INTRODUCTION

In 2013, General Stanley McChrystal (U.S. Army, ret) published a memoir entitled *My Share of the Task: A Memoir*.[1] This book is a fascinating account of the experiences of one of the U.S. Army's most influential general officers of recent times. McChrystal's career spanned 38 years, from the day he first set foot on the grounds of the United States Military Academy at West Point in July 1972 to the day he retired at a ceremony on the parade field at Fort McNair in July 2010 after abruptly resigning as Commander, International Security Assistance Force (ISAF) and U.S. Forces Afghanistan (USFOR–A). As a "war story," McChrystal's reminiscences are absorbing. However, it is his reflections on his time as Commander of Joint Special Operations Command (JSOC) and Task Force 714 (TF 714) during the height of the Iraq and Afghan wars that are especially illuminating. In those years, he presided over the transformation of U.S. special operations forces (SOF) into an extensive counter-terrorist network that could replicate the "dispersion, flexibility, and speed"[2] of the adversarial threat networks confronted in Iraq and Afghanistan, in particular, al Qaeda (AQ) and its local allies and affiliates. His experiences provide useful guidance as the Canadian Armed Forces (CAF) explore Attack the Network (AtN) activities[3] in response to the evolving improvised explosive device (IED) threat of the early 21st century. The intent of this article, in reviewing McChrystal's memoir, is to tease out these principles for the contribution they may make to the CAF's AtN research effort.[4]

THE "WAR STORY"

McChrystal's memoir is engrossing, on par in the view of many commentators with U.S. Civil War General (and later President) Ulysses S. Grant's highly regarded Personal Memoirs.[5] One of the highlights of the book is the riveting account of the hunt for Abu Musab al-Zarqawi, the ruthless leader of al-Qaeda in Iraq (AQI).6 This episode sheds light on the wide range of operations, intelligence, and analysis disciplines, skills, and activities required to systematically hunt down a high-value target; it serves as an exemplary case study of an AtN operation to "neutralize" a key node in a 21st-century threat network. U.S. SOF had been pursuing Zarqawi for the better part of two years since the 2003 invasion of Iraq, but the elusive AQI leader had always remained one step ahead. Their first break came on 6 January 2006, when Mohammad Rabih (a.k.a. Abu Zar), a critical node in the AQI threat network previously thought to be dead, was captured very much alive and well. Interrogated at the Special Operations Task Force screening facility at Balad Air Base north of Baghdad, he identified a cluster of buildings in Yusufiyah, on the southwest outskirts of the Iraqi capital that AQI used for meetings. Designated Named Area of Interest (NAI) 152, this location became one of many NAIs the task force monitored with whatever intelligence, surveillance, and reconnaissance (ISR) assets7 that could be spared from more urgent needs. After three months of watching and waiting, a suspicious convoy of vehicles suddenly approached NAI 152 on 8 April. Assault teams were immediately dispatched to strike the site and a secondary location nearby. At this secondary location, the assault team arrested 12 men who were taken to the Balad screening facility for questioning. Several weeks and 51 interviews

later, the interrogators finally drew out a decisive piece of information from one detainee who identified Sheikh Abd al-Rahman as Zarqawi's spiritual advisor and revealed that al-Rahman met with Zarqawi regularly every seven to ten days. Most importantly, he gave up al-Rahman's address in Baghdad. Thereafter, from mid-May, a constant watch was mounted on the sheikh. The effort was intense, with two ISR assets focusing on al-Rahman and one tracking anyone he met with, a commitment that represented the bulk of the task force's ISR capabilities at that time. This commitment of scarce ISR assets was not without cost. Operators were limited as a consequence to one or two raids per night, far below the operational tempo McChrystal believed was necessary to keep AQI back on its heels. By early June, heated debates erupted within the task force over whether to continue to watch al-Rahman or to move in and arrest him. Finally, on 7 June, highly suspicious movements on al-Rahman's part—what special ops professionals call "classic countersurveillance behavior" or "tradecraft"—caused his monitors to sit up and take notice. Something was afoot. They pulled in all available ISR assets to track al-Rahman, and, in short order, nine orbits had been assigned to follow four separate targets. Al-Rahman left Baghdad, switching among three different vehicles along the way, until at last he arrived at a two-story house nestled among palm groves in the dusty little town of Hibhib. There, the "eyes in the sky" finally saw the prize for which the Americans had been searching for so long: Zarqawi. Though McChrystal would have preferred to capture Zarqawi alive for the wealth of intelligence he had about the AQI network, this was not to be—the commander of the Iraq task force judged a ground raid to be too difficult to execute with a high probability of failure. The Americans could not afford to let Zarqawi slip through their fingers yet again. Consequently, orders were given for an immediate airstrike. Shortly after 6:00 p.m. on 7 June 2006, an F-16 delivered two precision-guided munitions on target, obliterating the (not so) safe house in which Zarqawi was meeting, appropriately enough, with his spiritual advisor. At 7:04 p.m., the AQI leader was pronounced dead from his injuries.

Source: U.S. Army photo by Sgt. Zach Mott, 3rd Hvy Bde Combat Team, 4th Inf Div Public Affairs

Rubble of safe house in Hibhib, Iraq, where AQI leader Abu Musab al-Zarqawi was killed in an airstrike, 7 June 2006

McChrystal's story is not without controversy: the friendly fire death of Ranger Pat Tillman in Afghanistan; the alleged mistreatment of detainees held at screening facilities under his command during the wars in Iraq and Afghanistan; and, of course, the infamous *Rolling Stone* magazine article that brought his career to a crashing end. The first two he discusses in some detail. Yet, the affair of most interest, the one that forced his resignation, he touches on only briefly. The question foremost in this author's mind—how could such an experienced and intelligent commander make a mistake of this magnitude?—he leaves unanswered, confining his personal vindication to a one-sentence summary of the findings of the U.S. Department of Defense (DoD) investigation into the matter.[8] Understandably, McChrystal, like all memoirists, tries to portray himself in the best possible light in potentially discreditable circumstances. In this, he succeeds better than most. His explanations of these and other controversies (apart from his resignation) are reasoned and frank; he owns up to mistakes where mistakes had been made. Whether they are sufficient to exonerate him, however, is for each reader to decide.

TRANSFORMING SPECIAL OPERATIONS

With temporary diversions along the way, McChrystal's career path led him back time and again to special operations, stepping into a senior SOF command during the critical years of the Iraq and Afghan wars. These were transformative years for U.S. special operations. When McChrystal assumed command in 2003, the SOF "were great at what we did—indeed, unequalled—but we weren't right for what needed to be done"[9] to defeat the threat networks confronting the U.S. and its allies in Iraq and Afghanistan. The challenge, as McChrystal saw it, "was to retain our inherent strengths of competence and precision, yet regain the innovation, adaptability, and focus of a small team," the group size where the "real magic resided."[10] To do this, the special operations community had to change, both structurally and culturally. McChrystal sums up the operational concept that guided his efforts to transform the SOF under his command in these terms: "It takes a network to defeat a network."[11] In the remainder of this section, I will try to tease out the key elements of the counterterrorist network McChrystal built to confront the threat networks of the early 21st century.

McChrystal assumed command of Joint Special Operations Command (JSOC) and Task Force 714 (TF 714) on 6 October 2003. TF 714 was the forward-deployed, global special operations task force, with JSOC members making up the core of task force personnel. Early in his command, McChrystal realized that TF 714 needed "a central hub with a clear deck"[12] if it was to assume a decisive role in the fight against AQI. This hub was set up at Balad Air Base in Iraq in July 2004. A hardened air shelter in the north-west corner of the base served as headquarters for TF 714 and the Iraq-focused TF 16. The physical layout of the headquarters embodied the transparent and inclusive approach McChrystal felt was needed to replace the secretive, compartmentalized traditions of the special forces. Work spaces were designed to "channel interaction, force collaboration, and ease the flow of people and information."[13] There was no honeycomb of partitioned offices; the interior of the hangar in its entirety was made a top secret-secure facility, thereby allowing everything to be discussed openly on the floor.[14] This area, known as the Situational Awareness Room (SAR) (see Figure 1), consisted of tables set up in a rectangular horseshoe at which the task

force commander and his senior staff sat. Facing the commander was a wall of screens that displayed a ticker of updates and streamed real-time video of ongoing operations. Behind the commander, the task force staff as well as representatives from other government agencies sat at four rows of tables. These other agency representatives were critical additions to the task force headquarters. McChrystal believed that all the resources of the U.S. government had to be mobilized in order to better understand the enemy: Central Intelligence Agency (CIA) human intelligence (HUMINT), National Security Agency (NSA) signals intelligence (SIGINT), Federal Bureau of Investigation (FBI) forensics and investigative expertise, Defense Intelligence Agency (DIA) "military reach," and National Geospatial-Intelligence Agency (NGA) mapping ability.[15] In other words, an interagency approach was needed with the task force headquarters integrating the diverse specialties of these and other contributing security and intelligence organizations.

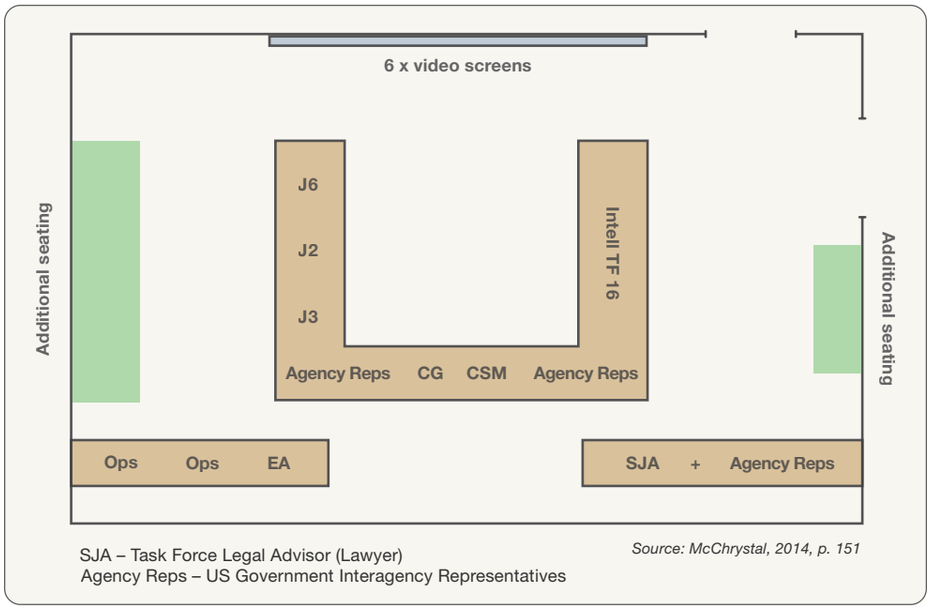


Figure 1: Situational Awareness Room

The operations and intelligence (O&I) video conference was the "core heartbeat of our battle rhythm and the nucleus of each day."[16] The meeting ran from 90 minutes to two hours and tied together a geographically dispersed command and other interested partners. By 2007, it had become "a worldwide forum of thousands of people associated with our mission."[17] Few topics were out of bounds for discussion: tactics, strategy, intelligence, operations, resourcing, and values were all debated from a variety of perspectives. Apart from its importance as a forum for information sharing, the O&I "fostered decentralized initiative and free thinking while maintaining control of the organization and keeping the energy at the lowest levels directed toward a common strategy."[18] Subordinate leaders did not have to seek headquarters' approval for every decision: "Everyone left the O&I confident they knew the latest update of our organization's intent, strategy, rules, and approvals."[19]

What were TF 714's "intent, strategy, rules, and approvals"? These are typically outlined in a task force's *campaign plan*. A campaign plan is, in simple terms, a blueprint for accomplishing a mission. The commander and staff decide upon the best course of action (*ways*) to achieve clearly defined objectives (*ends*) including designating the resources needed such as forces and time (*means*). The goal in developing the campaign plan is "to identify, refine, and then coordinate the most effective and efficient way to succeed."[20]

Task Force 714's objective was to systematically dismantle the global AQ threat network and its franchises and allies in Iraq and Afghanistan. Early on, McChrystal concluded that a strict decapitation strategy would not achieve this end since the killing or capture of senior AQ leaders seldom proved decisive (witness the resurgence of the AQ brand since the death of Osama bin Laden). Rather than focus exclusively on decapitating the upper echelons of the core AQ leadership, therefore, McChrystal broadened TF 714's targeting strategy to include those mid-level leaders who ran the insurgency on a day-to-day basis. In other words, he sought to "disembowel" or hollow out the middle of the network—depleting its entrenched expertise and institutional wisdom—and cause it to eventually crumble from within.[21]

The process for implementing this strategy—the targeting cycle—was termed F3EA: Find–Fix–Finish–Exploit–Analyze[22] (see Figure 2).

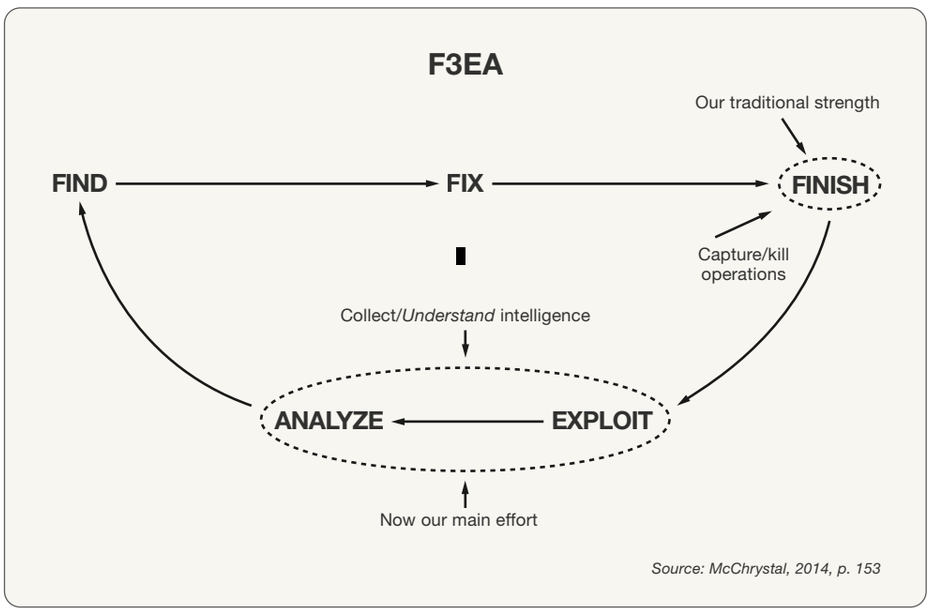


Figure 2: Targeting Cycle

A target was identified and located (*Find*) and kept under constant watch to ensure it hadn't moved (*Fix*). An assault force would then move in to kill or capture the target (*Finish*). Material of intelligence value from the site was collected and detainees interrogated (*Exploit*) in order to better understand the enemy and to identify opportunities for further attacks against the network (*Analyze*). Whereas *Finish* had been the traditional strength of SOF, McChrystal emphasized that the main effort for the task force was now *Exploit and Analyze*, an approach that ultimately enabled more frequent and more successful raids.[23]

Target development lay at the heart of the targeting cycle.[24] This involved weaving together information gleaned from a variety of collection disciplines in order to locate, monitor, and map a target within a threat network. Human intelligence (HUMINT), for example, consisted of information gathered from human sources on the ground, including Coalition foot patrols engaging the locals and spies. Developing these sources was challenging, however; in Iraq, insurgent reprisals snuffed out informants and made recruiting others difficult. This reinforced the importance of prisoners or detainees as sources of HUMINT. They could explain the meaning of information gathered from other intelligence sources and allow task force members to "step into the mechanics, mindset, and weaknesses of the enemy organization."[25] As McChrystal observed, they revealed what and how the enemy thought as well as why he fought.

ISR[26] emerged over the course of the Iraq and Afghan wars as a critical means of intelligence gathering (recall its centrality in the hunt for Zarqawi described above). Unmanned aerial vehicles (UAV)—Predators being the most common—equipped with video cameras sent live feed back to the Joint Operations Center, allowing task force personnel to observe people, vehicles, and locations for extended periods.[27] This constant surveillance enabled analysts to identify a target's "pattern of life," that is, his habits, movements, and mannerisms as he undertook daily routines.

In monitoring targets, McChrystal ordered task force operators to work side-by-side with analysts, for example, monitoring Predator feeds on uninterrupted 24-hour shifts. This was something new for the operators. Typically, the yearly cadence for an operator consisted of four months in combat on nearly nightly raids; four months on alert/on call; and four months recovering from or preparing for deployment.[28] Under McChrystal's command, squadrons that rotated home were expected to maintain their focus on their area of operations (Iraq or Afghanistan), continuing "to monitor operations, watch feeds, and listen to video teleconferences (VTC) at their stateside bases."[29]In addition to sharpening their tactical and operational skills, operators were required to train and study with analysts. McChrystal saw tremendous benefit in operators and analysts working more closely together:

> Operators, the Brahmins within TF 714, developed deep respect for the intelligence professionals. They became better operators by learning to think like analysts and by acquiring vast knowledge about the enemy. Both analysts and operators increasingly owned the mission, which in turn increased activity on the ground by moving targeting decisions down the ranks.[30]

McChrystal also brought the analysts downrange to Iraq and Afghanistan as part of the Joint Interagency Task Forces (JIATF) he set up in an effort to better harness all the intelligence resources of the U.S. government. Bringing the analysts closer to the fight facilitated faster analysis of intelligence, making it potentially more relevant (i.e., more actionable). Moreover, working together—literally in the same tent—increased the sense of shared mission and purpose among analysts from different agencies and lessened the gravitational pull of their home institutions back in the U.S. Finally, forward deployment allowed analysts to interact directly with operators and to see firsthand the immediate impact of their information on operations.[31]

Extended monitoring of the target's actions and movements held the potential for big payoffs in that valuable connections to other targets in the network might be revealed. This approach was popular with law enforcement augmentees to the task force as well as intelligence analysts whose job it was to unravel enemy networks. However, prolonged target development was less popular with action-oriented operators. They preferred to strike targets quickly in order to pressure the network and to harvest the vast troves of intelligence they possessed. Moreover, all task force members found it difficult from a moral standpoint to hold back while watching targets continue their murderous attacks.

The question of when to strike a target was—and is—a critical one. McChrystal continually stressed the importance of operational pace to mission success. The task force had to control the tempo of the battle. He observed that, in irregular warfare, insurgents win by regulating the speed of the war. They force their enemies to fight at their pace—"slowing it when they were vulnerable…quickening it when they sensed fatigue or weakness in their foe."[32] McChrystal believed that the task force had to maintain a calm, disciplined, and regular battle rhythm at a rate that could be sustained over a long campaign but that would exhaust the enemy. It had to hammer away relentlessly at AQI so that network security became that group's overriding obsession, thereby distracting it from essential tasks like recruitment, fund-raising, and strategizing.[33]

McChrystal understood that kinetic "kill or capture" operations were not the only way to disrupt and dismantle threat networks; offensive information operations represented a complementary line of operation. The purpose of these non-kinetic operations was to sow doubt and distrust and to provoke divisions, both personal and factional, within and between AQI and the Iraqi insurgency. For example, McChrystal proposed to his superiors that the reward on Zarqawi be reduced from $25 million to $5 million while that for Abu Ayyub al-Masri, an Egyptian member of the "dominant aristocracy" within AQ, be raised to an equivalent $5 million. Given Zarqawi's fixation on status, McChrystal hoped this apparent diminution in the AQI leader's standing relative to al-Masri would upset relations between the two.[34]

Strategic engagement constituted a third supporting line of operation. This involved "talking to the most violent of our enemies to see if we could nudge their thinking" away from anti-Coalition violence.[35] McChrystal lent his support as well as TF 714 members to the Force Strategic Engagement Cell (FSEC) set up under British General Graeme Lamb

at the behest of then-commander Multi-National Force–Iraq (MNF–I) General George Casey, Jr., in the fall of 2006. One of Lamb's first challenges was to peel Ansar al-Sunnah (AAS) away from AQI.[36] AAS was a Kurdish Salafist group that had briefly sheltered Zarqawi in its enclave in the Kurdish autonomous zone prior to the U.S. invasion of Iraq. Lamb endeavoured to flip Abu Wail, AAS's spiritual leader, who had been captured in earlier sweeps of AAS's senior leadership and was being held in detention. In a series of one-on-one exchanges with Lamb, Abu Wail held firm to his convictions that the U.S. was an occupying force and that he had a religious obligation to fight the Americans so long as they stayed in Iraq. Nevertheless, he eventually conceded that AQI and not the U.S. posed the greater threat to the Iraqi way of life. Banking on this slight crack in Abu Wail's hostility, Coalition leaders took a chance and unconditionally released him in December 2006 in the hopes that he would convince his comrades in AAS, if not to rally to the U.S. side, at least to turn against AQI.

In this instance, the Coalition's gamble seemed to have paid off. Five months after Abu Wail's release, a faction of AAS under his command—the Sharia Committee of AAS—broke away to form the Jihad and Reform Front (JRF) with two other insurgent groups. While remaining intensely anti-American, the JRF set itself in direct opposition to AQI, explicitly committing itself to avoid killing innocents. In retaliation, AQI began to target JRF leaders. Ultimately, Abu Wail failed to swing AAS as a whole over to the Coalition; other members considered him a collaborator. Nevertheless, the Coalition's strategic engagement with Abu Wail was a limited success in so far as it splintered the AAS threat network.[37]

While supportive of strategic engagement, neither Lamb nor McChrystal considered it a substitute for unrelenting targeting. McChrystal quoted with implicit approval Lamb's philosophy that "We can offer them [the insurgents] a way out, we can show them daylight, yeah, but if they don't take it, we'll put 'em in the fucking grave."[38] In McChrystal's view, information operations and strategic engagement were complementary means to refine TF 714's precision strikes. "Precision" in this context did not mean simply killing or capturing a target while minimizing collateral damage. Rather, it meant bringing about second- and third-order effects by moving a group's thinking in the right direction.[39] This was graphically depicted in the "Squeeze Chart" (see Figure 3). Those groups, both Shia and Sunni, at the extreme ends of the spectrum—the "irreconcilables"—were targeted for elimination while the "reconcilables" were squeezed towards the Iraqi government at the centre of the spectrum through the combined promise of reconciliation and threat of extermination.[40]

Tactically, night raids and precision air strikes comprised key activities in executing the kinetic side of the campaign plan. From modest beginnings in the first years of the Iraqi insurgency, the volume of strike operations subsequently mushroomed. In April 2004, McChrystal's command carried out a total of 10 operations in Iraq, rising to 18 in August of that year. Two years later, in the summer of 2006, the number of operations had soared to an average of over 300 per month.[41] When based on extensive surveillance and sound intelligence, these activities were highly effective in removing enemy forces and infrastructure from the battlefield. However, these tactics could be double-edged swords. They created negative second- and third-order effects that were difficult to avoid even when anticipated.

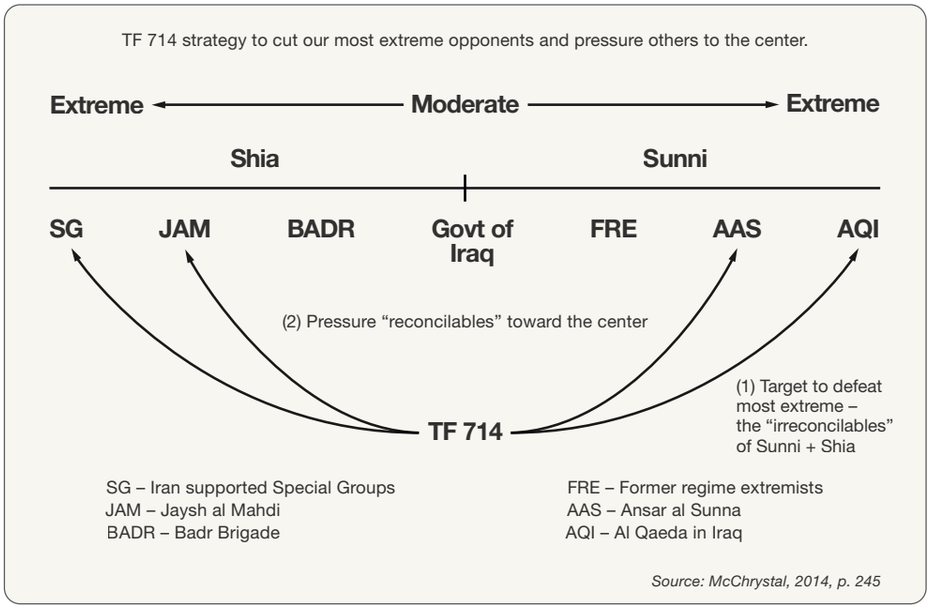


Figure 3: The Squeeze Chart

On occasion, McChrystal would accompany TF 714 operators on night raids—searching and clearing houses suspected of ties to the insurgency in the dead of night. He believed that task force operators—older and more seasoned than the typical Soldier or Marine—acted with control and poise as they searched Iraqis' homes and belongings; they were as sensitive as could be expected under difficult circumstances. Nevertheless, he recognized the humiliation these raids provoked in Iraqis. The forced intrusion of armed strangers into their houses in the middle of the night impressed on Iraqis, especially Iraqi men, that they were powerless to protect their homes and families. In these situations, McChrystal could feel their "pure anger radiating like heat."[42] And, with no common language in which to communicate, it was impossible for operators to establish any human connection with those being searched that could possibly mitigate this effect.

Precision air strikes were also used to attack the enemy threat network, especially in denied areas. These strikes were planned with an eye to limiting civilian casualties. Planners used computer-based algorithms to calculate collateral damage, taking into account variables such as the size and blast range of explosives, probability of accuracy, estimated civilian presence, structure and strength of buildings, and the shrapnel the buildings might produce.[43] However, precision bombing was not perfect; despite the care taken, collateral damage was, in many instances, unavoidable. This, though, was not the perception among many locals. In the early stages of the Afghan war, for example, U.S. precision bombing overawed the Afghans. They came to believe that American bombers could read the label of a cigarette pack on a car dashboard from tens of thousands of feet up in sky.[44] Consequently, Afghans found it hard to

believe that civilian deaths resulting from U.S. air strikes were anything other than intentional. Moreover, they saw American defensiveness and hesitation to apologize quickly after these incidents as callous. And even when apologies were forthcoming, Afghans saw no change in subsequent U.S. behaviour.[45]

This was not a minor problem to be shrugged off. Perceptions matter. McChrystal realized that the U.S. and its local allies could not succeed in their mission without the support of the people. Every time civilians were killed—or humiliated—the U.S. eroded its welcome and corroded the host-nation government's reputation.[46] Consequently, upon assuming command of ISAF in the summer of 2009, McChrystal ordered his forces to exercise "courageous restraint," that is, to forego fires—especially artillery and air power—when civilian casualties were likely, even if this prolonged a firefight or allowed insurgents to escape. This did not preclude the use of fires if the survival of the troops was directly threatened. But if the only purpose was to kill insurgents, then McChrystal decreed that the safety of Afghan civilians and property had to take priority.[47]

Regardless of his success in transforming special operations, McChrystal realized that SOF could not defeat an insurgency on their own; coordination with conventional counterinsurgency forces was central to the effectiveness of TF 714.[48] Targeting operations alone could not address the deeper structural sources of violence that only a full-spectrum counterinsurgency campaign could.[49] Nevertheless, McChrystal believed that a carefully orchestrated campaign of precision strikes could support the first two elements of the "Clear—Hold—Build" counterinsurgency strategy.[50] It could help to shape the battlefield before the launch of conventional operations, undermining insurgent confidence and degrading its strength.

For example, in the battle for Fallujah in the fall of 2004, TF 16 (the Iraq-focused task force) distributed targeting folders to the Marines showing the location and movement of targets in the city. Task force operations prior to the ground assault targeted insurgent leaders, trainers, and mortarmen to eliminate their skilled labour and blasted key command and control centres and barriers set up to channel U.S. forces into ambushes.[51] Conventional forces in turn lent key support to task force shaping operations: setting up cordons, putting medical facilities on standby, and offering spare barracks for operators' use.[52]

McChrystal recognized that, on the downside, task force operations were often seen as complicating rather than helping the mission of conventional forces in an area of operations; SOF raids created enmity among the local population that the Soldier or Marine subsequently had to smooth over. Sometimes, therefore, an operation had to be sacrificed on the altar of coordination and cooperation. In McChrystal's judgment, in most cases, the long-term relationship with conventional forces or other agencies was more important than the operation at hand.[53]

CONCLUSION – PRINCIPLES FOR ATTACK THE NETWORK

McChrystal's memoir is a thoughtful, well-written account of the career of an American Soldier who, in his later years, played a pivotal command role during a tumultuous time for the U.S. military and, especially, its special operations forces. As such, it is a valuable contribution to the genre of military biography. More importantly, though, sprinkled throughout this chronicle are observations relevant to contemporary AtN activities. These stem from McChrystal's stated premise that "it takes a network to defeat a network." Drawing on his experiences and reflections, can we sketch out some general principles that might guide the organization and operation of an AtN network?

To begin, the animating approach of an AtN network should be one of openness and inclusion within the limits of the network. As McChrystal recognized from his first days in JSOC command, the traditional special operations culture of secrecy, compartmentalization, and centralization must be transformed. A whole-of-government approach is needed to mobilize all government resources, especially in the intelligence realm, in order to better understand the threat network. This requires cooperation / coordination and information sharing across multiple agencies in defence and security.

This inclusive approach is reflected in an integrative headquarters that brings together (physically and/or virtually) representatives of various defence and security agencies. In terms of the physical layout of such a headquarters, McChrystal preferred the "open office" concept, believing this arrangement encouraged the free flow of people, information, and ideas within the confines of a secure facility. While the aim is commendable—to remove the walls (literally) that impede free interchange among headquarters personnel—the open floor concept McChrystal instituted must be carefully considered. Such an open floor plan, while potentially fostering camaraderie and a "symbolic sense of mission," has been shown in many studies to be "damaging to attention spans, productivity, creative thinking, and satisfaction,"[54] at least in the civilian workplace. Whether the same holds true in the high-intensity setting of an AtN headquarters—where impediments to command performance and decision making can have life and death implications—is a question for further study.

The locus of decision making should also be pushed down the chain of command and closer to the battlefield. Within TF 714, McChrystal encouraged subordinate leaders to take greater initiative within the bounds of the commander's intent, becoming, as he described them, "entrepreneurs of battle." This, of course, increases the demands on subordinate leaders in an AtN network. They must have the training, discipline, and experience to underpin the independent judgment they are expected to exercise in a decentralized decision-making environment.

With respect to the campaign plan, a strict decapitation strategy targeting the senior leadership echelon of the threat network is unlikely to be effective. McChrystal believed that TF 714's target list had to be broadened to include mid-level leaders and operatives so as to eliminate al Qaeda's institutional knowledge and expertise. In other words, he sought to "disembowel" the AQ threat network so that it would collapse in on itself.

Such an AtN targeting strategy may prove a double-edged sword. Eliminating key senior and mid-level leadership nodes may indeed damage a threat network to the point of operational collapse. Paradoxically, this may not be desirable from a strategic perspective. More radical individuals may replace the "moderate" (relatively speaking) leaders who have been killed. These hardliners may be even less inclined to negotiate than their predecessors, thereby forfeiting any chance of political compromise with the threat network. As well, the new leaders may countenance more indiscriminate violence against soft targets as these are easier to attack and are a better match for the degraded operational expertise of the threat network they have come to lead. Moreover, "collapse" does not necessarily mean "disappear." Under a relentless AtN campaign, the threat network may fracture into smaller "orphan" groups that independently carry on the violence. With the breakdown in command and control, compliance with any cessation of violence (e.g., a ceasefire or peace accord) may be difficult if not impossible to guarantee since there is no central leadership to ensure or enforce observance.

Though broader, targeting must be selective rather than reflexive; identification as a key leadership node in a threat network should not immediately qualify an individual for elimination. As in TF 714, target development should establish the target's pattern of life—that is, his habitual, predictable, day-to-day behaviour—as a prelude to a possible kill or capture operation ("Finish" in the targeting cycle). However, AtN analysts should also ascertain the target's *philosophy of life*, that is, the intentions—rooted in worldview—that motivate the target's behaviour, especially violent oppositional behaviour. This will illumine the target's capacity and/or inclination for political compromise and help determine whether the target is an "irreconcilable" to be eliminated or a "reconcilable" to be squeezed toward the moderate centre of the spectrum (recall Figure 3).

Patience is the key to target development. The potential payoff of protracted target monitoring is that other critical nodes in the network may be exposed over time. However, there is also a definite downside: the target is allowed to continue to engage directly or indirectly in the violent behaviour that qualified them for elimination in the first place. This confronts AtN campaigners with the same dilemma as McChrystal and his command faced in Iraq and Afghanistan: when do the disadvantages of allowing a target to operate outweigh the advantages of continued monitoring? In simple terms, when should a target be taken down?

How a target is taken down can also pose problems. Kinetic tactical operations—night raids or precision air strikes—have first-order effects on the physical plane: they physically remove a target from the battlespace. However, as McChrystal observed, these tactical activities can also have important positive or negative second- and third-order effects on the psychological plane. On the plus side, they can nudge a threat network's thinking in the "right" direction away from violence, especially when coordinated with a program of strategic engagement. On the negative side, they can inflict unintended physical injury and damage on civilians and civilian objects as well as humiliation, personal insecurity, and other psychological harms. To minimize these negative effects, AtN operators must exercise what McChrystal called "courageous restraint" in kinetic operations, foregoing fires that inflict collateral damage unless their survival is at stake. Moreover, it requires that an AtN campaign engage in multiple, *non-kinetic* lines of operations—in particular, information operations and strategic engagement—as complementary means to remove targets—either voluntarily or involuntarily—from the battlespace.

Finally, and most importantly, AtN activities must be firmly rooted in the broader strategic context. AtN is only one component of future overseas contingency operations. McChrystal understood that TF 714's activities in Iraq and Afghanistan had to be coordinated with an all-force counterinsurgency effort in order to create a security environment that would allow grievances and root causes to be properly addressed through the political process; SOF activities could complicate the conventional mission if that coordination was lacking. As the U.S. Joint Staff J7 lessons-learned study *Decade of War* noted:

> In post-2003 Iraq, SOF operations were not always well coordinated with GPF [general purpose forces]. This led to situations where GPF, as the battlespace owners (BSO), were left managing the second-order effects of SOF targeting operations [which resulted in] significant disruption of their battlespace in the aftermath of those operations.[55]

Conventional forces resent it when they feel they have to "clean up the mess" left with the local population after SOF operations. To avoid this operationally debilitating ill-will, AtN campaigners must coordinate their activities with conventional forces as, together, they shape the battlespace as part of a larger overseas contingency operation. As McChrystal recognized in his time as JSOC commander, SOF cannot "win the war" against threat networks on its own. Neither can AtN.

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ENDNOTES

1. U.S. Army Gen (ret) Stanley McChrystal, *My Share of the Task: A Memoir* (New York, NY: Portfolio/Penguin, 2014). (First edition published 2013. Paperback edition with new preface published 2014. All references in this article are to the 2014 paperback edition.)
2. Ibid., 148.
3. As the U.S. Joint Forces Command *Commander's Handbook for Attack the Network* states, "AtN activities are designed to neutralize the threat network, create the conditions that enable friendly networks to effectively function with the support of the local population, and establish the conditions that will allow the disengagement of friendly forces"; J7 Joint Warfighting Center, *Commander's Handbook for Attack the Network* (Suffolk, VA: United States Joint Forces Command, 2011), I-3. Currently, AtN activities in the CAF are regarded as a domain of the Counter-Improvised Explosive Device (C-IED) capability. However, AtN more broadly conceived is an "inter-agency capability used in support of counter-terrorism, counter narcotics, and counter organized crime activities[;] from this perspective, AtN are activities conducted by, although not necessary limited to, special operations forces, intelligence and law enforcement agencies"; Matthew A. Lauder, DRDC-RDDC-2013-L3, *Attack the network: Knowledge and information gaps and deficiencies* (Toronto, ON: DRDC, Toronto Research Centre, 5 December 2013), 1, fn. 2.
4. As part of the Army/Manoeuvre Adaptive Dispersed Operations (MAN ADO)/Explosive Hazard Avoidance S&T program, DRDC, Toronto Research Centre has proposed a five-year *Attack the Network (AtN) (OMOIKANE)* project (Activity Lead: Matthew A. Lauder) beginning April 2014, the objective of which is "to enhance the ability of the CAF to better appreciate the human environment/socio-cognitive aspects of the 'left-of-boom' space and enable robust pre-event interdiction"; Matthew A. Lauder, *S&T Activities – Irregular and Asymmetric Warfare* (PowerPoint presentation) (Toronto, ON: DRDC, Toronto Research Centre, 2014), Slide 3. As part of the DRDC in-house AtN project team, this author is focusing in Phase 1 on designing a strategic-level conceptual framework or theoretical model to guide AtN capability development |as it relates to the human dimension and the development of non-technological interventions.
5. See the blurbs from American historians John Lewis Gaddis and Walter Russell Mead included in the 2014 paperback edition.
6. McChrystal, *My Share of the Task: A Memoir*, 188–236.
7. Intelligence, surveillance, and reconnaissance (ISR) consists of a family of assets—including remotely controlled unmanned vehicles as well as piloted, manned planes—that collect intelligence. Typically, these are referred to as manned and unmanned aerial surveillance platforms (ibid., 157).
8. The report stated that there had been no violation of Department standards and that "not all of the events occurred as portrayed in the article" (ibid., 390).
9. Ibid., xii.
10. Ibid.
11. Ibid., 148.
12. Ibid., 150.
13. Ibid.
14. Ibid., 150–151.
15. Ibid., 117.
16. Ibid., 163.
17. Ibid.
18. Ibid., 164.
19. Ibid.
20. Ibid., 331.
21. Ibid., 162.
22. Ibid., 153–154.
23. Ibid., 177.
24. Ibid.
25. Ibid., 199.
26. ISR was integrated into F3EA. Part of TF 714's ISR assets were used to support ongoing operations with the other part earmarked to develop future targets (ibid., 177).
27. Ibid., 137.
28. Ibid., 180.
29. Ibid., 144.
30. Ibid., 138–139.
31. Ibid., 117.
32. Ibid., 161.
33. Ibid., 162.
34. Ibid., 213.
35. Ibid., 244.
36. Ibid., 247–248.
37. Ibid., 263.
38. Ibid., 246.
39. Ibid., 244–245.
40. This assumes that the Government of Iraq actually lay at the centre of the political spectrum. In the years that followed McChrystal's time as JSOC commander, the overtly Shia sectarian bent of Prime Minister Nuri al-Maliki's government alienated the Sunni and Kurdish communities in Iraq with disastrous consequences for the security of the state, as evidenced in the rapid advance of the radical Islamist group the Islamic State of Iraq and Syria (ISIS) through disaffected Sunni towns and cities in northern and western Iraq.
41. Ibid., 145.
42. Ibid., 91.
43. Ibid., 142.
44. Ibid., 311.
45. Ibid.
46. Ibid., 312.
47. Ibid.
48. Ibid., 131.
49. Ibid., 240.
50. Ibid., 242.
51. Ibid., 160.
52. Ibid.
53. Ibid., 141.
54. Maria Konnikova, "The open-office trap," *The New Yorker*, (4 January 2014). Available online at http://www.newyorker.com/currency-tag/the-open-office-trap
55. U.S., Joint Staff J7, Joint and Coalition Operational Analysis (JCOA), *Decade of War, Volume 1: Enduring Lessons from the Past Decade of Operations* (Suffolk, VA: Joint Staff J7, 2012), 22. Available online at http://keystone.ndu.edu/Portals/86/Documents/Decade%20of%20War_report_Vol1_U.pdf

Source: Combat Camera

COMMANDER'S INTENT

Captain Matt Rolls, MA

The current structuring of the commander's intent throughout the army is inconsistent and fails to adhere to doctrinal principles. This paper will explain what a statement of intent should include in order to offer guidance to subordinates that is unique to every other portion of the operation order. It will recommend that the commander's intent include, at minimum, both the mission purpose and end state, thereby achieving unity of effort and of purpose and equipping subordinates with the information required to execute mission type orders. The commander's intent would accordingly be formulated as follows: Intent = Purpose + End State, at minimum.[1]

The commander's intent should accomplish two things. Like the main effort, it synchronizes actions towards a goal and, most importantly, offers guidance to subordinates when the situation has changed or when seeking guidance from the commander is impossible. Many current statements of intent fail to achieve either of these goals. They simply restate how the operation will be conducted. In many instances, the commander will try to put his own stamp on it by adding unnecessary adjectives like 'aggressively', 'decisively' or 'violently'. The scheme of manoeuvre already indicates how the operation is to be conducted, and the addition of adjectives tells a subordinate nothing he should not already know.

The commander's intent must synchronize the efforts of his subordinates and give them guidance on how they should proceed when he is unavailable or when the situation is rapidly changing or has utterly changed. To achieve this, he has to consider what is

most enduring about an operation. While tactical tasks may change owing to changes in the enemy's disposition, in friendly capabilities or in the nature of the civilian populace, the initial purpose of the operation is likely to endure. As a result, the purpose of the mission must be the primary element of the commander's intent. The purpose is derived from the mission analysis and will appear in the 'in order to' portion of the mission statement. The commander's intent may consist of a simple restatement of the statement of purpose from the mission statement; however, it offers the Commander an opportunity to add more detail and explain how the mission relates to the overall success of the unit and the unit's higher headquarters. While repeating the purpose of the operation may seem superfluous and inconsistent with the introduction to this paper, readers should understand that the purpose is the most concrete component of the commander's intent and consequently the most important in guiding the subordinates' actions. It is therefore the only element worthy of repetition.

The next enduring portion of an operation is the end state, which should constitute the second portion of the intent. The end state describes how the operational environment should look on a unit's successful completion of its mission and offers the subordinates concrete guidance. The end state should be expressed, at minimum, in terms of enemy and friendly forces and should include all operational functions. In addition, units that are executing terrain-oriented tasks like seizing, clearing or occupying should also express the end state in terms of the terrain. It will also be appropriate, when conducting stability operations, to describe the end relationship with the local population and, when conducting partnered or mentoring operations, the relationship of the end state to the host nation's forces once the operation is concluded. Thus, the commander's intent would, at minimum, look like this: Intent = Purpose + End State.

The above formula for the intent statement, while not currently in fashion, is in fact doctrinal. B-GL-331-002/FP-001, *Staff Duties for Land Operations*, states that the commander's intent "is a concise expression of the purpose of the operation, which describes the desired end state."[2] Moreover, this format is common practice and doctrinal for the U.S. Army, the United States Marine Corps and the British Army and is codified in the NATO Standardized Agreement 2014 (STANAG).[3] All this to say that the concept of intent entailing purpose and end state is thoroughly supported by our doctrine and that of our closest allies.

The following example will highlight the use of this formulation of commander's intent. In this scenario, a BG is seizing a series of key terrain features to facilitate a forward passage of lines by a friendly unit. The BG mission statement is, "2 RCR BG will SEIZE Obj COBRA by NLT xxxx in order to allow for the forward passage of lines of 1 RCR." The commander's intent could then read as follows: "My intent is to establish the conditions for 1 RCR to conduct a forward passage of lines through us so they may destroy enemy elements in vicinity of FREDERICTON thereby facilitating the clearance of lines of communication for 2 CMBG. The end state sees 2 RCR in hasty defensive positions prepared to deliver fires out to the battle hand over line in support of 1 RCR and sustainment operations commencing; the enemy in vicinity of Obj COBRA cleared, hills 422 and 423 that make up Obj COBRA seized, and routes through Obj COBRA open for 1 RCR's use." Even though the purpose is already stated in the mission statement, this gives the commander another opportunity to emphasize the importance of the mission's purpose and to nest it within his higher commander's intent. The end state should assign his subordinates numerous tasks if these have not already been outlined within the groupings and tasks paragraph.

It is clear, in the above example, that the purpose and end state have greater permanence than the tactical task and its execution. Should reconnaissance elements from the 2 RCR BG arrive at Obj COBRA and confirm that the enemy has departed, then the tactical task is no longer valid. The task of occupy would be more appropriate at that point. However, the purpose of the mission—getting 1 RCR forward to continue offensive operations—and the end state remain valid and therefore guide the actions of the commander.

This formulation will leave some people asking what the concept of operations paragraph would address. According to the *Staff Duties for Land Operations*, the structure of the concept of operations is at the commander's discretion and consequently can take on any form he chooses. This also means that the operations paragraph does not require four separate headings, i.e., "intent", "scheme of manoeuvre", "main effort", and "end state". This separation of end state from commander's intent is what makes drafting the intent so fraught with difficulty. The origins of the current trend of drafting the concept of operations under four separate sections are unclear. Its continued propagation in the individual training establishments is driving its continued use throughout the Army. Under the proposed structure, the concept of operations would lead to a commander's intent, which would contain the purpose and end state. This would be followed by the scheme of manoeuvre, which would speak to the conduct of the operation, the means of achieving the Commander's Intent and the main effort.

Some may argue that this simply constitutes a reshuffling of the deck chairs, since this information is already available in the Order under current practice and its placement is less important than the mere fact that it is there. This is false for two reasons. First of all, our doctrine requires that mission command be based on understanding the intent of your commander two levels up. A subordinate receives his two up commander's concept of operations from his immediate commander in his "Situation friendly" paragraph. He analyses his two up commander's intent and then places this in his own situation friendly paragraph for his subordinates. If the purpose behind the two up commander's mission is not discussed in the two up commander's intent, or anywhere in the Concept of Operations, then subordinates two levels down are not aware of it. As the end state is currently structured separately from the commander's intent, this also means that subordinates two levels down are not briefed on their two ups end state. This results in subordinates who lack the necessary information to employ mission orders and achieve unity of purpose and effort. Secondly, our doctrine and our school curriculums emphasize the importance of the Commander's Intent; however, the exclusion of the purpose from it in practice and the separate coverage of end state at the end of the Concept of Operations results in the phenomenon identified in the introduction. The Commander's Intent changes into a section where the commander focuses primarily on how he will achieve his mission, a subject that should be dealt with in the remainder of the "Execution" paragraph.

A further counterargument is that the methodology, Intent = Purpose + End State, is too rigid. First of all, this paper has stated numerous times that this methodology should be seen as a minimum. It provides the nominal required information for achieving unity of purpose and effort and places this information where it is most accessible to subordinates. Ultimately, the Commander owns his intent and can express it as he sees fit, and can therefore add additional elements. Many of those additional elements can be found in doctrinal publications. Secondly, if the Commander plans to add additional elements, he must be careful not to add items that properly belong in the Scheme of Manoeuver, Tasks or Coordinating Instructions. Many documents dealing with the Commander's Intent refer to this as the place where the Commander visualizes the operation. But if this section discusses how the operation is to be conducted then it probably does not belong in the Commander's Intent, for the reasons discussed earlier. Furthermore, the Commander must ensure that his intent does not become too lengthy. The intent must be easily understood and remembered by subordinates who will be wet, cold, hungry and exhausted. During the execution phase, those same subordinates will be stressed and physically and emotionally taxed. This environment puts a premium on clarity, simplicity and brevity.

Our doctrine and those of our allies make it abundantly clear that the commander's intent should speak to purpose and end state. This paper has argued for the validity of the Intent = Purpose + End State methodology, given that purpose and end state are the optimal tools by which subordinates can be guided. The divorcing of the end state and purpose from the intent has spawned intent statements awash with flowery adjectives and containing elements that rightly belong in the scheme of manoeuvre. Even worse, this deprives our subordinates of the guidance which the commander's intent is supposed to provide and which is supposed to ensure the tempo called for by our mission orders doctrine. The Canadian Army should abandon the current four paragraph "Concept of Operations" paragraph and replace it with the model advocated in this paper. This will begin with the Canadian Army Command and Staff College (CACSC), who must adopt it and champion it throughout the remainder of the Canadian Army Doctrine and Training Centre (CADTC) schools. This will provide for uniformity of instruction for all our up and coming leaders. Front line units should adopt this format immediately and stage a simple professional development session to publicize the new methodology and explain its benefits. And, finally, doctrinal publications that deal with the Commander's Intent, in particular B-GL-300-003/FP-001, *Command in Land Operations*, should be redrafted to emphasize this methodology and remove much of the convoluted language that breeds confusion on this topic. These changes will institutionalize this new approach to the Commander's Intent and ensure that the Army is well positioned to profit from the tempo allowed for by our doctrine through a shared understanding of intent between commanders and subordinates.

ABOUT THE AUTHOR...

Captain Matt Rolls joined the Canadian Armed Forces in 2006 as an infantry officer. Following occupational training he was posted to 2nd Battalion, The Royal Canadian Regiment (2 RCR). While with 2 RCR he completed an operational tour as part of TF 1-10 of Op ATHENA as a rifle platoon commander, initially in the Kandahar Provincial Reconstruction Team and then later in the 1st Battalion, The Royal Canadian Regiment Battle Group. From 2013–2014 he attended the United States Marine Corps' Expeditionary Warfare School as his Army Operations Course equivalency. He is currently the Adjutant of 2 RCR. He holds a BA with Honours in Political Science from Dalhousie University and is currently pursuing a Masters in Military Studies.

ENDNOTES

1. Credit for this equation goes to Major Cole Petersen.
2. Government of Canada. B-GL-331-002/FP-001, *Staff Duties for Land Operations*. B-GL-300-003/FP-001, *Command in Land Operations*, is not as definitive on the topic but mentions the inclusion of end state in the commander's intent in numerous places as well as some other suggested criteria.
3. ATTP 5.01 Commander and Staff Officer's Guide states "The commander's intent is a clear, concise statement of what the force must do and conditions the force must establish with respect to the enemy, terrain, and civil considerations that represent the desired end state. It succinctly describes what constitutes the success of an operation and provides the purpose and conditions that define that desired end state." MCWP 5-1 Marine Corps Planning Process says, "Commander's intent is the commander's personal expression of the purpose of the operation. This paragraph contains the purpose from the mission statement as well as any additional information related to purpose that allows subordinate commanders to exercise proper initiative if the task they are assigned is no longer appropriate to the situation." The British ADP Operations states, "intent is similar to a purpose. A clear intent initiates a forces purposeful activity. It represents what the commander wants to achieve and why; and binds the force together." STANAG 2014 says, "The Commander's Intent is a concise expression of the purpose of the operation which describes the desired end state. It should be understood two echelons down and helps his subordinates focus on what has to be accomplished in order to achieve success so that mission accomplishment is possible in the time available and in the absence of additional communications or further instructions."

Source: Combat Camera

Source: Combat Camera

"LEST WE FORGET...." THE CANADIAN ARMY AND UN PEACEKEEPING (AGAIN)

Sean M. Maloney, PhD

The idea that Canada should, will or must 'return' to what is commonly called 'peacekeeping' in order to redeem its sins for engaging in warfighting in Afghanistan has been mooted both before and after the 2015 election campaign. Similarly, and not coincidentally, a group lobbying for increased Canadian involvement in Africa held a brainstorming conference in Calgary seeking to influence a future policy tilt towards that continent. A prominent pundit continues to promote a neutralist, non-interventionist policy established long ago during his halcyon days during the Cold War, this time precariously propped up by Procrustes. A university professor in Ottawa argues, using talking points seemingly provided by the Russian embassy, that NATO should be disbanded and that Canada should withdraw from it. Marty McFly steps out of the DeLorean. I am forced by circumstances to write yet another article to remind Canadians about the realities of peacekeeping history.

Those who champion a 'return' to 'peacekeeping' likely fall into one of two camps. The first consists of those with a world view that sees all global conflicts, international and domestic, as events that should be mediated by the United Nations with minimum force, like an RCMP officer using a Taser instead of a firearm. Some who harbour this view are also likely to accept at face value World Health Organization reports that red meat will give them cancer. The second camp is populated by the ignorant, who in turn can be divided into two sub-groups: the wilful and the uninformed. Toiling to pay their taxes, many of them lack the time to minutely examine the entrails of national security policy as spilled out by the high priests in Ottawa on the sacred rocks of the Global Affairs Canada building. They accordingly gravitate to a handful of self-satisfied, self-laudatory and self-referential Canadian media commentators who will interpret policy for them. Knowing full well that there are dedicated academics who will suss out and debate the details of the evolving realities of international events, they default to their trusted agents in the media instead. This simplistic commodity is best consumed on laptops over lattes at coffee shops because there simply isn't enough time to read books anymore.

As to why these people are so uninformed, the fault probably lies somewhere within the education systems in this country. Detailed analysis is discarded in order to preserve self-esteem. Idealistic non-violence is taught without reference to the realities of human behaviour or global intercourse. Canadian history is distorted to prove how bad we were until we 'invented' peacekeeping, the one shining light in the horrifying colonial, genocidal darkness that was Canada.

This is what we will be returning to:

1. **A nostalgic perception of peacekeeping divorced from today's global realities.**

   Canadian peacekeeping, in the UN sense of the term, was a product of the Cold War and was contextualized by that war. Interpositionary peacekeeping of the kind developed and employed by General E.L.M. Burns in the Middle East of the 1950s and 1960s, during the UNTSO and UNEF missions, was part of a UN-mediated, state-based settlement between Egypt and Israel back dropped by a Soviet nuclear threat against the United Kingdom and France, two NATO members who had intervened in a regional dispute. UNEF II and UNDOF in the 1970s were deployed after a period of nuclear brinksmanship between the Soviet Union and the United States during a regional war between Egypt, Syria, and Israel. UN forces were deployed to the Congo in 1960 to mitigate a power vacuum being exploited by pro-Soviet elements. UN forces, in this case UNFICYP in Cyprus, were deployed to prevent escalating intercommunal violence from triggering hostilities between NATO members Greece and Turkey and to protect bases supporting the NATO deterrent.

   As a representative of the anti-Communist bloc, not a neutral, Canada used the UN and its peacekeeping operations to pursue national interests related to the broader Cold War conflict. Our NATO and NORAD-committed forces far exceeded in number those committed to UN or other peacekeeping operations during the Cold War. No one disputes the fact that Canadian soldiers did phenomenal work, but that Cold War environment no longer exists and will not exist again. Nor will Cold War-era UN peacekeeping.

   Indeed, the major UN peacekeeping operations that failed during the Cold War, including UNYOM in Yemen (1963–1964), are usually ignored by those who nostalgically seek a return to peacekeeping. The piecemeal mandate, the UN's inability to reign in Egyptian military forces or to prevent them from using chemical weapons, and the impossibility of controlling Saudi-supported irregular forces, not to mention the fact that UNYOM, by completely ignoring war in the Radfan, doomed itself to irrelevance when it came to generating peace in the region. It was not exactly Canada's finest hour when RCAF aircraft were used as cover by the Egyptian air force using their Soviet-supplied aircraft to napalm Yemeni villages.

2. **The false belief that Canada either makes war or does peacekeeping.**

   Despite substantial evidence to the contrary, the dichotomous idea that Canada either fights war or 'does' peacekeeping persists throughout Canadian culture. Any 'shifts' into warfighting is disparaged; Canada is being "dragged into war" by a hyper-aggressive American ally. And when Canada 'returns' to peacekeeping, this state of affairs is praised to the skies. Historically, however, there is no such shift. Canadian peacekeeping operations conducted during the Cold War, including UNFICYP, UNEF and ICCS, were initiated when Canadian-built CF-104 nuclear strike aircraft equipped with megaton-yield bombs were ready to turn targets in the Warsaw Pact area into radioactive rubble. The fact that Canada possessed an extensive nuclear capability during the Cold War and that this capability was justified by the enormous threat to Canadian values posed by the Soviet Union and its inhuman ideology is not taught in Canadian schools (indeed, the future existence of a monument to remind people of these facts is currently under attack by activists in Ottawa). UN peacekeeping divorced from its Cold War context is extensively taught in Canadian schools, and this pervasive and patently incorrect perspective has likely contributed to the 'either/or' view.

   During Canada's long war in Afghanistan, Canadian Armed Forces personnel served with UNTSO and UNIFIL in the Middle East, UNMIS and UNAMID in the Sudan, and MINUSTAH in Haiti. Everybody forgets about the MFO in the Sinai, probably because UN acolytes consign it to oblivion since it was American and not UN-led. At least one Canadian officer was killed during these operations in Lebanon, and a Canadian vehicle was attacked during the MFO mission. The fact that the Canadian Army participated simultaneously in a variety of operations mounted by international organizations cannot be disputed. We fight war, we prepare to fight war and we engage in peace support operations at the same time. We have done so since the 1950s, over sixty years ago. Those who think otherwise should re-examine Canadian history and perhaps their own reasoning processes.

   The question of whether Canada does *enough* peacekeeping is another matter. And no pundit has yet provided a metric to explain exactly what constitutes 'enough' or 'more'. Should we put more Canadian soldiers in harm's way on overseas UN operations so we can boost our peacekeeping numbers and tell the Canadian public and the UN that we are doing more? This course of action was supported by former Ottawa mandarin Paul Heinbecker in a CTV interview shortly before the October 2015 election. The media failed even to question the morality or utility of this approach during the discussions that followed.

   The boast that Canada had "ready-aye-ready" contributed to all peacekeeping missions and that suddenly, under the Harper Government, we stopped peacekeeping is simply not true (UNOMIL in Liberia was a peacekeeping operation, while Trudeau senior, in the 1970s, was lukewarm to the idea of UN missions. Self-proclaimed 'peacemonger' and Ambassador to the UN George Ignatieff thought that UN peacekeeping was a busted flush following the events of 1967). And even if this were so, why is this relevant? We should be examining the impact of our involvement, not the number of soldiers we sent. The whole idea that Canada is not committing 'enough' peacekeepers somehow smacks of 1960's Vietnam-era McNamara-esque metrics, like body counts. This is 2015, after all.

Royal Canadian Dragoons Reconnaissance Squadron on UN Cyprus Patrol

Source: Canada. Department of National Defence / Library and Archives Canada / ecopy

3. **Questionable mandates and confusion over Canadian interests**

So now we are going to 'return' to peacekeeping. If the UN proponents want us to do so, they should be aware that their uniformed representatives may be used and abused by international organizations and the belligerents for their purposes. And these purposes will not necessarily coincide with Canadian values and interests.

Canada's lengthy involvement in the Balkans is probably, next to Somalia, the most instructive case study. Twenty years later, there is still no clear explanation for the Canadian Government's decision to involve itself in a multitude of missions in a collapsing country riven by vicious factionalism. The best explanation available is that Canada responded to requests from several international organizations to deploy military personnel simply because Canada, in 1991–1992, was supposedly the repository of peacekeeping expertise given her long involvement with Cyprus (UNFICYP starting in 1964) and her history of missions in the Middle East (since 1954 in UNTSO, 1956 with UNEF, 1973–1974 with UNEF II and UNDOF). So when the OSCE asked the European Community to form an observation mission in Slovenia and Croatia and one of the belligerents asked that a North American nation serve on the mission, Canada was asked to contribute and said yes, incidentally without appealing to Parliament and with no challenge from the opposition. When the Vance Plan was under discussion and forces were needed for the planned United Nations Protected Areas in Croatia, Canada said yes. Was there a public or even internal discussion on how these deployments were compatible with Canadian interests? Not that we, the Canadian people, are aware of.

When Bosnia collapsed into internecine fighting and the UNPROFOR rear office was threatened, Canadian forces were redeployed from Croatia to secure the Sarajevo airport and escort humanitarian aid convoys during what now amounted to a three-way civil war. Were significant public discussions held by the Government regarding Canadian interests or values at that time? About the same level of discussion as over deploying Canadian troops to the ECMM and UNPROFOR in Croatia. Apparently, the UN asks and Canada sends. And when the 700-man Canadian battalion in Bosnia was held hostage by all three belligerent forces, the Canadian people were barely aware of the dilemma facing their uniformed representatives. Why was that, exactly?

Neither was the Government of the day in a hurry to inform the Canadian people, and the Canadian media neglected to employ on the Balkan missions the incisive tools they later used in Afghanistan. Public debate might have exposed the folly of deploying an infantry battalion into the middle of a three-way civil war and asking it to play a neutral aid escort role. A public debate might have twigged people to the idea that the longer humanitarian aid is delivered during such a conflict with no functional peace process, the longer the war will continue and the more people will get killed. Humanitarian aid does not go only to neutral, starving civilians, assuming that civilians in a war like Bosnia's were even neutral in the first place.

Some of Canada's more questionable engagements on the African continent are of particular interest here. What was the reason, or at the very least the rationale, for deploying Canadian troops on Operation PRUDENCE to the Central African Republic in 1998–1999? The best explanation that can be extrapolated from the existing material was that Canada was propping up French neo-colonialism in that country. The infamous 1996 'Bungle in the Jungle' in Zaire, as far as one can tell, was either an attempt to stave off another Rwanda or, according to journalist David Pugliese, to gain a Nobel Peace Prize for Raymond Chretien. Was there really a strategic need to participate in the UNMEE Ethiopian-Eritrean mission in 2000 or was Canada merely demonstrating to the UN that it still had skin in the New York game? And then to what end? UNMEE was driven out of the region by 2008.

And Canada's disastrous involvement in Somalia appears to have been propelled by the so-called 'CNN Effect', a pre-internet concept whereby repeated sensational and emotional images shown on television by media outlets will galvanize public opinion and force the government to 'do something' (or, alternatively, the Government will anticipate that there will be public pressure to act and do so pre-emptively on the information available at the time, regardless of strategic interests).

As for Canada's repeated involvement in Haiti in the 1990s, the only extant discussion of that experience suggests that domestic politics and the 'Haitian vote' in Quebec during the 1995 referendum were the driving forces. If such is the case, or if these were significant factors in the decision to deploy, one might argue that there was a strategic rationale for the mission: keeping Canada together. Otherwise, if it were simply a case of responding to the CNN Effect or Canada's internationalist duty as expressed through the UN, there might have been some room for public discussion on the matter. And in Haiti, like in Kabul in 2003, it was not a matter of peacekeeping: it was a matter of taking sides and stabilizing a particular government. In Haiti, everybody wore blue helmets, but don't pretend it was peacekeeping.

The 1990s, a period when Canada lacked an effective strategic policy process and her interests were not clearly defined, should not serve as a guide for action in today's world. Nor should we instinctively respond to the whims of international organizations merely because some Canadians think they have something to prove. After Kosovo and Afghanistan, we have nothing to prove. If Canada is going to get involved in any future mission, we should all be clear on the nature of that mission and why exactly we are pursuing it. And that includes the anti-ISIS campaign.

4. **The inability to protect human beings from mass murder**

Those who champion a 'return' to peacekeeping have clearly failed to comprehend that this mentality led to inaction, indecision, and obfuscation while thousands of human beings were being slaughtered in ethnic conflicts in the 1990s. We already have the film "Shake Hands with the Devil," based on the book by Brent Beardsley and Romeo Dallaire. The film "Hotel Rwanda" (2004) is another less accurate depiction

of the events of 1993. Frontline's 2004 documentary "Ghosts of Rwanda" is as chilling as it is haunting. The Rwandan autopsy is open to all in the works written by Michael Barnett (*Eyewitness to a Genocide*), Philip Gourevitch (*We Wish to Inform You that Tomorrow We Will be Killed with Our Families*), Jean Hatzfeld (*Machete Season*), Linda Melvern (*Conspiracy to Murder*), Colin Tatz (*With Intent to Destroy*), and Scott Peterson (*Me Against my Brother*). There is no excuse for not knowing and not learning from that horrifying experience.

The endemic indecisiveness of the United Nations in New York and Canada's slavish and legalistic complicity in the UN's failures during the Rwandan genocide is the real national shame, not what General Romeo Dallaire and his men did or did not do in Kigali. Some exponents have clearly failed to study this dark part of Canadian history in detail, otherwise they would not enthusiastically advocate a return to it. Why was General Maurice Baril promoted after that debacle…and then permitted to lead the 'Bungle in the Jungle' in 1996? How could Kofi Anan become Secretary General? Where were the Canadian voices of protest in both these situations?

Canada's engagement in the Balkans has obviously had no impact on people who want to return to more UN peacekeeping. Restrictive rules of engagement, the lack of a proper intelligence organization and a failure to grasp the strategic and political reality of the situation doomed Canadian efforts in Croatia. It was evident to those on the ground and in certain allied capitals that an American policy shift occurred in 1995, leading them to side with Croatia against the Serbs. Rather than withdraw the Canadian contingent in the face of an overwhelming military and moral force, Canadian and UN decision-makers woke up one morning to find that an entire Canadian infantry battalion had been overrun, disarmed and detained by Croatian forces. These included the same forces that had been repulsed in the Medak pocket by 2 PPCLI in 1993 while they were ethnically cleansing a Serb population to free up ground of future operational importance vis-à-vis the Krajinan Serb capital of Knin. As a result, the number of civilian casualties during Operation STORM was in the thousands. After almost a quarter of a century has passed, we still await a narrative by the Directorate of History and Heritage describing exactly what happened to Canadian troops serving the UN in Croatia, as well as in Bosnia from 1992 to 1995. Canada had to wait only ten years for a history of the Second World War.

Those who advocate a return to peacekeeping have clearly forgotten that the 2005 policies drafted by the Martin Government expressly included the understanding that it might be necessary to kill for peace and that intervention to protect human life was acceptable regardless of the strictures laid down by international organizations. That 2005 document was written with a full understanding of what occurred in the 1990s, and its authors sought to move away from the dangerous thinking extant during that decade. And this took place while the Canadian Army was deployed in Afghanistan in support of a legitimate government threatened with the totalitarian creed of the Taliban and Al Qaeda, entities who deployed terror attacks against civil society and the population in pursuit of their aims.

5. **Concealing Casualties**

One of the less honourable aspects of Canadian peacekeeping was the deliberate downplaying of certain incidents in which Canadian soldiers serving with the UN and other organizations were killed, after which the circumstances of their deaths were concealed or otherwise obfuscated. Overseas ramp ceremonies, CFB Trenton arrival ceremonies and public recognition on the Highway of Heroes became staples of casualty handling during the war in Afghanistan. This process was developed after the first four Canadian dead from a US airstrike during Op APOLLO in 2002 were commemorated by the City of Edmonton in an elaborate ceremony. The reasons behind such open and public expressions of collective grief stemmed directly from the poor handling of Canadian dead from UN peacekeeping missions.

Even before that, the 1974 downing of an unarmed Canadian Armed Forces Buffalo transport aircraft participating in UNEF II operations and the deaths of all nine Canadian personnel aboard had been concealed from public scrutiny. Indeed, the Trudeau Cabinet did not even discuss the incident, or if they did, they made no record of their deliberations. The UN deliberately portrayed the event as a "crash", not an attack, for their own purposes, which likely involved smoothing the waters so that the belligerents would accept the UNDOF force on the Golan Heights. The fragmented remains of the nine dead Canadians were collected in ammunition boxes from the crash site in Syria and then added to sand ballast in coffins. These coffins were returned at night with little fanfare to CFB Trenton. The details of the incident remain obscure even today, though it was subsequently revealed that Soviet surface-to-air missiles supplied to Syria had been used to bring down the aircraft.

In the Balkans, the deliberate killing of a Canadian soldier with a recoilless rifle was obfuscated into a death by random mortar fire. Canadian dead from the Balkans were returned quietly to Canada, usually to CFB Trenton, with little or no media coverage. It would be interesting to see some history written on the policy for the handling of overseas deaths of CF personnel during the Chretien Government years. And who influenced that policy.

6. **The Professional Humiliation of the Canadian Army**

The subject that no one wants to really discuss when they paper over the 1990s by calling it the 'Decade of Darkness' was the abject professional humiliation of the Canadian Army in the eyes of our allied peers, our opponents and our potential adversaries. Credibility is critical in any coalition environment, let alone vis-à-vis

one's potential adversaries (and we have them, despite what some might say). Professional competence and esteem are the most important aspects of credibility. By 1996, the institution had little or no credibility left.

The first stage in this process was the failure to deploy 4 Canadian Mechanized Brigade to liberate Kuwait in 1991. By neglecting to make an effective contribution to the mission alongside our closest allies, the professional standing of the Army was diminished. This ranged from antagonistic personal behaviour among allied soldiers to a lack of inclusion in critical allied activities since the Canadian Army was not viewed as serious about warfighting. The second phase was the political decision to disband the Airborne Regiment rather than address systemic disciplinary issues in that unit. The wholesale removal of a rapid reaction capability in a world where one was sorely needed reduced Canadian global options. No other country disbanded its strategic quick reaction force on an emotional whim.

The third were the failures in Bosnia and Croatia during the UNPROFOR years. The overrunning of CANBAT 1 in Croatia and the neutralization of CANBAT 2 in Bosnia (not to mention the poorly-handed sexual abuse investigation of Canadian soldiers stationed at the Drin and Bakovici hospital complexes) drove home the fact that the Canadian Army was in serious trouble. The fact that a fifth-rate army was responsible in the first case and sixth-rate army in the other was not really covered by Canadian national media. Nor was there a serious effort to address the psychological fallout on those who had served in the former Yugoslavia. Nor were they ever feted. It took nearly a decade for 2 PPCLI to be recognized for the Medak Pocket. Once again, we await a Directorate of History and Heritage narrative to help us comprehend what exactly occurred to Canadian troops in the last days of UNPROFOR in 1995.

It took the planned 1996 operation to Zaire to really open people's eyes to the fact that this was an institution at its nadir. Canada's attempts to assemble and lead an international coalition to prevent what some saw as the next Rwanda laid bare our inability to collect and assess strategic intelligence, the lack of a Canadian strategic airlift capacity and rapid reaction force and our inability to convince potential partners that we were capable of leading such a mission. The dubious domestic and even personal political purposes of the Zaire operation as exposed by David Pugliese (which have not been refuted let alone seriously challenged) are generally ignored by Canadian cultural mavens who grace us with their patriotic and peacekeeping boosterism.

Peacekeeping proponents have yet to elucidate the long-term effects of Canada's engagement with UN peacekeeping. In theory, such an analysis should include demonstrable effects so we can learn lessons and adjust our policies. We are able to do this with respect to our involvement in the Second World War (Nazism, Fascism, and Japanese imperialism decisively defeated) and in the Cold War (Soviet-led Communism decisively defeated). Afghanistan is more ambiguous but measureable in some respects (Al Qaeda's strategic capabilities eliminated, its leadership's appeal and strategic reach severely degraded if not destroyed, Pakistani proxies do not hold sway over Afghanistan following their failed assault in 2006–2009 and, after a decade and half of terrorism, they cannot build but only destroy).

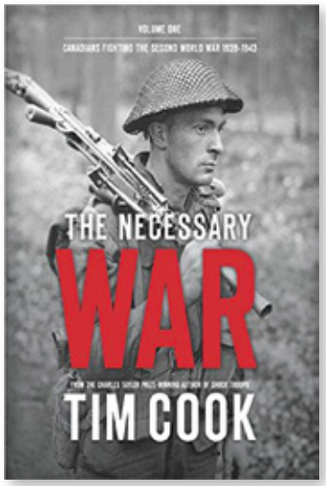
But what about, say, UNTSO? It is still there, and four or five wars have been fought between the belligerents over its sixty year tenure. UNMOGIIP? Still there, and three wars have been fought by the belligerents over its nearly 60-year tenure. ICSC and ICCS in Indochina? A Vietnamese communist victory, the 're-education' of the non-Communist population and then…. the Cambodian killing fields. UNEF I: solved a Cold War nuclear crisis but was forced to withdraw after being held hostage by Egypt in 1967. ONUC in the Congo? Unabated violence throughout the 1960s and a couple of million killed in the 1990s-early 2000's. The UN did conduct successful post-Cold War disengagement missions in Latin America, and UNTAG was successful in Namibia. These were successful owing to a unique set of geopolitical circumstances, namely, the Soviets pulled their support from the Communist forces as the Cold War ended and their proxies were forced to the peace table.

The Balkans, as we all know, only calmed down with the mass introduction of NATO forces who were engaged in stabilization operations, not peacekeeping operations. The Kosovar Albanian genocide was only reversed with a NATO-led bombing campaign directed against the perpetrators coupled with a credible threat of ground invasion. Slobodan Milosevic was deposed through a covert action campaign. If the UN had been in the lead, Milosevic would still be in place and half a million Kosovars would be living in semi-permanent camps in Albania, Macedonia, and Italy. At this point in history, the Balkans remains comparatively calm. Somalia? The country devolved into a radical Islamist statelet which was subsequently invaded by Kenyan proxies. Rwanda is at peace not through the UN efforts but through an RPF military victory and French intervention to protect the genocidaires from the RPF.

Impartial interpositionary peacekeeping was designed to freeze conflicts in place and forestall superpower involvement and possible escalation to the use of nuclear weapons. Stabilization operations in the 1990s dampened the flames of ethnic conflicts but were never able to fully eradicate embers temporarily starved of oxygen. Only a decisive blow delivered by one belligerent or another seemed to solve the problems of ethnic conflict: Croatian ethnic cleansing of the Krajinan Serbs, for example. Both experiences are products of their times. We cannot go back. Nostalgia, however misplaced, has no place in the future of Canada's national security policy. 'Peacekeeping' or whatever we call it or will call it, is, as I have written elsewhere, one arrow in the Canadian quiver. Given the world we live in, we cannot afford to make it the only arrow, no matter what emotional or nostalgia-based arguments that interested parties may deploy in a newly receptive political environment.

ABOUT THE AUTHOR…

Sean M. Maloney, PhD is a Professor of History at the Royal Military College of Canada. Among other works he is the author of *Canada and UN Peacekeeping: Cold War by Other Means 1945–1970* (2002) and *Chances for Peace: Canadian Soldiers in the Balkans 1991–1995* (2002) which were written and published without financial support from the Department of Foreign Affairs, the Department of National Defence, or the United Nations.



THE NECESSARY WAR VOLUME ONE:

Canadians Fighting The Second World War 1939–1943

BIBLIOGRAPHICAL INFORMATION:
COOK, Tim. Toronto: Allen Lane, 2014, 520 pages.
ISBN: 978-0-670-066506

Reviewed by Major Thomas K. Fitzgerald, MA, LL.B

Winston Churchill once described the Second World War as the "unnecessary" war.[1] He wrote that, had the Western powers confronted Hitler in 1936, the ensuing war could have been prevented or, at least, deferred until a more propitious time from the West's perspective. The West's policy of appeasement contributed directly to the onset of war, which, in turn, caused an estimated sixty million dead as well as untold suffering, generational disruption and a realignment of the world that still exists to this day. It was because of the British and French (and, to a degree, Canadian) policies of appeasement that a "necessary" war had to be fought to stop what award-winning historian, author and War Museum curator Tim Cook characterizes as "a war of good against evil…of unspeakable horror" and "bestial cruelty"[2] in the first volume of his masterfully written *The Necessary War: Canadians Fighting the Second World War, 1939–1943*. While it may not have been a "good war," it was one borne of necessity and one fought by the Canadians with "heroism and horror, of loss and longing and of sacrifice and endurance."

The Necessary War treads well travelled terrain, from the events leading to the emergence of the Nazis, to the outbreak of the war, to the various campaigns and battles on land, on and under the seas and in the air. He concludes this first volume with a well written account of the Battle of Ortona. Given the scope of his work, Cook cannot dwell too long of any one subject, and his writing is measured accordingly. He does address, however, certain controversial matters that continue to dog the Canadian war effort.

For example, it was not wrong, he opines, to have sent two battalions of Canadians to Hong Kong. Mackenzie King might have been acting naively in sending the Winnipeg Grenadiers and the Royal Rifles of Canada, as the Canadians were inadequately trained and lacking proper transport, but there was no "conspiracy" catering to imperial designs. The debacle of Dieppe was not the fault of any one person but the collective ineptitude of many senior commanders. Further, the importance of any "pinch" operation is overplayed in the literature and, in any event, was not an operational priority of Operation JUBILEE. Carpet bombing did little to halt German industrial production and had the unexpected effect of stiffening German morale to continue the war. Cook acquaints the reader with these and other controversies in his usual professionally proficient manner and offers his analysis. His arguments are clear, concise and convincing.

The Necessary War is not simply a story of war fighting. Cook recounts the significant social, political and cultural changes in Canadian society that resulted from the war effort. Women were employed in greater numbers in all facets of the war economy, from industry to agriculture. Women enlisted in all three services, many seeing overseas service. Necessary economic policies were implemented by the federal government to refine the burgeoning Canadian economy. Diplomatic arrangements were realized to facilitate wartime cooperation leading to the establishment of such multilateral and bilateral entities as the British Commonwealth Air Training Plan and the Permanent Joint Board on Defence. *The Necessary War* examines the Canadian war effort from a multitude of perspectives, and therein lies its strength and value.

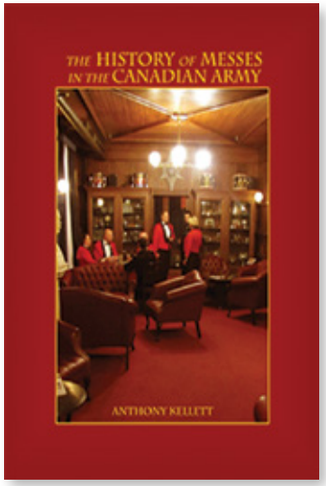
On 10 November 1942, Churchill asserted, "Now this is not the end. It is not even the beginning of the end, but it is, perhaps, the end of the beginning."[3] Professor Cook has brought us to the "end of the beginning" in Volume One of *The Necessary War*. The reader must wait, with great anticipation, for the "beginning of the end" in Volume Two.

Source: Library and Archives Canada

Source: Library and Archives Canada

ENDNOTES

1. Winston S. Churchill, *The Gathering Storm*, Boston: Haughton Mifflin, 1948, cited in Jack Schwandt, "The Unnecessary War: An Introduction to Churchill's *The Gathering Storm*," Word & Word 15.4 (Fall 1996). Churchill wrote, "There never was a war more easy to stop than that which has just wrecked what was left of the world from the previous struggle."
2. A subtext of Cook's volume is Edmund Burke's admonition that "the only thing necessary for the triumph of evil is for good men to do nothing."
3. http://www.churchill-society-london.org.uk/EndoBegn.html, accessed 12 April 2015.



THE HISTORY OF MESSES IN THE CANADIAN ARMY

BIBLIOGRAPHICAL INFORMATION:
KELLETT, Anthony. Ottawa: Service Publications, 2014.
ISBN: 9781894581981

Reviewed by Major John R. Grodzinski, CD, PhD

Over the last 25 years, army messes and institutes have undergone a transformation. Once a vibrant part of the social life and careers of officers and warrant officer and sergeants, they are now little more than cafeterias offering limited services. Depending on your perspective, these changes may not be a bad thing. However, to give a sense of how dramatically messes have changed, permit your friendly correspondent to describe regimental mess life as it was nearly 30 years ago.

The garrison workday began with "coffee," which was a parade for all officers, and which, since it came after morning physical fitness, served as breakfast. After enjoying not only coffee or tea, but also a varied mix of bagels, English muffins, mini-pizzas, doughnuts and fruit, we then carried on duty until noon, when everyone met again in the mess for lunch. It was a parade, but we needed a good reason to be absent. Following their meal, the subalterns played crud before returning to work. Happy hour was, of course, on Friday, and could only be missed with the permission of the Colonel; if there was a guest in the mess, no one was permitted to excuse themselves until the guest had departed. In any case, everyone had to say farewell to the senior officer present before departing. Other activities included a monthly commanding officer's dining (usually followed by a professional development session), mess dinners and mixed-dinings-in, marking the brigade commander's inspection, "black hat" weekend (coincident with the anticipated and oft-feared annual visit by the career manager), or important regimental anniversaries. A businessmen's luncheon (a feast I have never seen the like of since) was held monthly, and the New Year's ball was always a great event. The levée (another parade) occurred, curiously enough given the recent trend, on New Years' Day. It began at 0600 hrs and ended late in the afternoon, after we had visited all of the messes—about a dozen—in the garrison. Every month, there was a themed party. Attendance at these social and work-related events was normally mandatory; it was acknowledged beforehand by telling your colleagues "See you there," rather than asking "Are you going?" There was also the promise of free refreshment from promotions, and the now defunct "mugging out" that marked an officer's posting or retirement.

The point of this lengthy account is to demonstrate that mess life played an essential role in our socialization and professional development. It also provided a useful venue to get work done. For example, coffee break on Thursday was an important ritual, as the presence of the brigade and base staff allowed us to complete a considerable amount of work in a short period of time, as everyone we needed to speak to was there. Mess functions built bonds between the officers not only in our regiment, but throughout the brigade: before deploying on winter warfare exercises, we normally shared a happy hour with the infantry battalion we were to train with. By the end of the evening, I knew every company commander and platoon commander and had a sense of what their commanding officer was like.

Changes in military culture, financial regulations and attitudes toward alcohol consumption have brought sweeping changes—some desirable and others unfortunate—to messes and mess life. Messes are now a combination of club, cafeteria and doughnut shop, where rank groups are often mixed together for reasons that are inspired more by Trotskyite dogma than by practical military considerations. Some personnel believe the death of the mess is approaching as Treasury Board has targeted them for destruction. Whatever your perspective, experience, memories and values regarding mess life, *The History of Messes in the Canadian Army* will be of interest. Anthony Kellett, militia officer, defence scientist and author of the acclaimed *Combat Motivation: The Behaviour of Soldiers in Battle* (1982), has prepared a study of messes, canteens and institutes of the army that captures what purposes those organizations serve for their respective rank groupings. This book is an ambitious work, covering the origins of messes in the British Army, the operation of messes in New France and colonial Canada, and the history of messes in the militia and permanent force since 1855 and 1871 respectively, to the present day.

Source: l'Association des Fusiliers Mont-Royal (1961 Inc.)

The Officers' Mess of the Fusiliers Mont-Royal

The author differentiates the "mess," as a purpose-built building located in permanent barracks that first appeared in Britain in the late 18th century and whose objective expanded after the 1850s, from its original purpose, that, in the case of the officers, served to defray the financial

burdens on the subalterns and to provide an environment for social activity appropriate to an officer's social status. In its earlier form, the mess could be anywhere, whether in a large residence in the West Indies, a farm building or courtyard in Iberia or a hotel in Halifax. Nonetheless, we learn in the opening chapters that mess membership was involuntary from the beginning, financed by subscription, governed by rules and noteworthy for the heavy drinking, horseplay and rowdy games indulged in by members. Over time, messes became the centre of regimental life, and smart regiments developed elaborate and ornate messes, incorporating anterooms, dining rooms, games rooms, a library and housing. The quality of the food also improved. Eventually, messes became the repository of art, competitive and hunting trophies, weaponry, and fine furniture that became prized regimental property and conveyed a sense of formality. The much adored and damned chit, which ruined many a subaltern, also made its appearance in the late 19th century.

Source: Public Domain

The Queen's Own Rifles of Canada Sergeants' Mess, 1886

The pattern of mess life in British corps and regiments was replicated in British North America, and after 1867, in Canada. The formation of the active militia by the 1855 *Militia Act* and of the permanent, or regular, force in 1871 created the seedbed for Canadian messes. In that early period, the lack of permanent armouries and barracks meant that most units occupied drill sheds or rented office space, which was replaced in the late 19th century by more elaborate buildings. For example, in 1881, the sergeant's mess of the Queen's Own Rifles occupied "splendid" (p. 64) rented rooms in downtown Toronto, while the companies of the Royal Canadian Regiment of Infantry, located in London, Toronto, Quebec City and Fredericton, with five or six officers and twelve sergeants per garrison, had insufficient personnel to warrant messes.

The heyday of the regular force mess system came in the early years of the Cold War. By 1961, the regular army had expanded to over 50,000 personnel. In contrast to the period before 1939, when sub-units of the tiny permanent force had lain scattered across the country, regiments and battalions were now concentrated in large garrison sites, often alongside units from other arms, granting sufficient numbers to support a healthy regimental mess life, not only domestically but also overseas. By 1968, this system began to unravel, as the Canadian Armed Forces replaced the three services, and the base model introduced larger, integrated messes. Further decline resulted as the new super-bases of the 1990s resulted in shared messes

Source: Public Domain

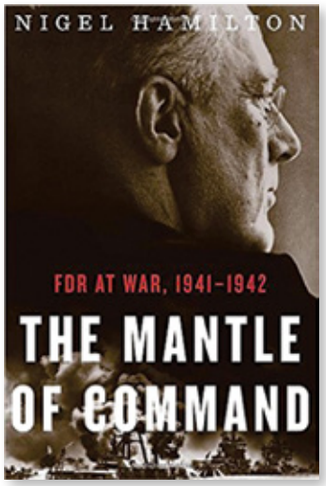
1st Battalion, The Black Watch (Royal Highland Regiment) of Canada Sergeants' Mess, 1960

and the enhancement of "stand-easies" or "unit rest areas" in unit lines, providing an alternative home for unit personnel, distinct from the consolidated base messes, properly appointed with the trappings of a traditional mess.

I could go on to describe the many facets of, variations on and stories about army messes, but it is best left for the reader to explore the history of messes and the variety of mess life in this book. For example, the closing chapter provides an interesting overview of non-regimental messes, such as the Army Officer's Mess in Ottawa and Bill and Alphie's at the Royal Military College of Canada, and of military clubs and garrison social events and balls. The book includes a glossary, over 30 pages of notes, a select bibliography and an index.

Readers should understand that this book is an institutional history of messes and institutes, rather than a study of the role messes play in officership, the development of warrant officers and sergeants, and unit and army culture, or their contribution to esprit de corps. The "endogenous factors" (p. 128), as the author describes them, including alcohol consumption (p. 129), factors responsible for the decline in mess life, are explored in general terms.

The History of Messes in the Canadian Army could have been a beautiful book; unfortunately, it is lacking in design: the layout is uninspired and the two-column text can be difficult to read. A more appealing format would have been to present the images throughout the relevant chapters, rather than crowding them into nine four-page photo sections. These criticisms aside, *The History of Messes in the Canadian Army* is a welcome study that vividly captures a dying aspect of military culture. Hopefully, this book will enjoy wide readership and inspire a renaissance of army mess life and culture.



THE MANTLE OF COMMAND:
FDR at War, 1941–1942

BIBLIOGRAPHICAL INFORMATION:
HAMILTON, Nigel. New York: Houghton Mifflin, 2014, 514 pages.
ISBN 978-0-547-77524-1

Reviewed by Major Thomas K. Fitzgerald, MA, LL.B

Wartime operational leadership has been a subject for both historians and political scientists.[1] Political styles varied with the individual leader and with the circumstances. Some, like Churchill[2] and Hitler, took a very active role in the planning of strategy and operations. The latter eventually assumed responsibility for all military planning after the defeat of the German Army in front of Moscow.[3] Stalin initially took on supreme operational command only to relinquish it to Marshals Gregori Zhukov and Boris Shapashnikov after directing a number of disastrous counterattacks during the initial stages of the Soviet–German war.[4] Even Mackenzie King was politically astute enough to leave wartime planning to his generals and to the Chiefs of the Imperial Defence Staff.[5] Veteran biographer Nigel Hamilton's *The Mantle of Command: FDR at War, 1941–1942* considers the phenomenon of political wartime command as it relates to Franklin Delano Roosevelt's first year of wartime performance. He arrives at a number of interesting conclusions.

Roosevelt's wartime leadership is often overshadowed by that of his contemporaries: Churchill, General George C. Marshall, Chief of Staff, and Harry Hopkins. Hamilton writes that Roosevelt's death before the end of the war and the resulting absence of personal memoirs has contributed to this situation. Hamilton rebutts the notion that Roosevelt was at best a talented amateur and at worst a strategic dilettante. He positions Roosevelt firmly in the top ranks of commanders in chief.

It was FDR who pushed for an early strike against the Japanese, the "Doolittle Raid." It was Roosevelt who convinced his commanders that concentrating American efforts on Germany rather than Japan—the so-called "Germany First" policy—made more strategic sense. He organized the White House in such a way that only he had overall strategic knowledge of events occurring in the Pacific and the Atlantic. FDR could also play hardball with the best of his allies and commanders. He deftly parried Secretary of War Harry Stimson's and Marshall's plan to initiate an invasion of northwestern Europe in 1942, Operation ROUND UP.[6] He was the prime mover for Operation TORCH, the invasion of northwestern Africa. FDR overruled his commanders while agreeing with Churchill's plans to invade Sicily and then Italy. He tried to inveigle Churchill to grant India its independence and, when gentle persuasion proved insufficient, he applied direct pressure. Roosevelt's attempts to have Britain divest itself of India are a recurrent theme in the narrative. His political radar was also finely tuned, as befits an experienced politician. When Roosevelt became aware that General MacArthur had accepted half a million dollars from the Philippine government for "past services rendered," rather than cashiering a potential presidential candidate with all the attendant fallout, FDR appointed him the senior army commander in the Southwest Pacific, making him a political exile and keeping him on a short leash.

Source: Wikimedia Commons

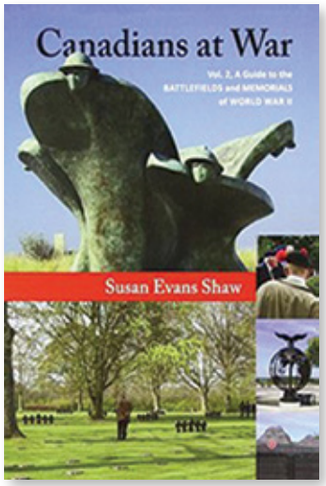
President Roosevelt and Prime Minister Winston Churchill seated on the quarterdeck of HMS Prince of Wales for a Sunday service during the Atlantic Charter Conference, 10 August 1941.

Roosevelt's often-overlooked political relationship with Mackenzie King is considered in *The Mantle of Command*. The two men met personally and corresponded on a regular basis. FDR sought out King for his advice on political matters. Roosevelt wrote to King following Dieppe to lament the casualty figures.[7] Their friendship led to many bilateral strategic initiatives.

The Mantle of Command is an excellent examination of civil–military relations in wartime. The author traces Roosevelt's growth as a military leader and the challenges he confronted and overcame. Re-interpreting primary sources, Hamilton has produced a fascinating account of American involvement in the third year of the Second World War.

ENDNOTES

1. Eliot Cohen, "Supreme Command: Soldiers, Statesmen and Leadership in Time of War" (New York: Simon & Schuster, 2002).
2. Max Hastings, "Finest Years: Churchill as Warlord, 1940–45" (London: Harper, 2009).
3. Robert M. Citino, "Blitzkrieg to Desert Storm: The Evolution of Operational Warfare" (Lawrence, KS: University Press of Kansas, 2004).
4. John Ericson, "The Road to Stalingrad: Stalin's War with Germany", Volume I (New Haven: Yale University Press, 1975); David M. Glantz, "Kharkov 1942: Anatomy of a Military Disaster" (Surrey: Ian Allan Publishing, 1998).
5. Tim Cook, "Warlords: Borden, Mackenzie King, and Canada's World Wars" (Toronto: Penguin, 2012).
6. For that intransigence, even disloyalty, Hamilton asserts that Marshall lost the President's confidence and, ultimately, the supreme command of the Normandy invasion, which went to General Dwight Eisenhower.
7. The author's index mistakenly lists Mackenzie King as "King Mackenzie." He also mistakenly writes that Campobello Island, a favourite vacation spot for the Roosevelt family, is located in New Brunswick (it is in Nova Scotia). The meeting at Placentia Bay was described as occurring in "Canadian waters." In 1941 Newfoundland was a British Crown colony. Small beer, perhaps!



CANADIANS AT WAR:

Vol 2. A Guide to the Battlefields and Memorials of World War II

BIBLIOGRAPHICAL INFORMATION:

SHAW EVANS, Susan. Fredericton: Goose Lane Editions, 2014, 263 pages. ISBN: 978-0-86492-444-5

Reviewed by Colonel Peter J. Williams, MSM, CD

Having reviewed the companion (and at 352 pages, slightly longer) volume on Canadian battlefields and memorials of World War 1 (see *The Canadian Army Journal*, Vol 16, No 1, Spring 2015, pp. 136–137), I thought it only right to provide a review of the author's second book in the set, this one about the Second World War.

The author admits that her links to World War 2 are not as close as those to the Great War, though her mother studied with wartime Canadian secret agent Frank Pickersgill at the University of Manitoba in the 1930s. At the suggestion of her publisher, Ms. Shaw notes in the Acknowledgements section that she had to "start from scratch" in researching this book and relied, *inter alia*, on material she could find in used bookstores and on relatives who had travelled to some of the locations mentioned in this guide.

Unlike the First World War, where Canada's military contribution was limited largely to the Western Front, the Second World War saw Canadians fight in theatres much farther afield. The author focuses the bulk of the book on three theatres in particular—Hong Kong; Sicily and Italy—and the campaigns in North-West Europe.

Volume 2 follows the format of its predecessor. The conduct of the campaigns in each of the major theatres is described from an Allied and then a Canadian point of view; next, battlefield points of interest including monuments and cemeteries are described, with directions on how to reach them. All of this is accompanied by high quality archival and modern photography like that present in the Great War guide, supplemented with maps largely taken from the *Official History of the Canadian Army in the Second World War*. One of the maps I had not seen before was the disposition of Canadian troops and units in France in June 1940—a full four years before D-Day—when Canadians were sent to France post-Dunkirk in the hopes of stemming the German tide. This is a very little known part of World War 2, and I was quite interested to learn that in addition to the 1st Field Regiment, Royal Canadian Horse Artillery, whose presence I was aware of, elements of the 1st Anti-Tank Regiment RCA and 2nd Field Regiment RCA also took part in these operations.

Perhaps it is worthwhile mentioning at this stage that the focus of the book is on the fighting that took place on land, though there are some references the Royal Canadian Navy (which does have its own memorial on Juno Beach in Normandy), and the Royal Canadian Air Force,

Source: Commonwealth War Graves Commission

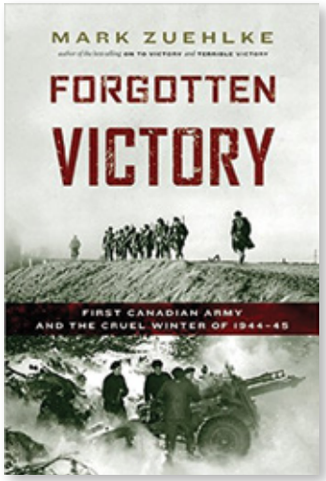
Agira Canadian War Cemetary, Sicily

six of whose members were shot as part of the group of 50 prisoners executed by the Germans after the so-called "Great Escape" from Camp Stalag Luft III in what is modern-day Poland. They are buried, and I admit that I was unaware of this, in the Poznan Old Garrison Cemetery in Poland.

The book is generally well researched, though there was the odd typo when referring to names of formations, but I did not find this to be overly distracting. The author has an eye for unique detail, and so we learn of the Dickin Medal, the equivalent of the Victoria Cross for animals, which was awarded to "Sergeant Gander," a Newfoundland dog who was the mascot of the Royal Rifles of Canada in Hong Kong. He received this award posthumously for carrying away Japanese grenades which would have otherwise killed Canadian troops. If you want to see an example of the "bouncing bomb" used in the famous Dam Busters raid, in which Canadian airmen participated, there is one at Dover Castle in England. And if you need the gate lock combination to get into the Rome War Cemetery, the author provides it in this book. Very handy.

This book is a very worthwhile companion to Volume 1, comes in the same compact size, and is recommended. While there are other guides which are perhaps more academic, this is the only one I am aware of which covers all the major theatres (as well as minor ones such as Spitzbergen) where Canadians fought. Though it might be too much to expect a volume on the Korean Conflict (North Korea would be unlikely to grant the author access to battlefields on its territory), perhaps we might see a guide on some other conflicts, such as Canada in Cyprus or the Balkans.

Colonel Williams is Director Arms Control Verification on the Strategic Joint Staff.



FORGOTTEN VICTORY:

First Canadian Army and the Cruel Winter of 1944–1945

BIBLIOGRAPHICAL INFORMATION:
ZUEHLKE, Mark, Madeira Park: Douglas & McIntyre, 500 pages.
ISBN 978-1-77162-0413-3

Reviewed by Major Thomas K. Fitzgerald, MA, LL.B

The month is February 1945. The Allies are stalemated along the approaches to Germany. Operation MARKET GARDEN, which had started with glorious expectations, had ended in disaster in September 1944. The British First Airborne Division was almost totally destroyed and was eventually evacuated by members of a Canadian Field Company from Arnhem. The unexpected German offensive in the Ardennes, the so-called Battle of the Bulge, had forced both northern Allied army groups to pause and regroup until the German threat was neutralized in January, 1945. Eisenhower and the other senior commanders realized that without a major offensive the Allies might be drawn into a quagmire reminiscent of the First World War, given the increasing strength of the German Army along the Maas and Rhine rivers.

It was this desire to "do something" with the only available formation, the First Canadian Army, that saw the genesis of Operation VERITABLE, BLOCKBUSTER I and II, and the campaigns to seize the "German forests", the Reichwald, the Hochwald Gap and the towns of Kapelsche Veer and Xanten, all masterfully described by award winning military historian, Mark Zuehlke, in his latest effort, *Forgotten Battle: First Canadian Army and the Cruel Winter of 1944–1945.*

Operation VERITABLE was a "Canadian show." It combined elements of two armies under General Harry Crerar and was the largest formation commanded by a Canadian general to that date. The intent of the operation was to clear the enemy from the western littoral of the Rhine. The Canadians faced a number of challenges during the Rhineland campaign, including extreme cold, burst dams, adverse terrain, frequent transport breakdowns that caused supply shortages and, most importantly, a professional and elite adversary, the vaunted *Fallschirmjäger* German paratroopers, who were determined to keep the Canadians on the western side of the Rhine. These were not easy battles, as Zuehlke makes clear. Mistakes were made by both sides. At times the battle turned into a contest of attrition characterized by infantry attacks followed by infantry counter-attacks. The heavily wooded ground and sloppy conditions limited the deployment of armour. The sacrifices and unbelievable bravery of these Canadian men can only be imagined when one considers that this period saw the awarding of two Victoria Crosses (one, posthumously, to Sergeant Aubrey Cousens QOR) along with forty Military Crosses or medals.

Source: Lieutenant Michael M. Dean/DND/Library and Archives Canada/PA-145676

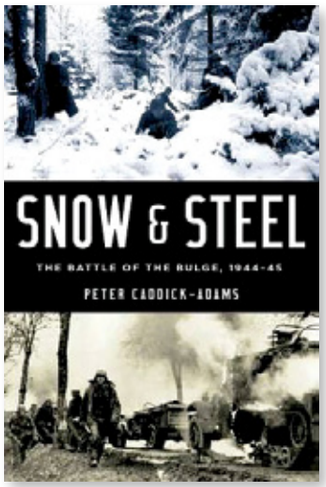
Lieutenant Louis Woods of Le Régiment de Maisonneuve observing a German position during Operation VERITABLE near Nijmegen, Netherlands, 8 February 1945

In his characteristically detailed and analytical style, the author describes not only the strategy and tactics of the Rhineland campaign but the personalities involved. The author draws on the diaries, after action reports, battle diaries and personal reminiscences of front line participants to craft a comprehensive and very human tale of this terrible time. The casual reader of the Second World War is probably familiar with the difficult professional relations that existed between General Eisenhower and Field Marshal Montgomery and between Montgomery and Crerar, but Zuehlke provides useful insights into the complicated and hitherto under-scrutinized relationship between Crerar and LGen Guy Simonds. The machinations employed by both Montgomery and Simonds to have Crerar sacked exposed the blatant careerism of both officers and, in Simonds case, reflected what could be considered rank disloyalty.

Source: Captain Colin McDougall/DND/Library and Archives Canada/PA-190818

Infantrymen of the North Shore Regiment climbing onto an Alligator amphibious tracked vehicle during Operation VERITABLE near Nijmegen, Netherlands, 8 February 1945

As the title infers, the Rhineland campaign is under represented, forgotten if you will, in the literature of the Canadian experience, even among Canadian authors. Such iconic battles as Dieppe, Ortona, Normandy, Falaise and the Scheldt take pride of place in any discussion about the Canadian war effort. This is unfortunate. We owe a debt of gratitude to writers such as Mark Zuehlke who, through their writings, keep these events firmly before us.



SNOW AND STEEL:

The Battle of the Bulge,1944–45

BIBLIOGRAPHICAL INFORMATION:
CADDICK-ADAMS, Peter. Oxford: University Press, 2015, 872 pages.
ISBN 978-0-19-933514-5

Reviewed by Major Thomas K. Fitzgerald[1], MA, LL.B

The Ardennes Forest, 15 December 1944. After their initial lodgement, the Allies burst out of the Normandy beachhead and surged east. The Seine was crossed, Paris was liberated in August and Antwerp was captured in September. Except for small and isolated pockets of German troops bottled up in French ports and formations west of the Rhine, the war seemed as good as won. Even the blunting of the airborne Allied offensive in Holland at Arnhem did not diminish allied "victory fever" and the belief that the war would be over by Christmas. General Eisenhower and Field Marshal Montgomery had a £5 wager between them to that effect. Then HERBSTNEBEL (Autumn Mist), also known as *Wacht am Rhein* (Watch on the Rhine), or, as it is more famously known, "The Battle of the Bulge", erupted over the American front lines in the Ardennes, catching US VIII Corps over-extended, under strength, under-trained and with no appreciation of the coming disaster. How did this happen?

The German operational plan was to launch a three army attack across the Meuse River and then drive on to Antwerp, thereby splitting the American 12th Army Group under General Bradley from the 21st Army Group under Montgomery. Hitler hoped that such an offensive would lead either to a breakdown in the allied coalition or to a strategic pause in the US-British war effort, permitting him to move his armies east to confront the much-anticipated Russian winter offensive.

In his latest work, *Snow and Steel: The Battle of the Bulge*, noted military historian and serving British Army Major Peter Caddick-Adams meticulously describes the lead-up to HERBSTNEBEL and the events during and after the month-long battle. He examines the motives, strategies and personalities of the combatants. Craddick-Adams attributes the initial successes of the German offensive to atrocious weather, intelligence failures, American military hubris before the battle and for a few days afterwards, antagonism and rancour between senior American commanders, the timidity of some of the American military leaders, and the audacity of the Germans in launching and pressing the attack in such foul weather. The Americans were largely able to reassert themselves thanks to improved weather, tremendous logistical efforts, tactical mistakes by the Germans heightened over time and, most importantly, the fighting spirit of the American soldier, tanker or paratrooper. The author credits Eisenhower's steadfastness and discernment in quickly recognizing the nature of the German *schwerpunkt* for what it truly was—more than a mere spoiling attack—and acting accordingly. That said, 80,000 casualties were incurred by both sides in the Ardennes.

Source: http://historicalsocietyofgermanmilitaryhistory.com/

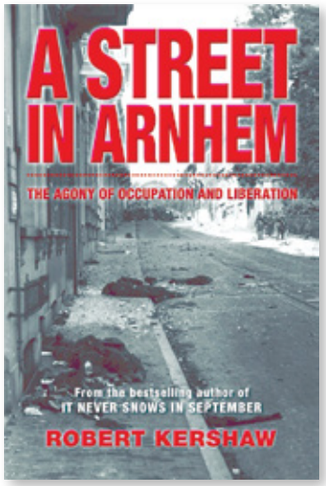
An American Dodge WC ambulance passes abandoned German Tiger II '204' from Schwere SS-Panzer-Abteilung 501, Kampfgruppe Peiper, I. SS-Panzerkorps, near La Gleize, Belgium, December 1944.

Stripped of appendices, Orders of Battle, the table of contents and footnotes, *Snow and Steel* weighs in at a mighty 700 pages. It is lavishly detailed and footnoted, perhaps unnecessarily so (Is it necessary to advise the reader that a driver of the "Red Ball Express" was the father of a famous Afro-American singer or that the American film star Jimmy Stewart flew combat missions over the Ardennes or to describe the Wagnerian mysticism that infused the genesis of the German operation?). The author comprehensively and lucidly covers the battle, commencing in the south with the blocking attack of the 7th Army, proceeding north to the 5th *Panzer* Army and, finally, ending with the 6th *Panzer* in the north. (It would be factually inaccurate to describe the campaign as a battle; rather it was a series of engagements that never really coalesced into a single battle until the end.) Caddick-Adams' analysis is objective and fair. His knowledge of his topic is impressive and enhanced by in-depth research, his many battlefield visits, and interviews with a dwindling number of survivors on both sides of the battle. He covers the important engagements: Bastogne, St. Vith and Houffalize. He touches on a topic not widely known by American, British or Canadian readers though known from a German perspective, namely, the shooting of German prisoners of war by American troops.

A number of books and films have been devoted to examinations of the Ardennes battle; several are forthcoming. *Snow and Steel* is the gold standard by which future treatments of Hitler's last offensive in the West will be measured. It is highly recommended.

ENDNOTES

1. The views and opinions expressed in this review do not reflect the views of the Government of Canada, the Department of National Defence, the Canadian Armed Forces or the Office of the Judge Advocate General.



A STREET IN ARNHEM:
The Agony of Occupation and Liberation

BIBLIOGRAPHICAL INFORMATION:
KERSHAW, Robert. UK: Ian Allen Publishing, 2014, 304 pages.
Photos/maps: 39/4, ISBN: 978-1-7110-3754-0

Reviewed by Major Chris Buckham

Operation MARKET GARDEN's ambitious goals, challenges and ultimate failure are well known to both historians and the general public; however, the details of the fighting that took place between the German defenders and Allied attackers in the towns of Oosterbeek and Arnhem are not nearly as well understood or documented. Even less so is the trial by fire that the civilian population living in Oosterbeek underwent as the adversaries grappled with one another.

Kershaw's book commences with a broad perspective on the history of the town and its people as well as the Battle of Arnhem itself before focussing upon the effect of the fighting on its epicentre: the two streets of Stationsweg and Utrechtseweg. Over the course of eight days of intense combat, these streets, their populations and an entire way of life was utterly transformed.

Kershaw's style is very personal; while he draws in the broad strokes of the units, fighting styles, larger influences of the Western Campaign and the regional actions of the MARKET GARDEN Operation, the real strength of the book lies in its rendition of the personal reminiscences of those involved in the fighting (including civilian, Allied and German sources). This adds a great deal of depth and understanding for the reader of the real impact on those participating and, more importantly, their motivations, fears and observations as their world was turned on its head.

There are a number of central lessons to be gleaned from this book:

1. The impact that five years of war had upon the individual quality of the German soldier. Throughout the book, comment is made (especially by the civilian population) of the changes in quality, deportment and professionalism compared to the German Army that had passed through the region in 1940.

2. The frustration and disillusionment of the Allied soldiers with their high command, namely the poor planning and the lack of support, as they fought for their lives with relief only 10 km away.

3. The resiliency of the civilian population, completely unused to war suddenly forced into basements with no food or water or access to medicine for their wounded.

4. The ability of German forces to undertake offensive operations this late in the war and the hubris with which the Allied planners assumed away resistance.

5. Language barriers amongst the Allied forces which prevented effective cooperation (Polish and English paratroopers).

6. The vulnerability of Allied air forces as they attempted to drop reinforcements and supplies to the beleaguered Allied paratroopers. The intervention of *Luftwaffe* anti-aircraft units and the engagement of *Luftwaffe* fighter units amongst the Dakota aircraft of the Allies were frightful.

7. Sometimes the cure is worse than the disease as the Allies, in an effort to liberate Holland and hasten the end of the war, caused the utter destruction of a region of the country previously untouched by the ravages of conflict.

The publishers have produced a very high-quality book with excellent coloured overview maps in the inside front and back covers. The font is very easy to read and the author has provided a very comprehensive bibliography and end notes. Canadians played a significant role in the operation, as it was Canadian engineers who evacuated the British and Poles across the Lower Rhine River to safety. This strongly written, educational, balanced and engaging book is well worth a read.

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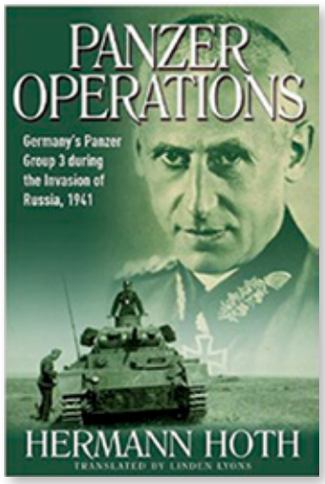
Source: Flickr

Burned-out Tiger II (2./s.Pz.Abt. 506) at Weverstraat street in Oosterbeek, Holland



PANZER OPERATIONS:

Germany's Panzer Group 3 During the Invasion of Russia, 1941

BIBLIOGRAPHICAL INFORMATION:

HOTH, Hermann. Havertown, PA: Casemate Books, 2015, 215 pages. Photos/maps: 14/16, ISBN: 978-1-61200-269-9

Reviewed by Major Chris Buckham

Hermann Hoth is considered by many to have been one of the greatest armoured commanders serving in the German Army during the Second World War. A veteran of the First World War, he commanded Panzer Group 3 during the initial drive into Russia, and he was then given responsibility for 17th Army and subsequently 4th Panzer Army. Despite being awarded the Knight's Cross of the Iron Cross with Oak Leaves and Swords for exceptional bravery and leadership, he was blamed by Hitler for the loss of Kiev in November 1943 and relieved of command.

In 1956, Hoth drafted his memoirs relating to the operations of 3 Panzer Group from the commencement of BARBAROSSA (June 1941, i.e., the invasion of Russia) until October 1941. This book is the first translation of those memoirs into English and represents an outstanding assessment of not only the operational command of armoured forces but also the interaction (both positive and negative) between Hitler, the strategic German Army command and the operational units. His observations on the delineation between "strategic" and "operational" lines of command as well as the overarching political considerations driving decision making are both relevant and insightful even today.

Throughout, Hoth centres his assessments on the teachings of such giants of military thought as Scharnhorst, Clausewitz and Moltke and on the necessity of learning from the lessons of the past. He also assesses the climate in which German military planners had to operate at the strategic level—namely, a climate in which Hitler continuously fluctuated in clearly identifying the main objective of the campaign: would it be the destruction of the Red Army and the capture of Moscow or the economic crippling of the Soviet Union? The challenge was that one goal was clearly military in nature while the other was socio-economic. The vacillation between the two would hamper operations throughout the early days of the campaign.

The meat of the book, however, centres upon the effective command of armoured forces in the field and how to best use them. He draws extensively from the pre-invasion assessments made of the Soviet Union, its transportation infrastructure, its military and its anticipated response to invasion. He also discusses various invasion planning courses of action that were developed by the German High Command. Those are fascinating, as they are outstanding examples of highlevel planning, and Hoth provides information regarding the process by which they were considered and rejected. Included was an option to combine all armoured and motorized infantry divisions into one massive mailed fist that would drive forward from a start point on the northern flank of Army Group Centre directly towards Leningrad, thereby cutting off Russian Baltic forces and securing the northern flank. Following that, the mobile forces would drive southwards, cutting off Moscow and the Russian Army from its resupply and reinforcement options from the Urals and forcing it to fight on reversed fronts; all this while Army Group Centre and South would drive inexorably forward, pinning Russian units in place. Such an example emphasizes the bold and risk accepting nature of effective armoured operations.

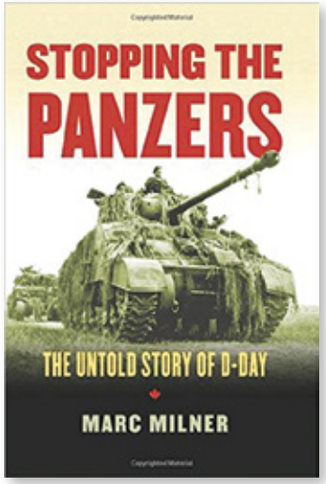
The main body of the text traces the operations of Panzer Group 3 during the initial period of Operation BARBAROSSA and the factors that affected Hoth's decision making. In his conclusion, Hoth encapsulates the essence and fundamental tenets of the operational command of mobile units and goes over the key factors in the achievement of success (in relation to the campaign in Russia). Additionally, he reiterates the absolutely critical requirement to clearly establish and maintain the aim of operations regardless of the temptations that may arise along the way. He includes in his work a series of annexes outlining key assessments and orders that he received and drafted during the course of the campaign. He also includes a discussion on the decision to undertake the final drive on Moscow in October 1941, incorporating/emphasizing the responsibility of the commander in the decision making process.

Hoth's writing style is direct and to the point, yet it remains very readable and thought-provoking. He is a commander who cares very deeply about his soldiers and their well-being as well as about the mentorship and development of his leaders. Included in this book is an annex by the translator that assesses Hoth's political and social views. I found this to be somewhat jarring, as it seemed out of place given that this was an operational treatise written by Hoth and not a biography; however, it is very much a sidebar issue. I would strongly recommend this book for any leader wanting to clearly understand what command—highlighted by bold, decisive action—entails in an operational context.

Major Chris Buckham is a Logistics Officer in the RCAF. He maintains a blog of his reviews at www.themilitaryreviewer.blogspot.com.

Source: Bundesarchiv, Bild 101I-351-1427-21A / Jaeckstein / CC-BY-SA-3.0

Soviet Union, Witebsk - Panzer IV Ausf E with vehicle convoy on an unknown road



STOPPING THE PANZERS:
The Untold Story of D-Day

BIBLIOGRAPHICAL INFORMATION:
MILNER, Marc. Lawrence: University Press of Kansas, 2014, 375 pages. Maps, ISBN: 978-0-7006-2003-6

Reviewed by Captain John Rickard

Marc Milner's new study of 3rd Canadian Infantry Division's performance during the first days of the Normandy campaign is a fine example of military history at its most effective. Milner provides a careful explanation of the operational concept under which the division was expected to fight, a comprehensive reconstruction of the ebb and flow of 3rd Division's engagements with elements of three different German divisions, and a reasoned indictment of the official history's interpretation of events.

For the first time, we are given a complete and clear picture of 3rd Division's mission. We now understand that it was heavily augmented with artillery to perform the crucial task of defeating a German panzer counterattack against the beachhead on what was recognized by invasion planners as the most suitable ground for the purpose west of Caen. Milner dismantles the idea that the division was supposed to capture Caen from the west and is particularly effective in explaining that First Canadian Army, not George Patton, was the real centrepiece of FORTITUDE SOUTH, the deception plan to hold the Germans in Pas-de-Calais. That strategic deception may seem above the divisional battle narrative, but Milner explains how disruptive the latter was in preventing the Germans from massing against a vulnerable 3rd Division during the first two days ashore.

There seems to be little doubt that 9th Canadian Infantry Brigade (CIB) could have reached its final objective at Carpiquet late on D-Day, but General Sir Miles Dempsey, the commander of 2nd British Army, called a halt in anticipation of a panzer counterattack (p. 123). The performance of the vanguard of the 9th Canadian Infantry Brigade, the North Nova Scotia battle group (with the Sherbrooke Fusiliers), is afforded careful attention. Drawing upon his considerable firsthand knowledge of the battlefield, Milner expertly describes the critical nature of the ground to both sides and the tactical manoeuvring around the villages of Buron, Authie, and Saint-Contest. The maps are very helpful in assisting the reader to visualize the tactical problem faced by Canadian commanders.

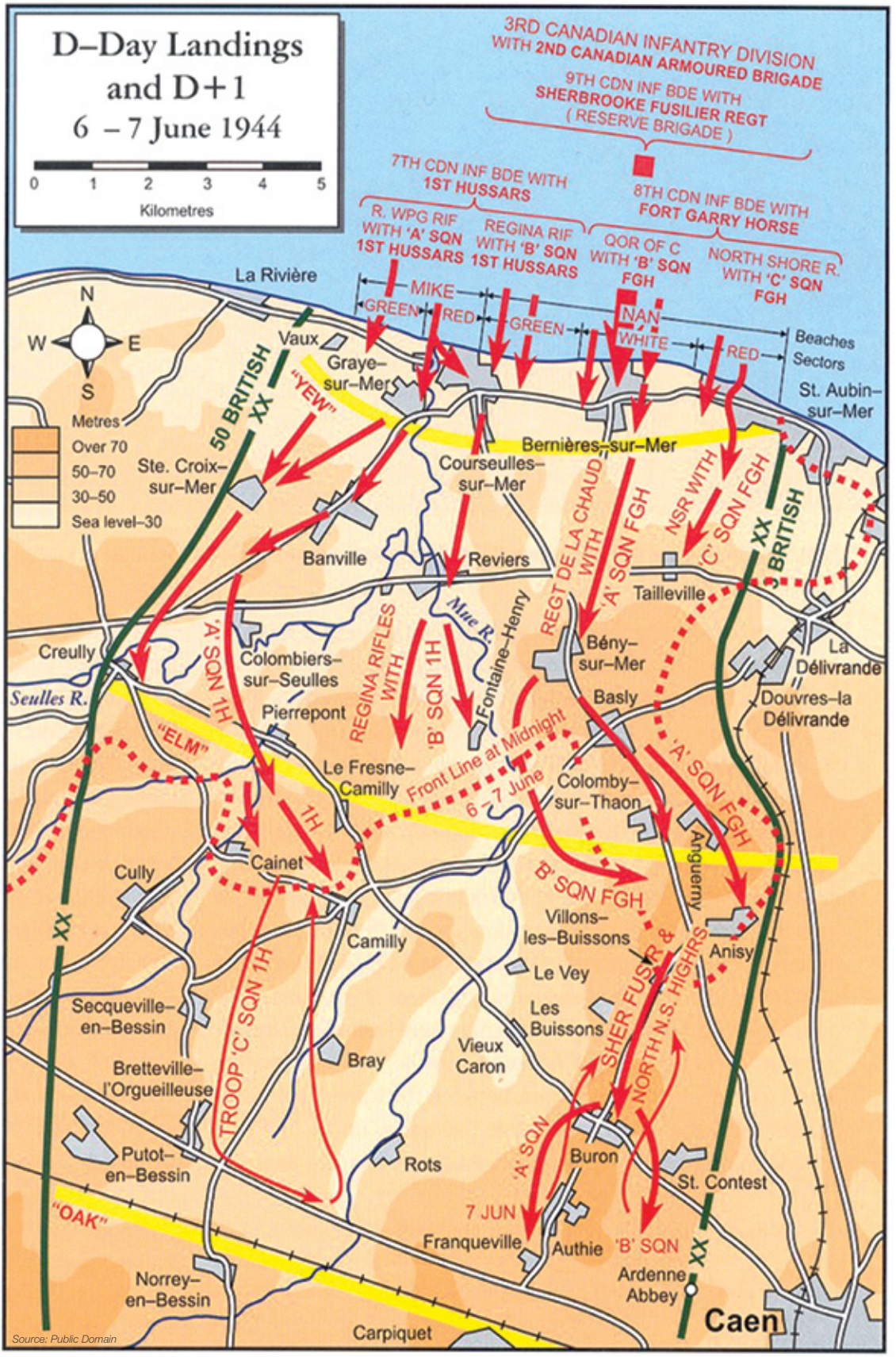
Milner convincingly argues that the vanguard had to fight through a remnant battalion of the 716th Division and Kampfgruppe Rauch of 21st Panzer Division before engaging Kurt Meyer's 25th SS Panzergrenadier Regiment. Milner calculates that the vanguard was outnumbered perhaps four or five to one. Milner contends that C.P. Stacey's statement in volume three of the official history, *The Victory Campaign*, that the vanguard fought a force approximately its own size, represents a "gross misinterpretation of the facts" (p. 301). The idea that the vanguard was ambushed by 25th SS Panzergrenadier Regiment also fails to withstand Milner's scrutiny. Rather than an ambush, an advance to contact is described, with the battle building in intensity. He concludes that 9th CIB consolidated on the "only piece of ground that made sense" (p. 190).

Milner admits when he does not have an answer. For example, he cannot explain why only two forward observation officers (FOO), not four, linked up with the North Nova Scotia Highlanders before the battle. The artillery story is critical, since the guns assigned to 9th CIB failed to support the vanguard for seven hours during the height of their D+ battle. Milner reveals that the war diary of the division artillery commander, Brigadier Stanley Todd, was fabricated in July 1945 and calls the *ex post facto* reconstruction for the record "nonsense" (p. 172). Going further, Milner declares that Todd's post-war statements were deliberate obfuscation. The failure of 9th CIB's gun support could not be mitigated because, as Milner explains, the division did not fight as a division but as three separate brigades. Brigadier Todd was unable to adjust artillery fire from other brigades to assist the vanguard because of the conscious decision to decentralize command to the brigades until they had established their fortresses astride the Caen-Bayeaux highway.

Milner's careful reconstruction of events leaves the reader with the suspicion that, had the entire 12th SS Panzer Division arrived in full on D-Day or even D+1, 9th CIB's vanguard, at least, might have been defeated in detail along with other parts of the division because of an operational concept that undermined mutual support and flexibility.

One cannot read *Stopping the Panzers* without questioning the value of the official history of the campaign. Milner stresses that Stacey had not seen the crucial planning documents from the Chief of Staff, Supreme Allied Commander (COSSAC), did not know the full purpose of the Canadian assault, and was unaware of the presence of 21st Panzer Division northwest of Caen on D+1 (p. 137) when he published *The Victory Campaign* in 1960. Milner justifiably implies that Canadian military historians have been content over the years to let Stacey do all their thinking for them—they have been "content with a rather superficial analysis" (p. 23). Ultimately, Milner concludes that the official history "did a dreadful disservice to the men whose story it was supposed to tell" (p. 310). He has revealed enough issues with the battle reconstruction of the official history to convince this reviewer, at least, that *The Victory Campaign*, or parts of it, should be rewritten, taking advantage of all the scholarship that has been produced in the intervening years.

Stopping the Panzers is more than just a history of a battle. It is also a genuine contribution to the knowledge of the Normandy campaign, sets a good example for future historians in its attention to a proper historical method firmly grounded in persistent curiosity, and treads boldly past the sacred cow of *Official History*. It is highly recommended for an army readership because of its careful tactical reconstruction and adherence to sound historical method.



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