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Cover

Ottawa artist Stephen Quick's stunning interpretation of Major William 'Will' Barker's Victoria Cross-winning fight on 27 October 1918.

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Security Force
Capability Building 2.0:
Enhancing the Structure
behind the Training



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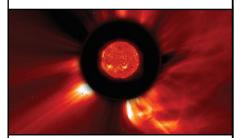
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Reframing and Responding to Electromagnetic Pulse (EMP) Risk to Canada



The Art of Command: An Artistic Interpretation



The Influence of Empire: A National Organization and the Birth of the Royal Canadian Air Force, 1918-1924

MILITARY JOURNAL

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NOTE TO READERS

As a bilingual journal, readers should take note that where citations are translated from their original language, the abbreviation [TOQ] at the end of the note, which stands for "translation of original quote", indicates to the readers that the original citation can be found in the published version of the Journal in the other official language.

EDITOR'S CORNER

elcome to yet another summer edition of the *Canadian Military Journal*. This time out, our cover proudly features Ottawa artist Stephen Quick's wonderful interpretation of Major William 'Will' Barker's victoria Cross fight on 27 October 1918. Barker, who would

Victoria Cross fight on 27 October 1918. Barker, who would finish the war with 50 accredited aerial victories and become Canada's most decorated airman of the war, was flying his last combat patrol over the Western Front that day, in a new Sopwith Snipe, the formidable successor to the ubiquitous Sopwith Camel, before returning to England for a staff assignment. At 12,000 feet, in a brilliant blue sky over the Forêt de Mormal at 8:25 AM, Barker spotted a white Rumpler C two-seater reconnoitering the lines from well above him at 21,000 feet. After several climbing turns to gain advantage, Barker put telling bursts into the German aircraft. As the Rumpler broke up in the air, one of the crew members emerged in a blossoming parachute. Barker stared transfixed by the scene, a near-fatal mistake, for he in turn was hammered by a Fokker D VII, the first he had ever encountered, and he was severely wounded in the right thigh. Fainting from the pain, Barker somehow threw the *Snipe* into a spin, only to recover consciousness some 2000 feet lower, in the midst of a total force of approximately fifteen D VIIs! For the next several minutes, Barker was everywhere in the sky. Flying with consummate skill, yet believing he was doomed, he gave even more than he got. He fired at two of the Fokkers inconclusively, but set a third one on fire from ten yards' range. Wounded a second time, now in the left thigh, Barker again fainted and again spun downwards, regaining consciousness at 15,000 feet amid a portion of the enemy formation. Barker then gunned down another Fokker in flames, but one of this group peppered his Snipe and shattered his left elbow. Passing out once more, he entered a third spin and recovered in a further group of the enemy scouts flying at 12,000 feet. With his Snipe now riddled and smoking, Barker selected another Fokker for attention and blasted it to bits, although his aircraft suffered more damage as he flew through the wreckage of his latest victim. Still in dire peril, Barker seized upon a brief exit corridor, dived westward, and streaked towards the British lines, adroitly dodging more of the enemy in the process. Crossing the lines at scant feet, he crash-landed into the barbed wire entanglements protecting a British observation balloon site.

One of the many British and Canadian soldiers who witnessed this epic fight was Lieutenant-Colonel (later General) A.G.L. 'Andy' McNaughton, then-Commander of the Canadian Corps of Heavy Artillery, who called it a "stimulating event." Sometime later, he wrote that the cheers that echoed across the front for the little British fighter were "...never matched...not on any other occasion." The balloonists of 29 Kite Balloon Section raced to the downed *Snipe* and promptly extricated the unconscious young pilot, now awash in his own arterial blood. 'Will' Barker's last war flight was over, and although he did not know it at the time, he had just won the Victoria Cross, one of just three Canadian airmen to do so during the Great War...

Barker remained in the embryonic Canadian Air Force after the war, rising to the rank of lieutenant-colonel, and after several business ventures, including a short-lived flying business partnership with friend, fellow ace and V.C. holder 'Billy' Bishop, in 1930, he became president of Fairchild Aviation's fledgling Canadian operation. Tragically, on 12 March 1930, he was killed instantly at Rockcliffe Airport in Ottawa when the training aircraft he was demonstrating for the Department of National Defence stalled and crashed. Although it proved impossible to determine the exact cause of the accident, the need for a rapid throttle adjustment to help break the stall [which would have required the decisive use of his left hand – Ed.] appears to have been an issue. In a letter of condolence, Barker's British surgeon, Robert Dolbey, made a chilling observation with respect to the great ace's physical limitations:

"After the war, I operated on his elbow joint, after which – though it was no fault of mine, but an inevitable result of the destruction of the bone, he was never able to have any power in his arm, unless he had a retentive apparatus, so that Barker, from that time onwards, flew entirely with one arm. He was one of the finest young men that I ever met and I think his death is a terrible loss, not only to Canada, but to the whole of the British Empire."

With respect to our current issue, seasoned infantry officer Lieutenant-Colonel Pierre Leroux 'takes the point' with an interesting and informative discourse on security force capability building, based upon his experience in command of Operation UNIFIER in Ukraine during 2018 and 2019. While he maintains that the operation was successful, he also cautions that there was significant room for improvement. Therefore, while he details the initiatives used to enhance the Security Forces of Ukraine, and touches upon some of the notable achievements towards developing enduring effects, Leroux further offers some recommendations for future commanders and leaders of *any* future security force capability building missions.

Next, long-serving Army veteran Darryl Cathcart maintains that, "...for many, uniformed service in the Canadian Armed Forces is a family affair where military spouses, partners, and children are immersed in a unique sub-culture that does not exist in any other profession in Canada." He further opines, "When a military member leaves the CAF, whether voluntary or otherwise, a confluence of factors must be considered to ensure the conditions for transition are met, including the needs of one's immediate family." Cathcart stresses that the effect of retirement implicates the entire family, as the primary external influence transitions from military service to family goals, and keys in on some of the challenges associated with transition, while urging for continued research into the concomitant familial challenges. Specifically, "...the impacts upon spouses, children, and friends who provide front-line support to transitioning Veterans" need to be considered, along with the development of specific 'civilianization' workshops and seminars "...to help enable a family-first transition approach.

EDITOR'S CORNER

Moving right along, veteran human resources supervisor and emergency management, operations, planning and logistics officer Simon Wells maintains that while the threats to the nation from electromagnetic pulses (EMPs), are considered to be unlikely events, "...it is irresponsible to ignore the catastrophic effects of a natural or human-caused pulse." Wells further maintains: "In order to reframe the severity of the EMP threat to Canada, the referential object of risk should be shifted to the individual, not infrastructure, and the focus should be shifted to long-term impacts, not immediate outcomes. Interested? Read on...

Our next article is particularly visual in nature. Colonel (Ret'd) Bernd Horn, no stranger to our pages, explores the world of war art and its myriad contributions, "...whether to glorify conflict in some manner, to provide propaganda, to create a visual understanding of events or as anti-war statements laden with pathos and horror. Indisputably, war art captures emotion on many levels, from patriotic martial fervor to heart-wrenching sadness at the abject horror and senselessness of conflict." While Horn provides and discusses examples of the emotions of war on canvas, the psychology of conflict has not been extensively addressed using the same medium. "... [However], in this respect, contemporary war artist Gertrude Kearns takes a different approach, The Art of Command project [extensively featured in this article – Ed.], which spans over a decade of work, ambitiously strives to capture the essence, if not the soul of conflict by examining the military commanders and civilian decision-makers who prosecute it."

In our Military History section, The Royal Canadian Air Force's Chief Historian, Dr. Richard Mayne, explores the embryonic days of the Canadian Air Force, founded in fire during the closing stages of the First World War. While when hostilities ended, Canada set out to create a truly distinctive and unique air force, the Royal Canadian Air Force that eventually emerged was, for many reasons, "...a faithful replica of [Britain's] Royal Air Force." Mayne explains: "...this article will attempt to demonstrate that the RCAF survived because it adopted British identifiers in lean times, which gave this force a sense of professionalism and permanency."

A number of diversified and interesting opinion pieces are then offered in this issue. In the first, engineering officer and specialist in Disaster and Emergency Management, Major Donald Saul, in a review of traditional and present Canadian disaster and emergency management, "...reveals a growing trend in the employment of military assets to address gaps in municipal and provincial capability." Saul posits that while our armed forces have traditionally been relegated to response efforts, due to growing costs, it may be



A Sopwith Snipe scout, similar to the one flown by William Barker during his epic fight.

EDITOR'S CORNER



A post-war shot of 'Billy' Bishop (left) and 'Will' Barker in front of one of their privately-owned Fokker DVIIs. Note Barker's limp-hanging left arm.

prudent to consider policy for the Canadian Armed Forces (CAF) that concentrates upon mitigation and preparedness, rather than response and recovery. Next, combat engineer and reservist Major Dan Doran homes in on CAF initiatives to further professionalize the Reserve Force, but cites problems for reservists with respect to the challenges of military workload versus available time. Specifically, "...the aim of this article is to discuss the policy gap within the CAF Reserves as well as [to] present real-time solutions that have been tested and implemented by the 34th Canadian Brigade Group to re-align policy with practice in the context of telework remuneration to its members." Then, Defence and Security Studies Research Fellow Hristijan Ivanovski touts Canada's 2017 Defence Policy Review for acknowledging and emphasizing the strategic relevance of the nation's intelligence functions, in which Chapter 6 literally proclaims: "Intelligence is Canada's first line of defence." Finally, Reserve officer and scholar Marissa Gibson addresses "... the lack of cooperation and coordination among military and NGO (non-governmental organizations) actors within the humanitarian space – specifically in conflict zones, and propose[s] a potential policy for the Canadian government that can assist in improving inter-organizational relations with local and international NGOs in conflict zones."

Our own resident commentator Martin Shadwick is on a brief hiatus for this issue, but will be back in full force for autumn. Finally, we close with a 'hat trick' of book reviews on very disparate subjects, which we hope will energize the interest of our readers.

Until the next time.

David L. Bashow Editor-in-Chief Canadian Military Journal

LETTER TO THE EDITOR

Editor's Note

Distinguished Canadian scientist and author Doctor Kim Krenz has been a staunch supporter and friend of the Canadian Military Journal for many years. On 17 April 2019, I received the following Letter to the Editor from him, and marvelled yet again at his trademark candour and clarity. Kim will be 99 years young this June, and we, his friends and admirers at the journal want to take this opportunity to wish him a very happy birthday, and many more to follow. You rock, Kim!

~ Dave Bashow 17 April 2019

Behind the Headlines

by Kim Krenz, Ph.D

arfare between opponent forces has always relied upon elements of stealth and surprise. In recent years, these elements have been expanded to include a wide range of aggressive and defensive techniques made possible by modern developments in the science of warfare. Russia, which in recent times has maintained a relatively low profile in international affairs, has been discovered to be a moving force on the world stage (somewhat to the surprise and consternation of the United States), and an agent behind several developments in techniques of world importance.

That activity, most immediately affecting the United States, has been the Russian interference in the relatively-recent presidential election. That interference has of course been clandestine, and its effects are still a matter of investigation, but its discovery has unsettled, to varying degrees, the American voting public.

President Trump, although something of an enthusiast in his treatment of Russia, maintains that his winning of the 2016 election had nothing to do with his Russian proclivities. Feelings are so strong in the matter that his activities are being formally investigated. It appears at this point that he may still be in trouble.

Meanwhile, it is a matter of great interest that the *Canadian Military Journal* (Vol. 17, No. 3 – Summer 2017) recently published an article by Major Andrew Duncan under the title "New Hybrid War or Old Dirty Tricks?" a study of recent developments in war technology attributable to the Russians. Major Duncan is a member of the Canadian Forces Intelligence Office in Washington, D.C., and is the Liaison Officer to the Defense Intelligence Agency. The United States, Great Britain, Canada and Australia are represented in the Agency.

The concept of a "Hybrid War" was *introduced* by the Russian Chief of the General Staff, General Valery Gerasimov, in a paper published in February 2013. The title of his paper was "The Value of Science is in the Foresight," and it begins with the statement that wars are no longer formally declared, and having begun, they proceed in a new and 'unfamiliar template."



According to Gerasimov, the use of "mobile, mixed-type groups of forces" and intelligence and sophisticated command and control systems, avoiding frontal engagements, and using "asymmetrical actions" can nullify the enemy's advantages in a conflict.

Gerasimov's article has become the subject of intense debate, in Russia and elsewhere. It has special significance as a guidebook to the Russian campaign in the Ukraine. The actual term "Hybrid War" was *defined* in 2007 by Frank Hoffman, a former U.S. Marine Corps officer, as "...a full range of different modes of warfare that includes conventional warfare with irregular tactics and formations, including terrorist acts, coercion and disorder."

The outcomes of this approach to war fighting can be seen in the recent struggle we have witnessed between Russia and the Ukraine, where local militias friendly to the Russians have been fighting for the invading forces. The tactics employed by the Russians provide an example of the application of "deep operations" theory, in which every aspect of the conflict, land, air, cyber, as well as conventional war fighting, has been used to achieve success. On the side of the Ukrainians, the fighting was invigorated with NATO assistance and military support of Ukrainian forces, as well as economic sanctions against the aggressors.

Who was it who said – and correctly in my view – "We live in interesting times"?



Lieutenant-Colonel Pierre Leroux, Commander of Joint Task Force-Ukraine, visits with Canadian Armed Forces members during T-80 tank training at the International Peacekeeping and Security Centre in Lviv, Ukraine, during Operation UNIFIER, 26 October 2018.

Security Force Capability Building 2.0: Enhancing the Structure behind the Training

by Pierre Leroux

Lieutenant-Colonel Pierre Leroux is an infantry officer of the Royal 22nd Regiment, who most recently commanded Operation UNIFIER, Rotation 6, in Ukraine, from September 2018 until April 2019. 12 July 2019 marks the end of his tenure as commander of 1st Battalion, the Royal 22nd Regiment.

Introduction

ecurity Force Capability Building (SFCB) immediately evokes hands-on and direct training to a host nation's (HN) developing military force. When I was told I was going to command OP UNIFIER, Rotation (Roto) 6, conducting range events, and providing direct training to Ukrainians were the first things that came to mind. At that moment, I had no idea that Training Development Officers (TDOs) would end up being our most valuable assets, and how understanding and enhancing the structures behind the training would be crucial to our success. Considering what I have learned during this mission, I must admit that I was ill-prepared for this particular type of operation. Hopefully, this article will provide useful insight, not only to future OP UNIFIER rotations, but also to

any other Security Force Capability Building missions. First, it is important to not only explain what we have done in our work to enhance the Security Forces of Ukraine (SFU),¹ but also the reasoning behind those initiatives. I will then touch on some notable achievements towards developing enduring effects. Finally, I will conclude with some recommendations for future SFCB commanders and leaders.

Context: Identifying the Problem

The first document I read to prepare for this mission was the Roto 3 end-of-tour report that was produced about a year before our own deployment, in September 2017. Among the expected content of such a document, it described one important principle with which I identified, namely, the need to produce more enduring effects in order to have a true impact on the Security Forces of Ukraine. The reasoning was that providing direct training, as UNIFIER was mostly doing at the time, was not creating long-term change, especially considering the very high attrition rates of the SFU (estimated to be more than 30 percent). We were doing great things and passing on our valued expertise and knowledge. However, we were only

influencing a small fraction of the well-over 200,000 soldiers in the SFU. The report concluded with the necessity to look beyond direct training towards creating institutional and systemic *enduring effects*. From that document, a seed was planted.

Under the guidance of Canadian Joint Operations Command (CJOC), and through the great initiatives of the next two rotations, a shift occurred from supporting collective training in Combat Training Center Yavoriv (CTC-Y) – an equivalent to some extent to our own Canadian Manoeuvre Training Centre Wainwright - to expanding our footprint to individual training

centres across Ukraine. At the time of transfer of command authority between Roto 5 and Roto 6 in September 2018, about a third of the 200 members of Joint Task Force Ukraine (JTF-U) were positioned outside of CTC-Y across Ukraine supporting individual training in various training centres. These changes, as well as the addition of two Training Development Officers, played a crucial role in our understanding of Ukrainian training methods, and more importantly, the precise problems at the heart of the issue.

However, at transfer of command authority, it was not yet clear to the leadership and

planning team how to produce actual enduring effects. During a collaborative mission analysis session in the pre-deployment training period, we agreed upon the general intent and importance to strive to produce durable changes that would enable the self-sustainment and autonomy of the Security Forces Ukraine. The 'what' was clear, but not the 'how.' During the relief in place period, we were able to better understand the impacts of the recent use of a Systems Approach to Training (SAT) in three domains: Military Police (MP), Engineers, and the National Guard of Ukraine (NGU). Although we had touched upon the subject during the tactical reconnaissance visit and follow-on discussions, this initiative was still in its very early stages. The MPs were the most advanced, while the Engineers and the NGU started using these concepts in the weeks leading to the transfer of command authority to produce general occupational specifications broken down into development periods. As these particular initiatives affected the structure of specific trades and NGU NCOs in general, it became clear that a Systems Approach to Training could make a difference to the overall training systems.

Evaluation: Finding the Right Path to Enduring Effects

In the first month of our rotation, we took the time to evaluate all aspects of current initiatives, with a view to provide clear direction towards creating enduring effects. Our disposition throughout various types of training centres, and the expertise of the TDOs were key to highlighting an important fundamental aspect of the Ukrainian training system. It is based upon the *instructor*, and not upon the *learner's results*. In most cases, there are no formal performance standards, with courses being *process-based*, rather than *result-based*. Making this connection was an important step to our understanding of this complex problem and how we were going to solve it. No precise performance objectives with respect to individual training means the quality of the instruction is

uneven from one class to another, and consequently, the end result is also variable. Furthermore, it raised the fundamental question: what precise end-state are the different individual training courses striving to achieve? There was no clear answer. Our first 30-day analysis showed us that this problem was spread across the entire Security Forces Ukraine. We had put our finger on the problem, and a Systems Approach to Training appeared to be a promising solution.

For a start, let me explain SAT as it was demonstrated to us by our experts, the Training Development Officers. Considering training

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serves the purpose of preparing military personnel to perform their operational tasks to the required degree of proficiency, SAT is a requirements-driven approach to instructional systems design. By placing the focus upon the intended results of instruction, SAT ensures training meets the performance requirements of corresponding job tasks. In essence, it is a method which drives training toward a specific and precise end state. By doing so, it provides relevance to training plans, and it fosters efficiency. SAT is adaptable to specific courses, such as the MP investigator course, or defining a completely new trade, for example, medical technicians. It can be used to solve *wider* problems, such as generating a new

professional NCO Corps, to more *specific* problems, such as ensuring the proficiency and quality of snipers.

To achieve the required training outcomes, SAT relies upon a five-phase process. The *Analysis* phase captures these outcomes in the form of Performance Objectives (POs). The *Design* phase describes a training program enabling learners to achieve these objectives. Instructional material is produced during the *Development* phase, while the *Implementation* phase consists of delivering the instruction. The *Evaluation* phase, which occurs throughout the SAT process, assesses the effectiveness and efficiency of the training program, and recommends improvements, *if* and *as* required.

Thus, a Systems Approach to Training is a great method to create enduring effects, since it produces foundational documents for individual training courses, such as Qualification Standards, Training Plans, and certain courseware. These products will 'endure' beyond the inevitable departure of Canadians, while building a solid foundational structure to the SFU's training system.

Analysis: Conceiving the 'How'

Having completed our first 30-day evaluation, we were ready to provide more detailed direction and guidance to the Task Force. Prior to our deployment, we issued an operation order, detailing the intent and aim to produce enduring effects. The 'how' we were going to proceed now needed more clarity by virtue of a fragmentary order. To capture the essence of our analysis, we will use the ends-ways-means format:

- Ends: Produce enduring effects on the training system to enhance the SFU capabilities and professionalization.
- Ways: Improve the structures behind the training system by implementation of a SAT where possible.

• Means:

- Doctrinal knowledge of Canadian Forces IT&E Systems (CFITES) to understanding SAT
- TDOs as subject matter experts
- Provide training to task force and Security Forces Ukraine (Qualification Standards Plans manager course)
- Support the SFU to lead writing boards to formalize Qualification Standards (analysis – Stage 1) and Training Plans (design – Stage 2)
- Provide guidance on other possible structural changes: enduring effects scale
- Stand-up a new sub-unit focused upon Systems Approach to Training development
- Acquire the 'buy-in' from top SFU officials

Through the analysis, it also became evident enabling operations were required to facilitate the implementation of SAT. First, in the context of the SFU mindset and the Soviet legacy,

acquiring 'buy-in' from higher echelons was crucial to this implementation. Informing and convincing SFU top echelons became an essential step in formalizing the structural changes we were proposing. To ensure coherence and unity of effort, we also needed to get our multinational partners on board. Acquiring the support of NATO's Defense Education Enhancement Program proved very beneficial, as that support gave us added credibility. Finally, our involvement in collective training (CT) at CTC-Y remained important to understand the overall situation. In essence, CT is the final step of any Force Generation (FG) model, and in a way, it is figuratively 'where the rubber meets the road.' We needed to keep a strong foothold in collective training to evaluate the results of our individual training efforts, and to create a feedback loop. We also identified a tremendous amount of opportunities to enhance the structures supporting collective training. From updating doctrine, to formalizing range control procedures, to demonstrating how to organize and plan a live fire exercise, we had the opportunity to work on the structures behind the training, versus the training itself. This became an important part of our concept, as a significant portion of our task force

> was still involved in collective training, and it kept them involved. From the corporals to the captains and majors, everyone had opportunities to produce enduring effects.

> Conceptually, here is how the scheme of manoeuvre was broken down:

- Shaping operation: Engaging with Security Forces of Ukraine leadership and headquarters to acquire their 'buyin' and support for SAT and supporting initiatives
- Decisive operation: Enhancing the Individual Training and Education (IT&E) system by implementing SAT to ensure the quality of training

Supporting operations:

- Enhancing the collective training at CTC-Yavoriv by mentoring a Battle Group instructor cadre to foster quality training and augment our situational awareness with respect to the efficiency of individual training
- Coordinating with our multinational partners to promote synergies and to ensure coherence
- Engaging the local population via outreach programs to maintain their support

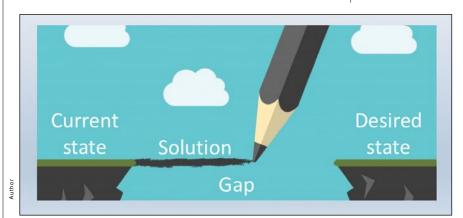


Figure 1: A conceptual illustration of SAT as a solution toward a clear end state.

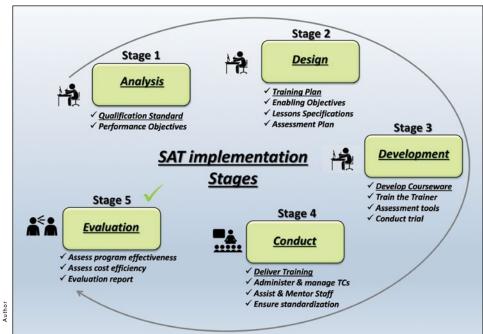


Figure 2: SAT Stages/IT&E Progression Conceptual Framework.

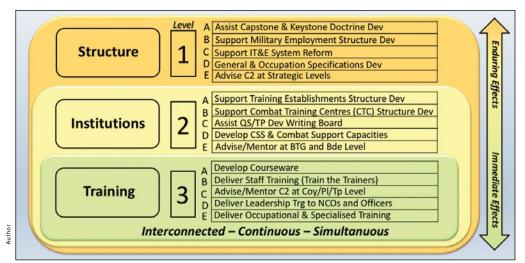


Figure 3: Enduring Effects Scale. The initial intent was to use it as a sequential, progress-based matrix. However it quickly became clear that one training group, and even one specific project could require efforts at different levels, and that progress was not in fact linear in this way. The Scale now serves as a way to identify the work that is being done, and provides visual representation of possible next steps. Each step and level can be interconnected, continuous, and simultaneous.



N

Conceptual Framework and Notable Achievements - Roto 6.

Results: Measuring our Progress

To situate ourselves and follow our progress, we decided to limit our tracking system to three priorities: IT&E, engagements, and collective training. With respect to these three themes, we linked specific doctrine with the Security Force Capability Building manual (which is still in draft):

- IT&E: Canadian Forces IT&E Systems
- Engagements: Stakeholder Engagement Guide
- Collective Training: Security Force Capability Building (CAN), and Allied Joint Doctrine for Security Force Assistance (NATO)

The intent was to formalize a tracking model specific to these subjects which would describe each step from the start of an initiative to disengagement, once the conditions are in place for the Security Forces Ukraine to make a full takeover. It is first and foremost a quantitative tracking system, as it does not measure the quality of the progress.

The most obvious observation of our tracking system through our rotation was that we started our rotation with less than ten IT&E initiatives, and ended the tour with 37 of them (23 at mid-tour). Each of these initiatives is a Systems Approach to Training cycle in itself, all of which are at various stages. Although slow to start, SAT really caught on over the months, particularly after it was formally supported at the higher levels of the Armed Forces



Lieutenant-General Jean-Marc Lanthier, Commander of the Canadian Army, visits with members of Operation UNIFIER conducting battalion training with the 94th Marine Infantry Battalion at the International Peacekeeping and Security Centre near Starychi, Ukraine, 5 December 2018.

"As we were gaining

we also observed an

increase in the number

of organizations we were

engaging, and the quality

of those engagements."

Ukraine, and when we expanded our support to the National Guard Ukraine. Considering each of these cycles requires a

writing board (WB) for the analysis and design phases, and then significant work over weeks and months to develop the proper courseware and to conduct pilot courses, each full cycle can take between 18 and 24 months. Each of them is a significant endeavour. This is why it is important to set the conditions for the SFU to take the lead from the start, supported by our expertise, as JTF-U resources are too scarce to support every cycle. Time spent on training and preparing SFU personnel for these writing boards and courseware development is of the utmost importance to make SAT sustainable.

A positive example of this observation is

the NGU Basic training writing board held during October and November of 2018, to which 15 NCOs from across Ukraine were assigned, and they took complete ownership of the process. We supported this writing board with one Canadian TDO, one NCO and one translator, along with a Canadian major supervising part-time. The writing board produced qualification standards and training plans completely adapted to the needs of the NGU. The easy method would have been to duplicate our own CAF documents, but that would not have been adapted to the true needs of the NGU, nor would it have done anything to build their internal capacity and expertise to conduct such writing boards themselves in the future.

On the other hand, we have also had mitigated success where on occasion the Armed Forces Ukraine has not taken owner-

ship and waited for Canadians to do the work. This occurred with respect to the Basic Sapper courseware development, where the AFU did not take into account the work required to generate over a hundred lesson plans. This resulted in the pilot course being postponed by five months. True 'buy-in' is required, and shaping operations are as important to set the right conditions for real progress and success.

As we were gaining knowledge and situational awareness, we also observed an increase in the number of organizations we were engaging, and the quality of these engagements. It became crucial to approach and track

engagements in an organized and logical manner, as they are key to our ability to work at the institutional level. Thus, the Engagements Progression Conceptual Framework was used to ensure we remained focussed upon our objectives. In order to obtain 'buy-in' from different levels across different organizations, we strived to be recognized as advisors and partners. We also dedicated significant efforts to convince the SFU leadership. This proved a difficult challenge, particularly with the AFU, but it was an absolute necessity. In the last month of the tour, after much relationship-building, the advisors at the General Staff and the Land Force Headquarters² were providing advice and working closely with their counterparts (Level 2 – Developing), while the

knowledge and situational awareness,

advisor to the NGU was totally integrated within the organization (Level 4 – *Integrated*). It required two-thirds of the tour to get to this point, which makes the case for longer tours for specific positions, such as advisors. Each rotation of personnel causes a degradation of relationships, as trust and knowledge must be rebuilt, and over time, this becomes frustrating for host nation staff. While NGU stands apart as a Level 4 engagement, many stalled at Levels 1 and 2 during the bulk of our rotation.

Finally, we also tracked our progress supporting collective training by focusing upon building the structure supporting CTC-Y, and enhancing the capacities of the instructor/Observer Controller Trainer (OCT) cadre, in accordance with the recently-approved

training standards. We continued to move away from direct training and towards an observer/mentor role for the observer controller trainers, providing them advice and concentrating upon building their competencies. Between training unit rotations, we provided direct training to the OCT staff, with a view to enhance their expertise and knowledge of the newly-implemented standards. We also focused upon the range safety rules and regulations to conduct live ranges, as they were lacking in that specific field. Overall, it was assessed that we were working at Stage 3 (advising) of the Collective Training Progression Conceptual Framework, with occasional efforts directed at Stages 2 (training) and 4 (observing), depending upon the group with whom we were working.

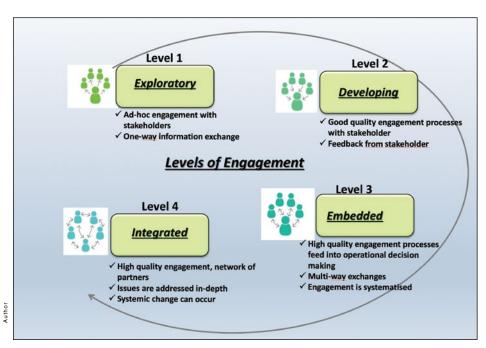


Figure 4a: Engagements Progression Conceptual Framework.

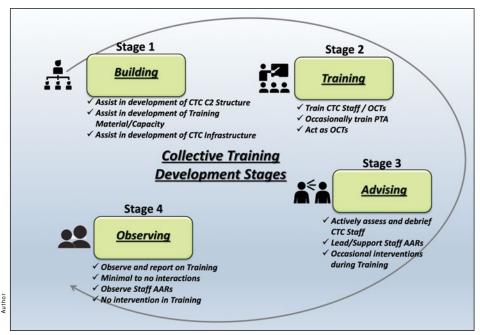


Figure 4b: Collective Training Progression Conceptual Framework.

What became crucial was not the end-product of a particular writing board, or the quality of a platoon attack at CTC-Y, but how well we were providing the SFU with tools to becoming more autonomous. Each of these efforts helped to build the structures supporting training, with a view to produce effects that would one day put us out of a job; eventually building an autonomous system that will train professional SFU personnel. By creating ways to track these different efforts, we were able to provide focus and to ensure the 'yard stick moved to the right,' little by little.

The Way Forward: Deductions and Opportunities

onsidering what we have come to understand during our rotation, what follows are some deductions which could prove useful for force generation and employment purposes of future OP UNIFIER rotations.

Force Generation:

- Doctrinal foundation is important: read and familiarize everyone with Canadian and NATO doctrinerelated documents, particularly CFITES;
- Training: Qualification Standards/ Training Plan (QS/TP) courses for everyone implicated in/with IT&E;
- Understanding the structure behind the training: A visit to/ from Canadian Army Doctrine and Training Centre Headquarters with briefings on various subjects (standard cells, how to manage SAT cycle at higher level, Canadian Manoeuvre Training Centre organization, etc.);



A Joint Task Force-Ukraine small team training instructor demonstrates magazine loading technique to Ukrainian soldiers during Operation UNIFIER at the International Peacekeeping and Security Centre in Starychi, Ukraine, 15 February 2017.

- Participate in real QS/TP writing boards. Canadian Army training centres are always looking for help from the field force to conduct training development;
- Ensure TDOs are detached to the task force from the start of Theatre Mission Specific Training (TMST);
- As training is only one part of building capabilities, project management experience and mindset is a real asset to ensure all aspects are taken into account (comprehensive mindset);
- Security Force Capability Building is largely based upon personal relationships. Selection of the right personnel for the right position is important, particularly for the advisors that will engage multinational partners or host nation headquarters;
- Set an environment where initiative is encouraged to find other ways to achieve enduring effects within the Commander's intent. SAT is by no means the only method to achieve this.

Force Employment:

 Ideally, every training group should have a TDO. At a minimum, there should be three to match the geographical disposition hubs in the OP UNIFIER Joint Operations Area;

- Every SAT cycle needs to be led by SFU, supported by OP UNIFIER resources. This will set the conditions for long term success;
- While important, the real value of a writing board is not the direct results in setting Qualification Standards. Rather, it lies in building the capacity of the SFU to plan, organize and lead their own WBs and implement to rest of the SAT cycle;
- Build TDO capacity within the SFU, as this is a key element to their autonomy and the long term sustainability of their training system;
- Once the performance standards are set (though SAT), keep in mind the standards need to be observed. The next step is to build standard cells;
- SAT is not the only path to enduring effects. There are many other ways to improve the structures behind the training, like demonstrating how to plan and organize collective training events or safe combined arms live fire exercises. The important thing to keep in mind is to enhance the structures supporting training;
- Establishing relationships are very important in Security Force Capability Building. Time and resources spent on engagements is like time on recce for a raid: invaluable.



Members of Operation UNIFIER participate in foreign weapon familiarization at the International Peacekeeping and Security Centre, 4 October 2018.

Conclusion

It is widely understood that the aim of Security Force Capability Building operations is to produce effects that will lead to the self-sustainment of a host nation. What is less understood is how to accomplish this. Hopefully, this discussion has demonstrated that a Systems Approach to

Training is an excellent method to build foundational structures supporting the development of capabilities. It is a way to enhance the system supporting training that will lead to efficient, relevant, and competent security forces. It is not, however, the only mechanism to do so and it cannot be successful in isolation. There are many other ways to produce enduring effects by improving the structures supporting training. Everyone can play a role, from the soldiers on the ground mentoring a standard cell, to captains and majors demonstrating how a Battle Group command post is organized, and transforming it into doctrine. In the future, other higher level institutional opportunities should be considered to produce even more structural improvements: career management, long term business planning and doctrine writing, along with other opportunities.

CAF operators often take training - and the system behind it - for granted; career courses, pre-deployment training, annual refreshers are expected steps that must be completed. In Canada,

we have the luxury of a 'well-oiled machine' delivering relevant training mechanisms that produce professional and proficient soldiers. In most countries where we are or will be conducting Security Force Capability Building operations, this system does not exist. To enhance such a structure, we need to understand our own, keeping in mind it will need to be adapted to the realities and the caveats of host nation security forces. That is why the recurring mantra throughout our tour was that OP UNIFIER has moved away from training, and is now focused upon enhancing the structures supporting training.



"It is widely understood that the aim of Security Force Capability Building operations is to produce effects that will lead to the self-sustainment of a host nation. What is less understood is how to accomplish this."

NOTES

- The Security Forces of Ukraine describes both the National Guard of Ukraine (NGU) and the Armed Forces of Ukraine (AFU). These are two distinct organisations. The NGU falls under the Ministry of Interior, and the AFU is under
- the Minister of Defence. Op UNIFIER worked exclusively with the AFU until May 2018, when a Memorandum of Understanding was signed between the CAF and the NGU.
- General Staff of the Armed Force of Ukraine is the headquarters and management body of the entire force. Land Forces HQ is equivalent to the Canadian Army Headquarters in Canada.



Family, including kids and friends, greeting returning naval deployment members from Operation REASSURANCE aboard HMCS *Charlottetown* as it docks in Halifax harbour, 13 January 2017.

Military to Civilian Transition: A Family-First Approach

by Darryl G. Cathcart

Like, I am just...success for me would be to just get out of it alive right now.

~ Ben, study participant, 2017

Darryl Cathcart enrolled in the Canadian Army as a private soldier in the Royal Canadian Regiment, was commissioned from the ranks, and retired as a senior officer. During his army service, he served in command positions from the detachment to the company level, and deployed to Bosnia, Croatia, Kosovo, and Afghanistan. He is a graduate of the Royal Military College of Canada, the United States Marine Corps Expeditionary Warfare School, and the Joint Command and Staff Programme at the Canadian Forces College. Darryl holds a Master of Education degree from Queen's University, and has commenced a Doctor of Education degree programme in Educational Leadership with Western University.

Introduction

or many, uniformed service in the Canadian Armed Forces (CAF) is a family affair where military spouses, partners, and children are immersed in a unique sub-culture that does not exist in any other profession in Canada. Military families are subjected to extended separations due to individual training requirements, unit exercises, and deployments in both a domestic setting or internationally in unforgiving environments. Throughout a service member's career, each family member is living in an ever-changing household where parenting duties are not always shared equally, in a setting where long-range domestic event planning is often unpredictable, and under an omnipresent umbrella of stress that manifests in various forms throughout the household. When a military member leaves the CAF, whether voluntary or otherwise, a confluence of factors must be considered to ensure the conditions for transition success are met, including the needs of one's immediate family.

The military-to-civilian transition impact upon families is of great concern, considering that 77 percent of over 2750 Veterans released between 1998 and 2015 self-identified as married, or in a common-law relationship. Additionally, a 2011 Veterans Affairs Canada (VAC) survey reported that one-quarter of the respondents indicated that their families experienced a difficult adjustment to civilian life. The effect of retirement implicates the entirety of one's family as external influence shifts from military service to family goals. Further, the number of current releasing service members who are married or in a common-law relationship highlights the requirement for a family-first approach to transition.

Relevant Literature

Service members may face a wide variety of stressful situations throughout their careers, ranging from exposure to physical and psychological trauma, international missions dealing with a litany of humanitarian concerns, austere and geographically-isolated postings, along with extended time away from family due to training and deployments.³ The constant need to deal with ambiguity cultivates desirable personal traits such as adaptability, flexibility, and selflessness that members

may be able to call upon during their transitional phase.⁴ Moreover, a recent federal government report emphasized the importance of the stabilizing function that families provide during transition.⁵ Therefore, when researchers note that military families move "...three-to-four times more often than their civilian counterparts," the cumulative impact of uniformed service upon the household becomes more quantifiable. For medically-released personnel, they may no longer be able to employ those aforementioned traits that ensured their military

and personal success due to persistent health limitations and concerns. This further emphasizes that successful reintegration into civilian society is highly individualized, and decision-making criteria should be determined by each aviator in relation to their own situation.

In 2016, the Veterans Ombudsman identified that a supportive family structure is an essential requirement for a successful transition. The implication of this finding has manifested into the creation of programs and services designed, especially for family members. Additionally, research in Western Canada headed by psychologist Dr. Marvin Westwood and his associates underscore the familial challenges faced by Veterans with post-traumatic stress

disorder (PTSD), as evidenced by the reports of domestic violence, depression, and substance dependency issues. Dr. Tomika Greer, a Human Resource Development professor at the University of Houston, focused upon the impact with respect to female Veterans, given the probable change in their family role, from full-time service member inclusive of deployments, to potentially "becoming a primary caregiver in their home." Additionally, not-for-profit groups, such as the Military Family Resource Center (MFRC), offer transition services aimed at the entire family. These

MFRC services provided throughout Canada have recently been augmented by federal government funding, \$147 million in the next six years, that will allow amenities to be accessed by Veterans and families after release. Using direct language, Doctoral Scholar in Political Science at the University of Alberta, Leigh Spanner, stated that the "...civilian family becomes subservient to the soldier and to the military as an institution." Therefore, an implication of greater access to geographically-dispersed MFRCs may provide a consistent conduit of reliable information and special-

ized programming that military family members can readily access. The depth of complexities surrounding Veterans' families warrants due and specific consideration in research.

Canadian Context

undamentally, the administrative process of release shares similar stages regardless of type; medical, voluntary, end of terms of service, or disciplinary. Aspects of military service are not limited to a daily regime of '9-to-5' work. Rather, service extends beyond the uniform, affecting family and

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The first group of soldiers, mostly from 5 Canadian Mechanized Brigade Group, return to Canada after completing Rotation 6 of Operation UNIFIER, 4 April 2019, Jean-Lesage Airport, Quebec.

friends, and it is truly a unique way of life. A condition of military employment is that members and families must move to various Canadian Forces Bases and Wings located in both major metropolitan areas, with the associated high cost of living, to rural locations, with limited prospects for spousal employment, school choices for children, reduction of some community services offered in either French or English, or readily-available access to family health care.

The release process follows three distinct phases, posited here as the post-military preparation, synchronization of efforts, and realization of potential stages. Each of these individual but mutually-supportive periods provides the opportunity to consider the needs of the family as it relates to transition. In other words, a main influence upon family life, the military, is replaced by a broader range of considerations when looking forward to life after the service. For the CAF, where approximately 5,000 service members are released annually, (inclusive of the 2,000 who have been medically released), post-military planning becomes more family-centric. This is particularly noteworthy considering Department of National Defence (DND) data indicated that 67 percent of releasing service members between 2012 and 2017 were in a recognized relationship with children (married or common-law) at the time of release.11 DND figures, coupled with results from VAC's longitudinal Life after Service Studies (LASS) program, clearly indicate that service members will continue to be in committed relationships when transitioning to civilian life.

While this study program was driven by five research questions that examined the individual-decision making process of Veterans faced with a medical release and the policy that best enabled transition, one question pointedly focused upon the

personal support structure that aided transition. This particular research question was: "What support structures were identified that better enabled transition?" During the semistructured interviews, participants were asked about the composition of their immediate family, their role in the family before and after transition, post-military family considerations such as geographic moves, and partner employment factors. Additionally, both interview and questionnaire participants were asked if they belonged to any national, regional, or local Veteran associations, and how this connection supported transition.

Methods

The flexibility afforded by qualitative research best enabled a narrative approach in studying the phenomenon of being medically discharged from the Regular Force component of the Canadian Armed Forces. Further, the sub-culture associated with military service implicates the entirety of the service member's family and loved-one support network, which led academics to regard narrative analysis as a valuable form of research, given the overlapping and interpretive nature of qualitative studies. This is of particular interest for those researching a military-linked theme, given the formative role

that sociability, sub-culture, family, friends, and tradition factor into shaping the perspective and outlook of service members.

Data collection in this study consisted of two parts: Semi-structured interviews and an online questionnaire. Immediate and initial responses for study participation signaled a great amount of interest in the subject area, wherein more than 55 participants contacted the author. Participants were selected, based upon those who met the study criteria of being medically released from the CAF within the last five years (2012–2017), had served more than 15 years, were an officer or non-commissioned officer, male or female, and had served in any environment. The first five who both met the criteria and contacted the researcher were selected for the interview, while the remainder of the participants were offered the opportunity to complete the online questionnaire. Of note, participant pseudonyms were used in an effort to protect participant confidentiality.

Data analysis was enabled through the use of Atlas.ti, version 8.0. Interviews were transcribed verbatim and member-checked which contributed to the overall reliability of the study. The coding of questionnaire and interviews resulted in five distinct themes; (a) decision-making considerations, (b) family, (c) leadership, (d) post-military, (e) transition programs and policy.

Results

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The overwhelming consensus indicated that participants, in both the questionnaire and interview pools, benefited from having access to an emotional support structure during transition. Support was mainly manifested through close family members, but a number of comments indicated the

importance of continued association with friends and former colleagues. The type of connection maintained, whether familial, a Veteran association, or informal local groups, all contributed to the well-being of releasing service members. The outcome of data analysis led to the finding that family was one of five themes that positively contributed to Veteran transition.

Family

Each interview participant expressed the importance of an emotional support structure during transition, where this was frequently articulated as a statement of responsibility to gainfully contribute to their immediate fam-

ily. In one case, Ben's, the financial stability of his family was the paramount concern. Ben stated that he "...was in scramble mode. The bills needed to be paid and I really wish now that I made a different decision, but I was panicked and needed to have security right then and right there. So, I took the job I took." While Ben chose to seek immediate employment, he did so at the peril of his own sense of professional purpose, thereby elevating the family's needs above his own. Another interview participant, Mitch, considered himself as one of the "very lucky people," and that was amplified when he stated that "...the fact that my marriage survived, you know, I consider that a huge success." Cindy, a Royal Canadian Navy Veteran who was geographically



Private Sean Rogowsky, an Airborne Electronics Sensor Operator from 14 Wing Greenwood, is greeted by his daughter after returning from Operation MOBILE in 2011.

separated from her partner, requested a posting so they could be co-located in the same large metropolitan city. This outcome provided familial stability that aided during her medical release. For Cindy, the simultaneous intersection of growing her young family and terminating her career led to a firm foundation that helped her adjust and prepare for post-military life. When Cindy went back to work after maternity leave, her "...immediate family had in mind that [she] was not going to be at work for long."

Online questionnaire participants noted that there was a realization that retirement has an impact upon individuals situated around them, whether it is a partner, spouse, children, or a network of friends. When participants were asked if having an emotional support structure of family and friends was a significant contributor to a successful transition, over 87 percent of the Veterans acknowledged that having reliable personal support during transition was moderately helpful or better. Only one contributor indicated that a support structure was not a significant influence in a successful transition.

Veteran Organizations

There has been a marked decline in membership rates in national Veteran organizations where the rejuvenation of a civilian identity may be aided through the experiences of other members. Currently, the National Council of Veterans Associations in Canada lists more than 60 different organizations. These groups, some of which date back to the end of the First World War, include the Royal Canadian Legion (RCL) and the Army, Navy and Air Force Veterans in Canada (ANAVETS), both of whom offer complimentary oneyear memberships for retiring service members. In conjunction with national non-profit organizations, many military regiments and branches have well-established associations that aim to unite, assist, and provide a place for Veterans to gather. While there are competing interests, political leanings, and motivations among the ex-service member's groups, there are unifying features, such as Veterans advocacy, and a venue where the reaffirmation of camaraderie cultivated through

military service can flourish. Overall involvement in these associations is declining, as exemplified by the RCL status report¹³ that noted a total membership of 265, 804. While this may appear high, these numbers reflect the downward trend in membership rates that have resulted in a 66 percent drop since 2005.¹⁴ Arguably, the RCL is the nation's most recognizable Veterans group, and their membership rates are telling. This study further underscores the decline in Veteran's groups, with only 40 percent of interview participants who stated that they joined an organization despite 100 percent of respondents indicating that they strongly

identify as a Veteran. It appears that contemporary Veterans in this study are relying upon alternate types of associations to establish their civilian identity, as was supported through both interview and questionnaire responses.

When questionnaire participants were queried about the establishment and growth of a post-military identity, there is a consistent theme of pride in acknowledging military service. When asked if participants self-identify as a Veteran, 100 percent agreed. However, less than half joined a Veterans group or military association after being medically released. Many CAF messes (rank based social centres steeped in military tradition) offer a one-year free associate membership, in addition to the gratis membership offered by the RCL and ANAVETS.

Discussion

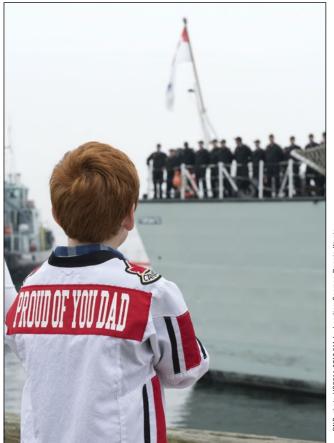
A s part of this study's participation criteria, emphasis was placed upon soldiers, sailors, aviators and officers/ non-commissioned officers, who have served for a minimum of 15 years of service, in part, because it was hypothesized that those Veterans would face a different set of challenges as compared to service members with less time served. Inclusive in this assumption was that the greater amount of time served in the military would equate to more transition consideration factors, such as spousal employment, geography, children, significant financial commitments, reconstruction of a civilian identity, as well as post-military retraining and education constraints. Several common themes emerged with participants, and one of the most significant centered upon individual access to an emotional support structure.

Family-First Transition

Military vernacular refers to those leaving the service as being released, and in the case of a health-related release, this departure is termed a medical release. Study results indicated that Veterans experienced a wide range of emotions when faced with a medical release. Participant comments such as "...it becomes more than just a job, it is your identity, it is who you are," spoke to a sense of loss. When referring to how her military identity is interpreted in a large urban city, Cindy, in a dejected tone, stated: "I just find people are very ignorant [about] it." These types of emotions also led to a downplaying of individual contributions that was best expressed by one Veteran who explained that when civilians hear the term 'Veteran,' "...people think of World War One and maybe World War Two, and that is about it." Additional participant remarks reflected that there was a workplace marginalization experienced during the member-to-civilian transition. Simultaneous with the notion of crafting a Veteran identity is the emerging and more dominant role service members take with respect to their families. Personal efforts shift from contributing to their former occupation, and these energies are re-invested into a family-first transition.

During uniformed service, interview participants averaged 6.5 moves in their career, wherein *self-reliance* became the essential ingredient cultivating *familial* resilience. Geographic moves, referred to as postings in the military, impact the member's family

in a multitude of ways ranging from spousal employment, schooling options for children, financial stress as a result of housing needs, acclimatization requirements in densely-populated urban centres versus the austerity of more rural postings, and separation from a network of extended family and loved-ones. On a move to a rural Alberta base, Jake, an interview participant, experienced a strengthening of the bond with his partner. Jake stated: "We [his immediate family] were on our own, away from [original] family, 16 hours was the nearest family. It was great. It was a great way to start my career." The underlying theme remains the notion that the entirety of the Veteran's support structure is implicated in military moves from the partner, spouse and children, to extended family and friends. Separation from extended family is a scenario that many service members must face, and the outcome produces mixed results. There is potential for emotional growth and for strengthening one's immediate family, noted in Jake's comments, as compared to increased familial anxiety and stress, which may contribute to the demise of the relationship. Neil, an interview participant, faced numerous isolated postings in the far north, which resulted in the dissolution of his first marriage after several extended separations. For CAF members, the divorce and separation rate at time of release between 2012 and 2017 ranged between 11 percent and 12 percent in all release categories.¹⁵ While these figures may be somewhat comparable to the overall Canadian population, ¹⁶ this may not be a generalized assessment, given the complexities of accurately comparing the relationship status between the two populations.



OND photo HS2014-0747-011 by Leading Seaman Ronnie Kinnie

Civilianization

The Canadian Armed Forces receives regular force recruits as young as 17 years of age, as both a non-commissioned member, or as a cadet at the Royal Military College of Canada. The indoctrination period that follows enrollment is lengthy and challenging,

and it immerses new service members in the sub-culture of the Canadian military. Initial exposure to the history and traditions of the military can last up to 15 weeks17 and continue for many months, dependent upon the branch of service and occupational specialty. The fusing of a young adult's developing identity into complete acceptance of an organizational ethos espoused by the CAF occurs at a formative time for most members. The data from this research supports the notion that one's personal military identity does not evaporate concurrent with release. Rather, the pride in service continues after the final days in uniform. In perpetuity, soldiers who are released will continue to

be known as Veterans regardless of their previous occupation, and yet, there are no resources allocated to the civilianization of identity. Currently, there is minimal institutional investment in a civilianization process, generally leaving Veterans and their families to deal with the challenges of returning to civilian life, some for the first time as an adult.

In the absence of a formalized civilianization process, Canadian Veterans appear to be finding alternative methods of associating with their peer group as opposed to gravitating towards long-established Veteran organizations where the transition may be better facilitated. A limited probe of social media platforms provided initial indications that a litany of general-

> concern and issue-specific Veteran groups have been created. While many Veterans groups are increasingly becoming more family-centric by offering services to both the service member and their partner, access to emergency funding, and even providing scholarship opportunities for children, the construct of a community Veterans' centre appears to be eroding. American studies have found that a lack of understanding on the part of releasing Veterans as to how to engage business and industry leaders is an impediment to future employment opportunities,18 where Veteran organizations may be one area where exservice members and spouses can participate

in networking opportunities with similarly-oriented individuals. By continuing to explore family-centric engagement strategies, Veteran organizations may be better armed to deal with the multi-generational Veteran.



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Limitations

This study discovered that there is a research opportunity across a greater range of releasing Veterans. The 15-year minimum service criterion applied in this research implied that there may be more family-focused considerations when facing an *unan-*

ticipated release from the CAF. In doing so, study recruitment produced a large number of potential participants who served less than 15 years in the military with similar challenges. Further, while participants were never questioned about the cause of their medical release, the nature of this study may have deterred potential participants, given the sensitivity of surrounding a personal diagnosis.

Conclusion

The central research question in this study focused upon the decision-making process of those Veterans facing an unexpected release from the CAF. However,

a reoccurring discovery was the importance of family as well as access to an emotional support when Veterans transition from military service. While participants indicated that achieving a balance between the military and domestic objectives was a main consideration during service, this was not always achievable as a result of geographic moves, deployments, and

the requirement to be separated from family, due to individual training obligations and collective unit exercises. Upon release, the exigencies of military service are replaced with a greater focus upon family goals and objectives as an outcome of the reordering of external priorities that previously influenced familial life. This creates an opportunity for a *family-first*

transition to occur. Additionally, this study uncovered that Veterans experience difficulty with respect to the civilianization of their lives, where resources offered through membership in Veteran's groups are not being fully explored. Memberships are on the decline. Therefore, alternate forms of camaraderie are being sought. The implications of this finding are wide-ranging, and they could be explored through multiple approaches. Continued research into the challenges of transition should consider the impacts upon spouses, children, and friends who provide front-line support to transitioning Veterans, thereby better synchronizing programs and services. Additionally, the

development of specific civilianization curriculum offered during mandatory workshops and seminars may enable a family-first transition approach.



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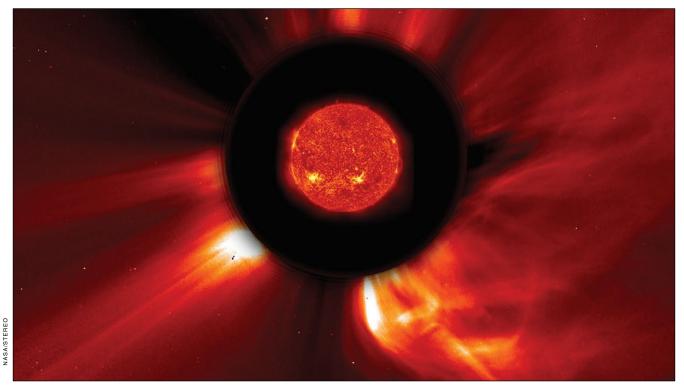
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Solar Terrestrial Relations Observatory's view of the 23 July 2012 coronal mass ejection. The event was the fastest-ever coronal mass ejection, leaving the sun at between 1,800-2,200 miles-per-second.

Reframing and Responding to Electromagnetic Pulse (EMP) Risk to Canada

by Simon D.H. Wells

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Introduction

ompared to the threat of chemical, biological, radiological, nuclear, and explosive (CBRNE) weapons, electromagnetic pulses (EMP) receive little attention. There is very little scholarship or public-facing government communication regarding this grave threat. Occasional news articles discussing possible scenarios can be found, but little else is said of the matter in Canada. That is surprising, given that the most effective delivery method in an attack would be through a nuclear warhead detonated at high altitudes in near-space. EMPs are contained within the nuclear threat. They can also occur naturally as a result of coronal mass ejections (solar flares), but a weaponized EMP would be faster, more intense, and highly destructive. In a high-yield warhead detonation scenario, the pulse would exert three waves within fractions of a second of detonation: the first

would disrupt electronic control systems and communications within a billionth of a second; the subsequent wave would follow within a second and overwhelm any remaining system protection measures (like surge protection); and the third would be a longer-duration pulse that disrupts or destroys electricity transmission lines and infrastructure.² The mechanism of an attack is through a weapon system, but the true weapons are the catastrophic consequences that would impact all of society. Vulnerabilities to natural incidents or human-caused events are unlimited. Depending upon the scale and intensity of the pulse, critical infrastructure could be permanently and irrevocably destroyed; office buildings shuttered; hospitals rendered inoperable with failing life support systems; stoves and ovens would not start; cell phones would not turn on; et cetera ad infinitum.

EMPs appear to be largely ignored because they are considered unlikely events. However, it is irresponsible to ignore the catastrophic effects of a natural or human-caused pulse. In order to reframe the severity of the EMP threat to Canada, the referential object of risk should be shifted to the *individual*, not *infrastructure*, and the focus should be shifted to *long-term impacts*, not *immediate outcomes*. Since there is not much literature openly available to scholars or planners and EMPs are comparably destructive weapons, this article will refer in part to CBRNE scholarship, assumptions and considerations, and planning. It will analyze the threats and impacts of EMPs and critique risk assessment and planning, recommending proactive capability-based planning.

Threat and Impact Analysis

There are robust international and national frameworks for *mitigation of* and *response to* CBRNE incidents, whether the incidents are accidental or intentional, but there appears to be very little public-facing discussion regarding the EMP threat. CBRNE and all other hazards to Canadians are planned for based almost exclusively upon their risk to infrastructure, with a focus upon business continuity³ or upon a broad and nebulous hazard identification that does little to address scenariospecific concerns.⁴ Neither basis is helpful when discussing EMPs. An EMP's effects will be markedly different from that of a chemical or biological attack. Therefore, specific assumptions and

considerations should be developed. This section will examine threats in two categories: human-caused events, specifically terror and rogue state attacks; and naturally- occurring incidents.

Human-Caused Events

Human-caused EMPs are dangerously effective and subversive weapons. They are most often imagined as a nuclear warhead detonated at high altitude in order to destroy infrastructure in a large area, but they can also be employed locally with equally devastating effects. An emergent concern is the increasing

access threat actors have to pulse weapons. Popular opinion is that the probability of an EMP attack upon Canada is low, but a survey of the threat environment shows that possibility is increasing.

The 'classic' EMP scenario renders large swaths of electrical infrastructure totally inoperable. Critical infrastructure would be destroyed by an EMP attack, but the long-term impacts upon

Canadian citizens and forces are the real threat. The pulse itself is merely a mechanism through which enormous societal consequences are affected. One damage estimate brought to U.S. Congress by its now-unfunded EMP Commission maintained that "...a nationwide blackout lasting one year could kill up to 9 of 10 Americans by starvation, disease, and societal collapse." The effects of a nationwide pulse incident would be apocalyptic. There is no comparable civilian body mandated to research EMPs in Canada.

Technological advances have made it increasingly easy to obtain, move, and employ pulse-based weapons at a local level. Radio Frequency Weapons (RFWs), the smaller counterparts of EMP weapons, are capable of damaging and destroying electronics locally,

with an effective range measured in kilometers, and are available on open markets in easy-to-produce models including briefcase packages.⁶ Subversive weapon systems such as these pose significant risk: the probability of an RFW system being employed is much greater than a high-altitude nuclear warhead detonation, and the impact could be just as severe. Subject matter expert Dr. Peter Pry, a member of the U.S. Congress EMP Commission, quotes the U.S. Federal Energy Regulatory Commission's warning "...that a terrorist attack that destroys just 9 key extra-high voltage transformer substations (out of a total of 2,000) could cause a nationwide blackout of the United States lasting 18 months" – fully

six months longer than the Commission's one-year mortality estimate. Whether or not mortality rates would increase after the one-year estimate period and what aggravating factors exist is unclear.

Despite the extraordinary impacts of pulse weapons, the drivers and actors involved are not well understood. Past critical infrastructure threat analyses have only mentioned EMPs and RFWs



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North Korea's intercontinental ballistic missile Hwasong-15 is displayed during a military parade in Pyongyang, 8 February 2018.

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as potential threats to cyber targets, ⁸ although, in fact, they threaten every aspect of our lives in some manner. There appears to be little thought given to the increasing scope of the EMP threat environment: it is characterized by urbanization and globalization, which amplify individual vulnerability by increasing interdependencies in economies and technology, and accessibility to weapons materials for foreign and domestic terror actors and criminals. ⁹ As we become increasingly dependent upon interdependent systems, our vulnerability increases in correlation.

Non-state actors, rogue states, and to a lesser extent, nuclear power states pose EMP threats to Canada and its allies. There are a limited number of states that possess the pre-requisite ability to launch warheads into space, but the capability could be developed in the near future. ¹⁰ Rogue states, such as Iran or the Democratic People's Republic of Korea (North Korea), could potentially use pulse weapons to disrupt their enemy's command, control, and communication systems. ¹¹ Middle powers and immature nuclear states, such as the aforementioned, benefit most from employing EMPs because they instantly gain significant strategic advantages (if not absolute victory) over enemies they might not normally be able to challenge.

In mid-2017, North Korea claimed to have conducted a "perfect hydrogen bomb test" with a 50-100 kiloton yield capable of delivering an EMP.¹² Iran reportedly conducted missile tests simulating EMP strikes in the 2000's.¹³ At the time this article was written, the United States had recently withdrawn from the

Joint Comprehensive Plan of Action with Iran and American allies (known popularly as "The Iran Deal"). The impacts to nuclear security are unclear, but it is reasonable to assume that nuclear and EMP risk will have increased as a result. As North Korea begins denuclearization discussions, monitoring and control becomes of paramount importance. Non-state actors could feasibly obtain unsecured nuclear weapons directly from the state or without its knowledge, ¹⁴ paralleling the Russian experience in the collapse of the Soviet Union. Canada may be a less likely target than the U.S. for an EMP attack, but our interconnected power grid in North America makes us intrinsically vulnerable to an attack upon the U.S. as well. ¹⁵

Naturally-Occurring Incidents

Naturally-occurring EMP incidents are widely accepted as the more likely type of scenario to which governments will need to respond. Historical events have demonstrated the scale of natural EMP incidents can be enormous and just as destructive as a humancaused event. Natural incidents may not have a security-related cause, but security will be needed in their aftermath and military capabilities and assets will definitely be required to aid in recovery.

Natural incidents may have just as serious impacts as human-caused events. The Carrington Event, a solar flare observed on 1 September 1859 by English scientist Richard Carrington, was the first observed geomagnetic event and one of the largest in the last 150 years, comparable to a significant event on



This image released by the North Korean Official News Service (KCNA) shows the launch of the intercontinental ballistic missile *Hwasong-14* during its second test-fire, 8 August 2017.



"Generally speaking, the

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London, Westminster Bridge, Palace of Westminster, and the clock tower of Big Ben at dawn.

4 November 2003. 16 The Carrington Event caused power surges through telegraph lines that set fire to papers and shocked operators; additional events in the past 50 years have caused power losses for millions, transformer failures, and threatened adverse health effects to those in affected areas. 17 One could extrapolate the added effect on modern telecommunications and electrical infrastructure if a comparable incident were to

affect the globe today.

Between 23 July and 24 July 2012, Earth missed a titanic coronal mass ejection by only three days' orbit, narrowly avoiding globally-catastrophic consequences. 18 Researchers called that event a "'shot across the bow' for policy makers and space weather professionals," noting that the storm's occurrence during a perceived period of minimal solar activity "makes the important point that incredibly powerful – even extreme – space weather events can occur even during times of weak or moderate sunspot cycles." Just like the militant threat, the natural threat is

unpredictable in timing and scale. The United Kingdom's House of Commons Defence Committee noted in 2012 that "the potential effects of space weather are growing rapidly in proportion to our dependence on technology," ²⁰ paralleling our interconnected vulnerability to attackers.

Generally speaking, the ability of emergency responders and military forces to operate in an affected area after an EMP incident will be disrupted or totally destroyed. Automated control systems employed by companies and agencies responsible for recovery will be inoperable, and skilled professionals capable of manually repairing damage will have limited availability.²¹ One

can assume the same constraints will apply to military equipment that is not target-hardened, so whether human-caused or naturally occurring, capabilities can be expected to be dramatically reduced.

Refocusing Risk and Responding

Electromagnetic pulses and radio frequency weapons do not pose direct threats to individuals, except those who might wear pacemakers or use other biotechnology. As we have seen, the catastrophic threats to individuals and communities are the results of the EMP's or RFW's lingering effects. To fully understand the threat's risk, we must

shift our focus from the likelihood of attack to the likelihood of specific effects.

The primary omission from Canada's EMP preparedness and mitigation is a fulsome risk assessment. *Impacts* are broadly understood, but *likelihood* is not. The general definition of risk employed by the Government of Canada is the product of a hazard's

impact and probability.²² The Canadian Armed Forces (CAF) could use a risk assessment's results to prepare and update contingency plans, inform strategic stockpiling, determine pre-positioning of military resources during high readiness, or to constrain tasking of high readiness and Special Operations Forces units. Risk assessment of the EMP threat is not an entirely military or civilian intelligence responsibility: the whole-of-government should be responsible for contributing to such an assessment. Although it would be a lengthy and cumbersome process, there is support to be gleaned from the lessons learned with respect to the CBRNE spheres. The Royal Canadian Mounted Police's (RCMP) evaluation of the federal CBRNE response program supported early identification of lead organizations, and roles and responsibilities for mitigation and response; facilitation of information sharing between responsible organizations; and, proactively determining strategic objectives.²³

In order to understand the risk of effects, one should refer to individuals as the object of risk, versus infrastructure, or through the use of generic scenarios. The Federal Nuclear Emergency Plan begins to address individual vulnerability by aiming to prevent or reduce health impacts, but it makes provincial and territorial governments responsible for sheltering, evacuation, food and water safety, and other local interventions.²⁴ It is an acceptable plan for the health portfolio's area of responsibility, but it is not comprehensive enough to serve as a plan for a combined federal response. For example, the Ontario Office of the Fire Marshal and Emergency Management's Provincial Nuclear Emergency Response Plan identifies more specific hazards and delivery mechanisms and sets planning zones around nuclear sites, based upon distance from the hazard's origin,25 but it is intended for nuclear generating station disasters instead of an entire suite of nuclear emergencies. That plan more specifically addresses the factor of proximity in nuclear incident risk, whereas the federal plan does not. The Province of Ontario's plan still does not comprehensively respond to a wide range of social consequences vulnerable communities might be forced to endure in a nuclear or EMP event. In fact, both are more akin to frameworks than true plans, and they focus almost entirely on quelling the source of the emergency instead of transitioning to and facilitating long-term recovery.

An EMP will be a 'magnifying glass' for all hazards. It is an exponential force multiplier for every possible societal vulnerability. The North Atlantic Treaty Organization (NATO) understands consequence management for weapons of mass destruction as "...a multi-dimensional effort, requiring coordination within the Alliance at all levels, as well as with civilian emergency planning authorities" and other actors. ²⁶ Military courses of action must be strategically coordinated with other government departments, non-governmental organizations, and international partners.

Recalling that very limited EMP scholarship and planning exists, it is necessary to refer to CBRNE response planning to determine probable courses of action and constraints. If the impacts of a natural or human-caused disaster rest upon the whole-of-society, then preparedness, response, and recovery must be coordinated across the whole-of-society as well. In the case of CBRNE weapons, NATO acknowledges that as the principal threat is terrorism, response and consequence management measures have primarily materialized from military perspectives.²⁷ A military response component will undoubtedly be critical, but just to apply a military perspective to consequence management is not comprehensive enough. It is imperative that Canadian Armed Forces leadership understand the whole-of-government response in order to effectively plan immediate and long-term recovery operations. Unfortunately, the whole-of-government collective body

does not seem to fully comprehend the mitigation and response options available to it. Public Safety Canada has conceded to media that its guidance with respect to EMP mitigation to electricity infrastructure owner-operators was generalized, and it did not address specific measures, such as surge or pulse protection.28 Even with respect to basic mitigation measures, we are unprepared.

In Canada, the CAF is undoubtedly the best-equipped and best-trained organization to



NATO Headquarters, Brussels, Belgium.

respond to the initial effects of an EMP incident, but it is not prepared to manage community-specific needs, nor should it be asked to do so. The second objective of Canada's CBRNE Strategy is to "integrate CBRNE into an all-hazards risk management approach" using capability-based planning to reduce risk once sources are understood.²⁹ In accordance with this objective, and in order to

ensure maintenance of its aim, the CAF should plan potential EMP response operations based upon its capabilities and mandate. It should also develop specific possible courses of action in order to be prepared to support incident-specific responses. An all-hazards approach, even including EMPs as a consideration, is too general to manage the chaos associated with an EMP's aftermath.

The CAF could potentially support business continuity of other government departments, but to rely solely upon military forces to support a response and recovery operation would be incorrect and inappropriate. Instead, military planners should focus upon contingency planning for distribution

of aid and equipment, aid to the civil power, and upon occupying and securing spaces with no functional government infrastructure. Constraint to only these types of missions or other specific missions more appropriately reflect the military's role and allows lead government departments to maintain overall command and control of disaster recovery.

The CAF and the Department of National Defence has integrated research and development and target hardening into its CBRNE capability development. It requires new equipment designs to include hardening against potential CBRNE threats, and it needs research and development to be coordinated with international partners via Defence Research and Development Canada (DRDC).³⁰ This policy encompasses previous EMP protection direction, thereby supporting increased EMP resilience within the military and hopefully enabling recovery operations by conventional forces that will remain operable after an incident. The Canadian Joint Incident Response Unit (CJIRU) is the sole dedicated CAF contribution to the National CBRNE Response Team, which includes the RCMP and the Public Health Agency of Canada.31 The concept of operations for force employment includes consequence management activities and use of force protection capabilities to support civilian authorities. However, without extensive preparation, a comprehensive response framework, or institutional knowledge and effective training, the CAF's ability to aid the National CBRNE Response Team is limited.³² Capability-based planning must be conducted in order to identify resources available for an EMP/CBRNE event response and to determine specific and likely courses of action.

This article has argued that the object of EMP risk should be the *individual*, because EMP threats ultimately affect individuals, whereas conventional weapons and tactics *collaterally* affect them. It has also advocated for capability-based military planning in coordination with the Government of Canada. As the scale and scope of an incident will very likely be protracted, planners should consider a proposed updated capability-based planning process from Defence Research and Development Canada (DRDC). The updated process would include concurrent capabilities and

capacity analyses resulting in outlined courses of action and defined force elements, linking results to the Joint Capability Framework, and identifying risks associated with specific capabilities, force elements, and objectives.³³ The capacity analysis is of particular interest because it is *capacity* that will become the greatest issue for responding forces. Independently from assessing

the suitability of proposed course of actions, a capacity analysis will consider force elements, scenario likelihood, and other inputs to determine responding force generation, producing determinations on the effectiveness of force composition and effects.³⁴

With updated capabilities and capacities analyses tailored to the threat and risk environment, the CAF would be able to develop specific contingency plans to exercise specific functions. It must consider its priorities and objectives when it is called upon to distribute aid to civilians or equipment to security forces and government organizations. Will the Government of Canada identify priority recipients of aid, and will they be categorized

by geographic location or demographic factors, such as age and health status? Or, will deployed officers and soldiers have to make those decisions when aid inevitably runs short during the catastrophe? What supplies or capabilities can it part with to support friendly actors? It must identify its rules of engagement when providing aid to civil power in a lawless and potentially anarchistic environment. Canadian service members could plausibly be asked to employ force to maintain order among a starving and terrified civilian population in the dystopian aftermath of an EMP attack.

Most significantly, the CAF must consider how it might use limited resources and capabilities to occupy and secure spaces and places, and it must identify those that are of strategic value. Clearly, there are not enough soldiers or vehicles to fully occupy Canadian territory. Additionally, it would almost certainly be impossible to protect all critical infrastructure sites and ensure continuity of government as well. Difficult considerations must be analyzed, such as the value of water treatment plants and power generating stations versus the continuity of the functions of government. There is no zero-sum answer to these problems.

Conclusion

"The concept of

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to support civilian

authorities."

Natural and human-caused electromagnetic pulses pose significant threats to Canada and its allies. While the threats and impacts are acknowledged, their risk has not been acknowledged. Shifting the focus of risk to the *consequences* of an event versus the *immediate outcomes* increases perceived risk and can better inform strategic and operational contingency planning. A concept of operations and recovery programming cannot be left solely to the military or to the public service. Dialogue is required to determine capabilities and objectives proactively, instead of during the aftermath of an unparalleled catastrophe, when there may be no means to communicate. Regardless of perceived likelihood or public or political appetite, coordination of mitigation and preparedness activities between all stakeholders needs to begin without delay.





An aerial view of the Bruce Power nuclear generating station in Kincardine, Ontario. An EMP event affecting this facility could have catastrophic consequences.

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The Death of Wolfe, 1759, by Sir Benjamin West.

The Art of Command: An Artistic Interpretation

by Bernd Horn

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he Art of Command, in a *figurative* sense, is a concept that attempts to capture the complexity faced by military leaders who are appointed to positions of command, giving them responsibility to lead personnel and manage resources to achieve assigned missions and tasks. Yet, the Art of Command can also have a *literal* connotation, referring to an artist's attempt to capture the heavy burden that falls upon the shoulders of those who have been appointed to command.

War art is hardly new. It has existed as long as struggle between people. After all, war art has been instrumental in contributing to the understanding of conflict. Prior to photography, war art was an essential vehicle for conveying outcomes; how battles were fought; what combat looked like; and who were the commanders and heroes. War artists provided work to newspapers who published their images, which in turn shaped public conception and perspectives of war.

Even once photography came of age, artists went where no cameras could be taken. Servicemen and women could sketch or paint their experiences in such situations as in combat, in the trenches, or in prisoner-of-war camps. War artists became a key component, complementary to journalists and historians in capturing and chronicling war in all of its dimensions. For example, contemporary war artists such as Don Troiani, Mort Künstler, Don Stivers and Keith Rocco have created incredibly detailed works that capture the essence of the American Civil War from equipment, personalities, regiments, as well as specific battles and events.

Undoubtedly, war art is shaped to meet a particularly desired outcome, whether to glorify conflict in some manner, to provide propaganda, to create a visual understanding of events or as antiwar statements laden with pathos and horror. Indisputably, war art captures emotion on many levels, from patriotic martial fervor to heart wrenching sadness at the abject horror and senselessness of conflict. For example, Benjamin West's famous piece "The Death of Wolfe" or Emanuel Leutze's "George Washington Crossing the Delaware" stir images of Great Captains and outstanding achievements on the battlefield. Conversely, Adolph Northen's "Napoleon's retreat from Moscow," John Singer Sargent's "Gassed" depicting a line of blinded soldiers in World War I, or Tom Lea's "Two Thousand Yard Stare," or "Abandon Ship" created for *LIFE* magazine to capture the trauma of the Pacific campaign during the Second World War, all convey the human cost of conflict.



The Hitler Line, by Charles Comfort.

From a Canadian perspective, war artists have been equally important. H.J. Mowat's graphic *A Night Raid*, or *Trench Fight*, or Maurice Cullen's haunting *No Man's Land* assisted Canadians

to better understand the terror of the European battlefield. Similarly, Charles Comfort's detailed portrayals of such events as the *Dieppe Raid*, or the capture of the *Hitler Line*, as well as Alex Colville's dramatic works, such as *Tragic Landscape*, and *Infantry, near Nijmegen* created images to meet the demand of the public with a desire to better visualize the war.

Author Heather Robertson captured both the allure and motivation of war artists. She explained:

War broke down old preconceptions, old inhibitions; it offered subject matter – death, mutilation, destruction – they [war artists] had never dealt with

before. They had to render the obscene tolerable, the ugly beautiful, create life out of death. Under the stress of this dance macabre, some painters created extraordinary and unforgettable works of art.¹

The importance and contribution of war art is without question. However, some would argue that war art is one manner to explore the emotions of war, but not necessarily the psychology of

conflict. In this respect, contemporary war artist Gertrude Kearns takes a different approach. *The Art of Command* project, which spans over a decade of work, ambitiously strives to capture the *essence*, if not the *soul*, of conflict by examining the military commanders and civilian decision-makers who prosecute it.²

Paradoxically, Kearns did not begin her career as an artist. She studied classical piano at the Royal Conservatory of Music in Toronto when she was in her early-twenties. She achieved a piano performance diploma at the University of Toronto and began to seriously work on composition. However, the studio practice of her father, Frederic Steiger (1899-1990), who was a full-time artist that

focused upon semi-abstract work and portraiture cast a significant influence upon her. In the 1970s, she began to dabble in life drawing (or in layman's terms, nudes) and soon recognized her strong graphic skills.

"The importance and contribution of war art is without question. However, some would argue that war art is one manner to explore the emotions of war, but not necessarily the psychology of conflict."

For the next two decades Kearns, sometimes on commission, focussed upon large format abstracts and portraits. She developed a strong presence in the Toronto contemporary art scene. However, in 1991, she had an epiphany. The Gulf War sparked a residual interest that had lay dormant, and it galvanized her desire to become a war artist.

That year, Kearns exhibited her Gulf Crisis series in Toronto, a series of large semi-abstracted pieces. Then, in 1993, she released a sombre, yet haunting portrait piece of three captured airmen (German, Italian and American) of the Gulf War. In 1994, she won an aviation peacekeeping competition held by the National Aviation Museum that drew her into the radar of the Canadian War Museum (CWM) and the National Aviation Museum. Within a few years, Kearns produced a number of dramatic pieces, such as Kyle Brown and the Somalia incident, Fires over Kuwait, and Avro Arrow: Black Friday, and Avro Arrow: Short Glory.

Her work was not without controversy. In 1996, the Canadian War Museum acquired her Somalia with Conscience and Somalia without Conscience artwork, which was explicitly about the torture of the Somalian teenager, Shidane Arone. It caused an eruption of protest by veterans and others when the CWM opened in its new location, and exhibited the latter work of Clayton Matchee and the prisoner. However, Kearns maintains that the piece was not an anti-military work, but rather, a stark reminder of the importance of strong leadership.

Instrumental to her eventual trajectory was her two-year project on Rwanda, which Kearns started in 2001. She completed four large editorial works on Lieutenant-General Roméo Dallaire. Undeniably, the complexity of situations in conflict zones that individuals, particularly leaders, faced, fascinated her. This led her to realize that she would need to meet Canadian Armed Forces (CAF) personnel to dig deeper into this new avenue of approach. As a result, a call to National Defence Headquarters (NDHQ) put her in touch with a staff officer who had been with Dallaire in Rwanda. The officer provided context, and added 'personal touch' material on both the general and the mission. He also became her very first live soldier portrait, Injured: PTSD, which is in the CWM Collection. The work was actually purchased by Veterans Affairs and donated to the Canadian War Museum.

During an art exhibition, her UNdone: Dallaire/Rwanda show in 2002, she met retired Major-General Lew MacKenzie. This meeting resulted in additional Balkan-inspired work, but this time through direct exposure to the mission commander. Notably, pieces included The Lie (screwing the press/pressing the screw), a media propaganda Kosovo piece, Resolution, and Exposed. Her meeting with MacKenzie also resulted in her developing an interest in leadership, specifically, a comparative sense of leadership between Dallaire and MacKenzie. This was a precursor to her eventual The Art of Command project.



Infantry, near Nijmegen, Holland, by Alex Colville

Throughout her journey, Kearns reflected that the 'normal' or 'easy' route to do war art as a contemporary artist was to take a typical anti-war perspective. However, she didn't think that such an approach was interesting enough, especially now. There was too much else to say.

A significant turning point came in 2003, when she was accepted into the Canadian Forces Artist Program (CFAP). Given her controversial work to date, she had not expected to be accepted. In her submission to join the CFAP, she stated her need to get to Afghanistan as an embedded war artist with the Canadian Armed Forces and the CFAP appointment provided the necessary access. She was subsequently offered a position with Roto [Rotation] 0 Task Force Afghanistan in Kandahar, Afghanistan, for five weeks, from December 2005 to January 2006. She completed the required six canvasses by the fall, but felt the works were too "uni-dimensional." In late- 2006, Kearns decided to start an

independent, non-commissioned, more complex project, unsure *how* or *if* it would ever develop.

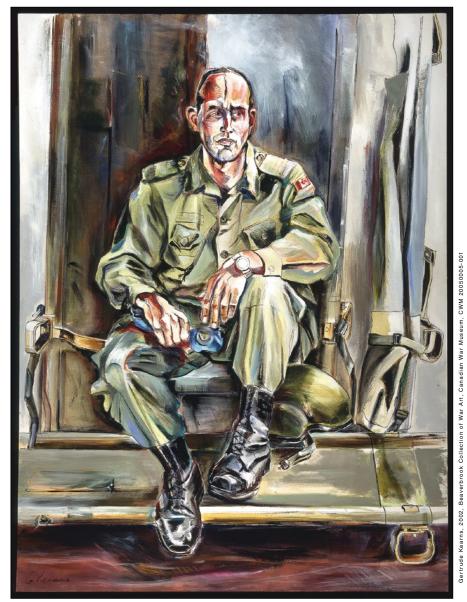
Her basic goal was "...to capture the gist of the military perspective and experience via a collection of officers charged with waging it." The experience in Afghanistan had left her wanting more. "I couldn't let go of the mission," she revealed, "What my time there had given me was a visceral sense of Afghanistan, the mission, and the CAF service personnel." She expanded on her brief experience back in Toronto through continuing exposure to soldiers and analysts through local militia regiments and defence associations, as well as reading.

Research provided Kearns with a methodology. As she explained, "I needed something that might allow me both a collective and individual look at the mission experience. I saw that senior leadership was the best route in as it offered huge thematic potential from top down: tactical, operational, as well as strategic perspectives."

Kearns felt that her work would serve on one level as commemoration to the war, but also commentary from a command perspective, as well as her own. She decided to focus upon command because it could give a key to the driving force behind the prosecution of the war. It was intended to be an objective commentary on the experience, being neither pro-war, nor anti- war. In fact, the intent was to focus intensely upon the military experience. It was not to be jingoistic or traditional. She wanted to strive for a more

contemporary, if not intellectual and sophisticated, artistic approach. As such, parallel to the portraits was text that was intended to pivot from the individual experience of the subject into the general experience. She collected material through interviews and research, resulting in an array of text presentations, sometimes using direct quotes, at times morphing quotes into dialogue, headline, and 'sound bite-like ideas,' to capture the essence of a philosophy, ideology or character, as well as mission concept.

In the end, her approach was highly unorthodox military art. Kearns acknowledged that the text-laden portraits, as well as some of the portraits themselves prior to the introduction of the text, ran counter to the conservative tradition of official portraiture of senior commanders. However, the eventual interest within the military community was remarkable and unanticipated. Interestingly, the work was never officially commissioned, but rather, it was tacitly



Injured; PTSD.

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sanctioned. The military's interest and curiosity, however, were not necessarily shared by the contemporary artistic community.

The value of *The Art of Command* project is multi-layered. On the surface, it provides a collection of portraits of important Canadian military commanders, as well as two of the civilian decision-makers who prosecuted the war in Afghanistan. Kearns has captured most of the 'key' Canadian commanders and decision-makers of the Afghan war in a collection of sixty-seven works: half, the original portraits from life sittings, the other half, the related texted war prints or 'posters.' As such, the body of work adds another dimension to capturing Canadian military history, specifically those responsible for the nation's efforts in Afghanistan.

'Peeling back the onion,' there is yet another layer to the project, namely, the examination of command itself. Individuals do not choose to be commanders. Command is an official appointment. Specifically, it is the vested authority that is given to a military officer. Unlike leadership, which allows an individual to emerge to lead peers, subordinates, and even superiors through force of personality, presence, and example, particularly in crisis, command is a conscious decision by the chain-of-command to entrust a specific individual with the responsibility of coordinating personnel and resources to achieve a military mission.

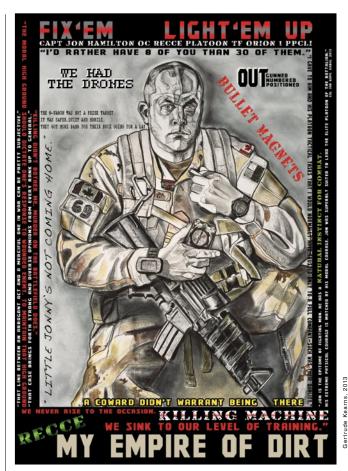
In essence, command is comprised of authority, management and leadership. The weight or emphasis a commander places on any one or number of these factors determines the 'type' of command climate that will exist. The multi-component nature of command also explains why it is such a personal and varied experience depending on the respective personalities of those given command.

Remarkably, Kearns has managed to capture the 'personal' aspect of command. Those familiar with the specific subjects/ personalities can see, not just the *physical likeness* of the

individuals, but also the *nature* of the individuals themselves. In most if not all cases, their character seems to seep out from the canvas. The portraits capture the wide range of differing personalities, from arrogant, petulant and entitled, to uncompromising, committed and professional, to humble, compassionate and insightful. Importantly, this 'second layer' captures another dimension of Canadian military leadership.

It is the next layer that is arguably the most important in terms of contribution of the project to the understanding of command. The narrative text that has been added to the portraits reveals, or perhaps, more accurately reinforces, much of that 'character' that was captured in the artwork. It uncovers which of the levers, namely author-

ity, management or leadership, is most important to the actual subject. It also provides an interesting perspective of personal emphasis from 'front line warrior' to a more operational/strategic level positioning. In essence, the different approaches to



Fix-Em - Light 'Em Up - [Captain John Hamilton].

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command by different officers depending on rank, time and situation. Significantly, this 'third layer' works towards an understanding

of the psychology of the military commanders and civilian decision-makers. It also speaks to the psychological impact of command on individuals, especially during conflict. It underscores the age old mantra of "the price of command," or often called "the burden of command." It also differentiates the various operational levels and those that operate at each.

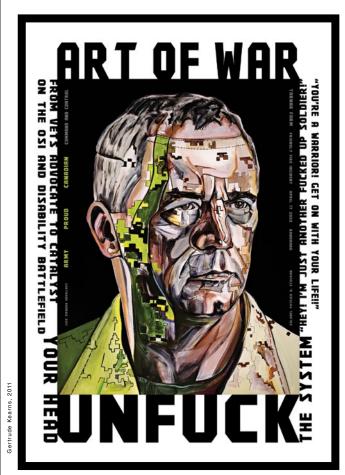
For example, the portrait of a young officer commanding a reconnaissance platoon ("Fix'Em – Light'Em Up") conveys the commitment and dedication of youth to 'the cause,' (which is often a mixture of belief in national service, as well as a commitment to the military profession). In this case, the battlespace is seen in starkly black and white terms with a fatalist perspective derived from

the invincibility of youth. "My empire of dirt," "Killing Machine," and "Bullet Magnets" convey the exuberance of the typical young combat arms officer.

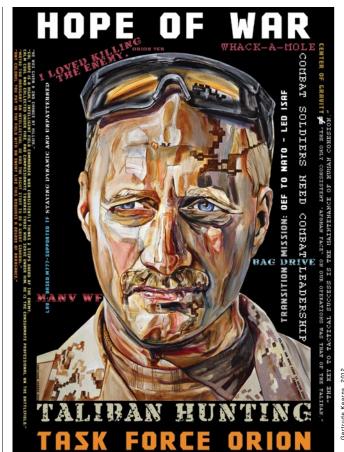
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But as one climbs the chain-of-command at the tactical level, the outlook changes somewhat. Kearns' study of three different battalion commanders, Lieutenant-Colonels Pat Stogran, Ian Hope, and Omer Lavoie, takes on a much more different perspective, based upon maturity, situation and personality. Stogran, an unrelenting maverick, who bristled at the bureaucratic red tape he was compelled to deal with as a result of the military coming out of its "decade of darkness," led a battalion in 2002 under the American led Operation ENDURING FREEDOM after the route of the Taliban and Al Qaeda. His text conveys a very forceful pride in uniform and the military identity, and an arguable intolerance to any sign of weakness. The text which includes, "You're a warrior get on with your life," and "Unfuck the system" encapsulates his outlook. [Pat Stogran was appointed Canada's first Veterans' Ombudsman in 2007 – Ed.].

At the same unit level, the study of Hope's portraiture captures his extremely confident bearing, warrior ethos and professionalism. In many ways a self-styled Canadian Patton, Hope was responsible for Canada's first foray into the restive Kandahar province. When the Taliban 'sparked up' in the spring of 2005, Hope's Task Force ORION was kept busy chasing insurgents throughout southern Afghanistan. Seen as a war fighter by his Afghan allies, Hope thrived in his environment. His portrait, ironically entitled "Hope of War," contained such text as "Taliban Hunting," "Combat soldiers need combat leadership," and "I loved killing the enemy." These sentiments portray the essence of the time and the personality.

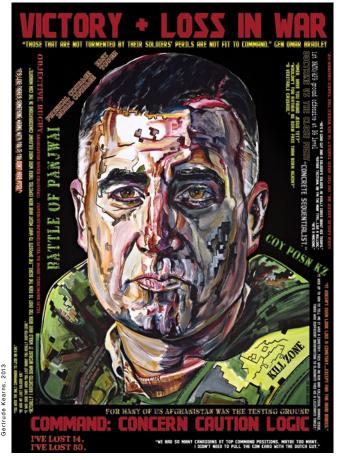


Art of War - [Colonel (ret'd) Pat Stogran].

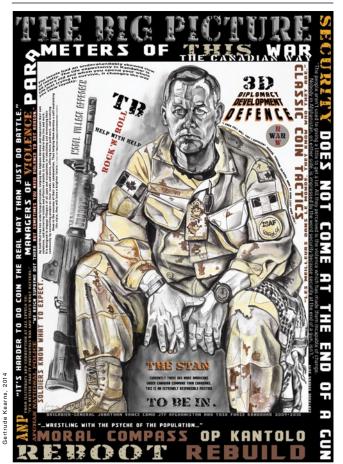


Hope of War - [Lieutenant-Colonel Ian Hope].

The final battalion commander, Omer Lavoie, whose unit underwent a bloody experience during Operation MEDUSA in Panjwayi in 2006, and the Taliban's shift to asymmetric tactics in its aftermath, illuminates a completely different perspective, based upon the personality and situational differences. In the case of Lavoie, the price of command is graphically evident. The piece titled "Victory + Loss in War," conveys the burden of losing subordinates in combat. The calculus is not 'black and white,' and is not as clear cut as winning and losing. Far from the "whack a mole" sentiments of others, Lavoie's portrait shares "Command: Concern Caution Logic." Additionally, it quotes General Omar Bradley from the Second World War, "...those that are not tormented by their soldiers' perils are not fit to command." The weight of command is visibly seen in the portrait and in its text. It also explains why Lavoie spent rare time at the Kandahar Airfield at his headquarters, and why he was perpetually in the field with his soldiers.



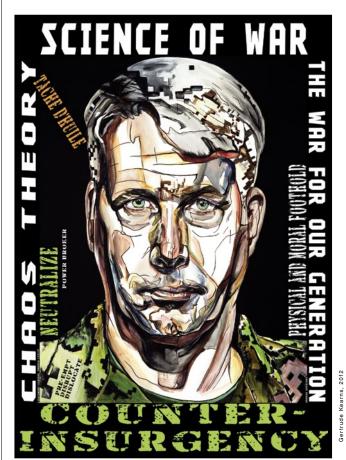
Victory + Loss in War - [Lieutenant-Colonel Omer Lavoie].



The Big Picture - [Brigadier-General Jonathan Vance].

The Art of Command collection of portraits has a similar impact at the operational and strategic levels. The portrait of General Jon Vance, arguably the most experienced and successful of the Canadian operational commanders in Afghanistan, depicts the wider and deeper focus and considerations at this level. Entitled "The Big Picture," the attention becomes clearly one of a wider, more inclusive governmental approach that emphasizes the necessary tools to win in counter-insurgency. "It's harder to do COIN [counter-insurgency] the real way than just do battle," expresses the holistic frame of mind.

The difference becomes even starker when an examination of commanders at NDHQ, as well as civilian decision-makers are examined. For instance, the text for the portrait of the Army Commander at the height of the war is extremely clinical. Entitled "Science of War," there is no emotion or reflection of the cost of the conflict. The same can be said of the portrait of the Minister of National Defence during the early years.



Science of War - [Lieutenant-General Andrew Leslie].

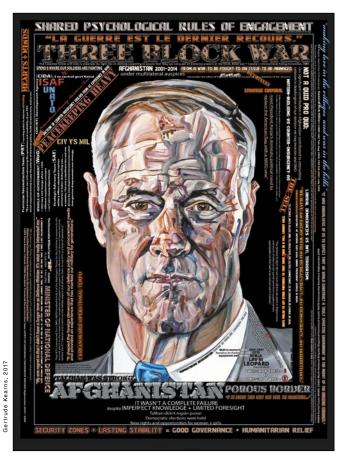
The portrait captures an insightfulness and cold calculation. The text mirrors this in a very theoretical, logic analysis of the situation. The portrait of Chris Alexander, the ambassador to Afghanistan during the beginning of the war, echoes the more sterile characterization of the struggle. Entitled "Diplomacy Politics in War," it mirrored the theoretical, costbenefit analysis of the Canadian experience. Significantly, it captured the essence of the civilian position, "We took our role seriously as civilian overseers of a military campaign."

"The aforementioned portraits, text and analysis is just a snapshot of the richness of *The Art of Command* project."

The aforementioned portraits, text and analysis is just a snapshot of the richness of *The Art of Command* project. The multi-layered approach to the portraits conveys, not only a graphic representation of a number of key military commanders and civilian decision-makers who were instrumental in the prosecution of the war in Afghanistan, but it also bestows insight into the psychology of command, if not the burden that accompanies those who must manage violence and direct a nation's efforts in time of conflict. In sum, the project

makes a valuable contribution to Canadian military history and the study of command and leadership.





Three Block War - [The Honourable Bill Graham].



Diplomacy Politics in War – [Ambassador Chris Alexander].

NOTES

- Heather Robertson, *A Terrible Beauty. The Art of Canada at War* (Toronto: James Lorimer & Company, 1977), p.15.
- Kearns actually wanted to call her art project the "Weight/Psychology of Command" as opposed to the pun, "The Art of Command," but the city of Toronto, which sponsored the first large
- complete showing of the collection, insisted upon the current title. All quotes by Gertrude Kearns are a result of an interview with the artist on 22 February 2018.



Sopwith Dolphins of No. 1 Squadron, CAF, at Shoreham-by-Sea, England, in 1919

The Influence of Empire: A National Organization and the Birth of the Royal Canadian Air Force, 1918 – 1924

by Richard Mayne

Richard Mayne, CD, Ph.D, a former Maritime Surface and Sub-Surface officer, Director of Royal Canadian Air Force History and Heritage, and defence analyst with the DND Chief of Force Development, is currently the Chief Historian of the Royal Canadian Air Force.

Introduction

s a result of its impressive First World War experience - where it not only contributed over 15,000 men to the Royal Flying Corps (RFC) and Royal Naval Air Service, but also produced some of the Empire's top aces - Canada set out to create its own distinctive air force. In many ways, the Canadian Air Force (or CAF), which existed between 18 February 1920 and 1 April 1924, was the product of frustration, as its veterans felt their efforts as Canadians during the First World War were often buried under an Imperial banner. As such, the CAF was truly a Canadian organization, complete with its own uniform as well as maple leaf emblazoned badges and symbols. And yet, this experiment failed because the Royal Canadian Air Force (or RCAF) that emerged in its wake was a faithful replica of the Royal Air Force (RAF). The key question, therefore, becomes why CAF officials, who were so emboldened by their wartime successes, suddenly abandoned their attempt to build a truly national organization?

While a number of general accounts have been written about this period, no one has yet fully probed the cultural and political factors, as well as the unique developments in Canadian air power thought that shaped the nature of the RCAF's birth. In fact, the idea that there was at least one Canadian strategic air power theorist or thinker, namely the Secretary of the Air Board, John Armistead Wilson, (who was looking at how air power could serve his country's unique national requirements), has not been explored to the extent that his impact upon the development of military aviation in Canada deserves. Instead, what is generally known is that a lack of political and public support – as well as an existing attitude that air defence was an Imperial rather than National responsibility – led to the subsequent failure of no less than five attempts between 1909 and 1924 to establish some type of a permanent Canadian military presence in the air. As such, this article will attempt to demonstrate that the RCAF survived because it adopted British identifiers in lean times, which gave this force a sense of professionalism and permanency. It will also argue that this move, along with John Wilson's development of what could be called Canadian 'airmindedness,' was part of a deliberate strategy to help the young air force counter a domestic situation whereby Canadians and some of their elected officials were not yet convinced of the need for a post-war national air force.



Members of No. 1 Squadron CAF at Shoreham, 1919.

Discussion

The development of a Canadian air identity during the First World War has been admirably explored in numerous sources elsewhere, and therefore, it does not need to be covered extensively here. Suffice it to say, Canadian airmen had done their country proud and that pride translated into a deep desire to maintain some type of national air presence despite the previous failed attempts to do so during the war. The Canadian federal government also had noted

that both military and civilian aviation were growing fields that would require some type regulation and governance. Their solution was the 1919 Air Board Act.¹

The military component of the Air Board did not get off to an auspicious start. More akin to an air militia of non-permanent members, this entity was characterized as an "air force in name but not fact," or, worse yet, as one modern commentator argued, it was effectively a "travesty of a force." This latter observation contains much hyperbole, but there is the fact that some observers from the time did feel that these were the "bow and arrow days..." of what eventually would become the RCAF. Indeed, there were

"The CAF had other problems as well. A lack of discipline was another key issue that it was believed the creation of a fulltime air force could fix."

many complaints. The fact that the civilian operations branch of the Air Board were paid more than the CAF was one source of friction, as some asked: "...why enlist in the CAF when the civil Operations Branch pays more. There are excellent mechanics who would be very willing to serve if they got permanent employment... [rather] than a large number of [part time] men who are hard up, and come up simply for a job and to have a holiday." This reality led to a situation whereby the CAF did not get the 'best and brightest,' or had men enlist simply to get specialized training, only

to seek full-time employment elsewhere. As one senior officer commented during a 1921 CAF conference: "The main trouble in getting the right kind of men here is that there is nothing to attract them... until we make it worthwhile for a man to come here, we never will get better. ... In the meantime we have got to trust our lives to these men." ⁵ The conclusion that was drawn from this sombre reality was that the CAF had to become a permanent force if it were to survive. ⁶

The CAF had other problems as well. A lack of discipline was another key issue that it was believed the creation of a full-time air force could fix. This was indeed a serious problem, as it



Another period shot of No. 1 and No. 2 Squadron Dolphins at Upper Heyford, 1919.



Major Andy McKeever, Commanding Officer, No. 1 Squadron, CAF, with one of the unit's captured Fokker D.VII aircraft of the German Air Force at Upper Heyford, 1919.



The CAF was clearly in trouble and matters were only getting worse. Training, which generally consisted of a refresher course that reminded pilots

William Avery 'Billy' Bishop, VC, in the cockpit of his Nieuport 17 scout. Late in the war, he was promoted to lieutenant-colonel and named Officer Commanding-Designate of the Canadian Air Force Section of the General Staff, Headquarters Overseas Military Forces of Canada. The plan was to send a two-squadron fighting force to France as an indigenous Canadian Air Force, but the Armistice intervened before it came to pass.

found that "...the present regulations lead to very lax discipline. It leads to a policy which seems to be eat, drink and be merry, for tomorrow we are fired. The regulations are very bad for discipline... They know they are here for a short while and dont [sic] care."7, 8

A lack of a consistent uniform policy was an additional issue that impacted the CAF's sense of cohesion. While the force had a unique dark blue serge uniform patterned upon an Army cut with buttons and badges of silver, it was not the only one that was used, as one CAF veteran recalled: "...for many months after the CAF started we were permitted to wear any kind of uniform, army, navy or RAF or any combination thereof, during working hours, but for dinner we were supposed to dress CAF blues, with wing collar. At the Officers Mess we could wear almost anything..." 9 The original blue serge uniform was intended to "...enhance the identity of the service,"10 but a lack of a practical uniform policy did not give CAF members the sense that they were truly a part of a military force. So much so, in fact, that R.A. Logan, who was a member of the CAF, argued that the RAF "at least... [have] a workable uniform." 11

The use of rank titles in the CAF was equally inconsistent, as it was not uncommon for members to revert to the titles they held in the RFC instead of the Air Force ones that regulations directed they use. 12 There was more... The fact that the CAF was filled with veterans was problematic because there was no growth potential. These ex-RFC flyers were only getting older, and there was no new generation to replace them. Recommendations to



27-victory ace Clifford 'Black Mike' McEwen in full dress splendour after the war. As an Air-Vice Marshal, he would go on to be the very distinguished Air Officer Commanding of No. 6 (RCAF) Group, Bomber Command, during the Second World War, leading fearlessly from the front, and later, a Director of Trans-Canada Air Lines, the predecessor of Air Canada.

extend the age limit of pilots were only delaying the inevitable, as the entire CAF was aging out.13 The CAF's equipment was also getting old. Thanks to a gift to all the Dominions from the RAF, the CAF had close to one hundred air-

craft in its arsenal, but these were war vintage machines.14



Air Marshal Viscount Trenchard (right) with Queen Mary.

of their war experience, was disorganized and actually ceased altogether during the spring of 1922. More than one officer "eventually quit in disgust" over these developments, and for the Inspector-General of the CAF, Air Vice-Marshal Sir Willoughby Gwatkin, the time of reckoning had come. ¹⁵ His solution was obvious, and yet brilliant. The only way any air force would survive in Canada during lean times was to make it a permanent and professional entity. That was the obvious part of his plan; its brilliance was to adopt the symbols

of the RAF, as it would be difficult for any future government to simply cast aside a permanent force that was linked to the British Empire. ¹⁶

The CAF's quest to develop closer ties to the British air service began in February 1921 when Gwatkin observed that his tiny force should adopt the RAF's new ensign, the more so since it was realized that such a symbol would be a source of pride. Even here, however, Canadian nationalism shone through, as it was suggested that a maple leaf could appear in place of the red dot on the ensign's roundel. While the British were excited to share their ensign "...to retain the sentiment of unity between the Air Services of the Empire," alterations were not welcome, and therefore, this idea was rejected. Yet, the larger concept had the desired effect, as the man responsible for the RAF, Sir Hugh Trenchard, wrote how the CAF now had a symbol that represented:

"William Lyon
Mackenzie King's
government did as it
promised, as the
military was slashed
and re-organized."

"...the good work that Canadian Pilots and Observers carried out under me in France, and I am very glad to think that they and their successors use the Royal Air Force ensign..." It was a good idea, and Gwatkin knew it as he instructed that the ensign raising ceremony be "...as pompous as possible." ¹⁷

Efforts to scrap the uniquely CAF motto of Sic Itur Ad Astra [This is how you get to the stars – Ed.] with the RAF's Per Ardua ad Astra [Through adversity to the stars – Ed.], as

well as the adoption of the British drill and ceremonial manuals and eventually their uniform, were designed to deliver the same effect of creating a sense of professionalism and permanency in the CAF.¹⁸ Put another way, the RAF had become a measuring stick for professionalism, and adopting RAF ways was seen as the CAF's road to achieve this aim. But the most significant step was described at a gathering of senior CAF officers in June 1921, where it was proposed that the "...King be approached to use [the] name Royal Canadian Air Force and that Prince Albert be appointed an Honorary [sic] Colonel." This was the true brilliance of their plan, as adopting the "Royal" prefix and creating direct links to the Empire's leading family would not only make it difficult for any cash-strapped government to simply cast aside the air force, but also, that it had to be robust enough not to prove an embarrassment to the monarchy.¹⁹

It was a good call, since the combination of a war-weary nation and the election of a new government with its calls for financial austerity made all those in the military nervous. The Air Force was right to be afraid, as one politician openly observed that the money being spent on the CAF was "...a pretty high price to pay for an air service in peace time," which was matched by a general view that the "...high cost of a military [aviation] force would cause it to be so small in peacetime as to be negligible in war." Nor were these views emanating from junior political figures, as the Minister of Reconstruction was heard to remark: "Canada would never need an air service."

William Lyon Mackenzie King's government did as it promised, as the military was slashed and re-organized. Not all the news was bad, however, as the creation of a single Department of National Defence to handle the Militia, Navy, and Air Force not only produced economies of its own, but also gave the Air Force the chance to embark upon a campaign to see it recognized as an *equal*, and, more importantly, an *independent* service.

But the CAF clearly had its work cut out for it as it faced a resistant Army and Navy that saw early Canadian air power as an extension of their respective organizations. ²² In fact, the Chief of the General Staff, Major General J.H. MacBrien, left no doubt where he stood on this issue as he argued that the Canadian defence establishment "...will not be large enough to warrant a separate Branch of the Service such as the Royal Air Force, and our Flying Corps should be part of the Army with attachments to the Navy as required." Many disagreed, but no one made a case for a strong, national and independent Canadian Air Force better than J.A. Wilson.

Having joined the public service in July 1910 as the Assistant Director of Stores with the Canadian Naval Service, Wilson eventually rose to the position of Assistant Deputy Minister within the navy, before assuming the duties of Secretary of the Air Board.²⁴ Once assigned to this position, however, he never looked back, as he not only played a key role in the drafting of the Air Board Act, but also, as he so eloquently put it: "I got mixed up in this [aviation] work and have devoted all my time to it ever since."25 Wilson was indeed committed to the cause of bringing a sound aviation policy to Canada, so much so that he should be considered one of the nation's first great air-minded thinkers. In fact, historian Hugh Halliday has gone so far as to call Wilson, "the father of Canadian civilian aviation."26 Halliday is entirely correct, but in a larger sense, Wilson should also be considered a 'saviour' of the modern RCAF, since his intellectual rigor, devotion, and networking were pivotal in the early efforts to make this force a relevant and permanent body when a generally-disinterested public and a cost-conscious government put its very survival in question.

Wilson never committed his thoughts on Canadian air power to one grand narrative or to a body of easily-recognized published works, but he was a zealous advocate who preserved the vast majority of his written presentations and extensive personal correspondence. As such, a true appreciation of his contribution to the development of early Canadian air power will only be understood fully through a book- length manuscript on his largely-underappreciated efforts. However, some 'broad brush' conclusions with respect to his *impact* can be drawn here.



Prime Minister William Lyon Mackenzie King in 1941.

While an analysis of Wilson's personal papers identify that he had a number of edicts, his teachings on the need for a permanent and national air force can be divided into two main *principles* and one constant *constraint*. The constraint was the product of still being a child of an Imperial 'mother,' whereby Canadians knew that Britain would come to their aid if they were ever directly attacked. As such, most Canadians (and by extension, the government) saw little need to spend large sums on a standing national air force during times of peace. Wilson understood the calls from returning veterans for a truly Canadian (versus Imperial) service. However, he was also pragmatic, and realized that it was up to air-minded individuals such as himself to convince his countrymen of this need. This was where both his top two edicts and networking were essential to the creation of a national and permeant air force in Canada.

Wilson's first and primary principle was simple. He lived in a large country with a small population base, and as a result:

...[he had come] to see more and more that the real strength of Canada in the Air depends on the commercial development more than on any other factor and that without it we cannot really expect to have a sound foundation for aviation in the country. The Government's work in aviation must have something back of it and cannot stand alone. ... there always will be such work in connection with surveys and work in the far north which we can do to advantage so that we may have some really useful and practical work to employ our men on instead of keeping them merely as a military force eating their heads off in time of Peace. ²⁷



An RCAF Vickers Varuna 1 floatplane in the Canadian north, 1926.

Put another way, in order to survive in a country like Canada, the key to making a permanent military air force relevant was to tie it to the nation's civilian requirements. To support this vision, Wilson advocated the development of a healthy aircraft industry, the fostering of nation-wide flying clubs that could both promote flying in Canada and serve as a 'pseudo' reserve for the Air Force, as well as promoting a requirement for the air force to perform civilian functions - such as forestfire and maritime air patrols, photographic work over largely unexplored parts of Canada, northern deployments, as well as other peaceful domestic functions - that would make the RCAF particularly relevant. 28 Due to this type of work, RCAF personnel of the inter-

war period were infamously known as 'bush pilots in uniform.' It was an accurate *characterization*, but more importantly, it was a purposeful *tactic*, within which Wilson played a large part that was designed to ensure the survival of the RCAF.

Wilson's second edict was also crucial, wherein he argued that due to the nature of air power, the RCAF would *continually* (and *forcefully*) have to fight to maintain its independence from the Army and Navy. For Wilson, this was also a question of survival, as he was convinced that the Air Force had to have an equal and

"In the end, however, there is a strange and unfortunate irony in the fact that the very survival of the RCAF was the product of a deliberate choice to abandon the symbols that would have defined it as uniquely Canadian."

independent voice, since: "Air problems are so different from those of either the military or naval forces." Wilson's warnings were well-founded, as the RCAF has faced numerous occasions – including one as recent as 2004 – where control of its assets were almost usurped by the Army and Navy. 30

Conclusion

In the end, however, there is a strange and unfortunate irony in the fact that the very survival of the RCAF was the product of a deliberate choice to abandon the symbols that would have defined it as uniquely Canadian, for Imperial symbols that made it "...a sort of step-child of the RAF." 31 As John Wilson had

prescribed, out of necessity, it also had become something of a contradiction wherein it was a *military* force that conducted *civilian* tasks. This was, naturally, to ensure its relevance to a peace time government, and this tactic – backed by Wilson's networking and air-minded thinking – worked, as the RCAF did achieve a sense of professionalism and permanency, which partially explains why it continues to exist to this day.



NOTES

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- 3 Logan to Hitchins, 18 October 1959, DHH, Logan Papers, 75/117, file 26.
- 4 Colonel Joy, Proceedings of CAFA Convention, 22 June 1921, DHH, 181.003 (D2716).
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- 16 Proceedings of CAFA Convention, 22 June 1921, DHH, 181.003 (D2716).
- 17 See various correspondence on files LAC, RG 25, G-1, Vol. 1300, file 1061; and LAC, RG 24 Vol. 5221, file 19-7-26.



John Armistead Wilson (centre) accepts the prestigious Trans-Canada (McKee) Trophy in Ottawa in 1944.

- The adoption of the RAF's motto would achieve the same effect - although it is interesting to note that recently-unearthed documents clearly show that Canada did not officially apply to use "Per Ardua ad Astra" until the summer of 1928. See Minute notes, 18 August 1928, British National Archives (hereafter cited as NA), AIR 2, 337/857405/28; Slater to Secretary, 28 August 1928, NA, AIR 2, 337/857405/28; OD Skelton (for Secretary of State for External Affairs), 18 June 1928, NA, AIR 2, 337/857405/28; Amery to Secretary of State Canada, 27 September 1928, NA, AIR 2, 337/857405/28; O.D. Skelton to Secretary of State for Dominion Affairs. 12 October 1928, NA, AIR 2, 337/857405/28. Minute note, 2 February 1923, NA, AIR 2 236/407693/23; Letter to E Marsh, 12 February
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 19 Proceedings of CAFA Convention, 22 June 1921, DHH, 181.003 (D2716). Gwatkin was not convinced and he instead used this occasion to shore up fissures within the CAF by observing that: "The King would grant the privilege if only having regard to what Canadians did in the RAF during the war. We do not like the King to be mentioned with a thing that is not going to be a success... Unless we are certain, unless we are quite satisfied the CAF is going to go on, we do not like to ask members of the Royal Family to accept posts, when some threatens resignation. It fills one with sinister forebodings."
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- 21 J.A. Wilson, The Influence of Civil Aviation in the Development of Canadian Air Power, DHH, Wilson Papers, 76/271, Box 2, file 15.
- Logan to Hitchins, 6 August 1955, DHH, Logan Papers, 75/117, file 26; Desmond Morton, "A Non-Operational Air Force: The RCAF, 1924-1931," in Bill March, (ed.), Combat if Necessary, but not Necessarily Combat, (Government of Canada, 2011), p. 2; Hitchins, Air Board, CAF and RCAF, 1919-1939, vol.1, p. 11. Gwatkin had worked hard to get the CAF recognized as an independent and equal service and the fact that the

- CAF was represented on what would become the Defence Council in 1920 was certainly evidence of his efforts. Yet, by the time of the reorganization both the RCN and militia still saw air power as something that existed merely to serve and support their needs over land and sea.
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J.A. Wilson/ Library and Archives Canada/PA-139754



Soldiers from 2nd Battalion, The Royal Canadian Regiment, India Company, support provincial government and municipal authorities in relief efforts during Operation LENTUS, Maugerville, New Brunswick, 22 April 2019.

Domestic Military Disaster Mitigation: A New Approach

by Donald Saul

Introduction

review of traditional and present Canadian disaster and emergency management (DEM) reveals a growing trend in the employment of military assets to address gaps in municipal and provincial capability. Applying Systemic Foresight Methodology,1 this article specifically examines the trajectory of this trend, including potential policy implications, and terminates with recommendations for future military and public safety applications. Disaster costs in Canada are on the rise. According to the Parliamentary Budget Officer, Canadians are experiencing a "substantial increase" in disaster assistance costs which can be attributed to the increasing severity and frequency of weather events, as well as a lack of appropriate mitigation measures. What is not well examined is the extent to which Canadians are increasingly relying upon the Canadian Armed Forces (CAF) to support other government departments and agencies in disaster response. Contemporary disaster literature underscores the benefits of transitioning management efforts from response and recovery to mitigation and preparedness.

However, the CAF have traditionally been relegated to response efforts. To address growing disaster costs, it may be prudent for Canada to consider policy surrounding the use of the CAF for select disaster mitigation projects.

Discussion

r. Ozcan Saritas is a professor of innovation and strategy at the National Research University in Moscow. With prior experience working with the United Nations Industrial Development Organization and various Russian governmental departments and corporations, he is a proponent for economic, technological, and social foresight.³ Systemic Foresight Methodology represents a conceptual framework to internalize the complexity of an issue by understanding that any inject into the system can fundamentally alter the nature of the system itself.⁴ To form a basis of understanding, this article examines four out of seven of Saritas's phases for Foresight activity: Intelligence, Imagination, Integration, and Interpretation.⁵ The phases known as Intervention, Impact, and Interaction⁶ are not examined, as subsequent recommendations are not executed or



Canadian Armed Forces members from CFB Edmonton assist in dyke building and sand bagging during Operation LENTUS 18-03 in support of flood relief efforts in Grand Falls, British Columbia, 19 May 2018.

evaluated. A comprehensive approach to disaster risk reduction would see implementation of both structural and non-structural measures. In terms of non-structural measures, some maintain that prudent risk management involves proper land use regulations and appropriately priced insurance. Structural mitigation measures are efforts to prevent hazards from physically impacting humans and our 'built' environment. Structural mitigation alone may not be the solution for all Canadian communities. However, in terms of CAF involvement in disaster mitigation, the Canadian Military Engineers would be the likely branch within the service to undertake structural projects.

A review of existing literature suggests that a fundamental transition in the employment of the armed forces in Canada requires an understanding of external socioeconomic, technological, political, ecological, and ethical drivers. To sustain impartiality, the Government of Canada presently restricts the employment of defence resources which could support "activities for the benefit of a non-defence agency." Accordingly, any provision of military services to the Canadian public outside of mandated defence requirements must not come into competition with private industry, and must not create a dependency upon the military for which private industry ought to establish their own capacity. The latter stipulation makes sense in concept; however, the same can be said of military involvement in disaster *response*. From a sociopolitical standpoint, increasing military involvement in response has precipitated into greater expectations of military involvement

post-disaster.¹¹ Interestingly, there is a similar socioeconomic trend in post-disaster assistance spending in Canada. As levels of government continue to breach limits on financial assistance provisions, Canadians are not discouraged from developing and living in hazard prone areas, and thus, an obtuse dependency upon government assistance persists¹²

What will this emerging trend mean for public safety and defence policy in the next five- to-ten years? It is further suggested that reliance upon the armed forces creates "perverse effects" in that the government is no longer vigilant at addressing hazards and vulnerabilities, pre-disaster. Recent disasters reveal that some Canadians want the military to become engaged earlier in the management cycle. Similarly, disaster researchers suggest that the government does not do enough to involve the CAF in disaster response, from which we can infer that there should be greater civil-military interaction before disasters in Canada. Further, many residents impacted by recent flooding in Quebec and Ontario felt that the commitment of the armed forces arrived too late. From an economic standpoint, increased reliance on the CAF for response would logically drive internal processes, such as defence spending.

In terms of costs, according to the Department of National Defence, planned expenditures for military domestic and continental assistance were assessed to be \$7.12 million for the 2016-17 fiscal year, ¹⁶ and by the 2018-19 fiscal year, this cost is



Members of 12° Régiment blindé du Canada assist residents with flood relief efforts by helping them evacuate their homes in Rigaud, Quebec, on 7 May 2017 during Operation LENTUS.

expected to increase by \$2.41 million¹⁷. Following this trajectory, programmed military funding for domestic operations could rise to over \$15 million by 2027-28. This trend is supported by Canada's most recent defence policy, which states that the armed forces will "bolster its ability to respond to increasingly severe natural disasters." Given the passive position that North Americans have towards disaster risk management, and the fact that voters more generally support spending for recovery over mitigation and preparedness, thould not be seen as absurd that a military workforce be put to the task of disaster mitigation. Unfortunately, the benefits of such military structural mitigation are often underrated.

According to Systemic Foresight Methodology, all perspectives should be taken into consideration when defining viable alternatives. ²² There may be several advantages to employing the CAF for disaster risk reduction purposes. The Global Facility for Disaster Risk Reduction suggests that avoided losses are the first primary objective of risk management investments. ²³

Comparing disaster losses to mitigation spending over several election cycles, empirical research finds that mitigation spending can significantly reduce direct disaster losses.²⁴ Possible mitigation projects, such as breakwaters, shoreline protection, dredging (to improve maritime safety), and contamination remediation have traditionally been undertaken by the U.S. Army Corps of Engineers.²⁵ Such structural mitigation measures implemented south of the border since the 1930s have averted flood damage costs totalling an estimated \$710 billion.²⁶ While direct losses may be averted through military mitigation projects, there are potential weaknesses to employing the CAF pre-disaster. For example, estimates of prevented direct losses appear deceptively



Ice storm warrior, 1998



A member of 2nd Battalion, The Royal Canadian Regiment, delivers water to a local resident during Operation LENTUS in Lincoln, New Brunswick, on 23 April 2019.

favourable by taking into account increased development in hazard prone areas protected by structural measures.²⁷ Such favourable estimates assume that these structures will never fail. From an environmental and ecological perspective, severe weather events are on the rise. Acceleration of the hydrological cycle as a result of global warming is leading to increased severity and frequency of natural disasters.²⁸ As such, estimates of extreme events which form the basis of technical civil engineering design are becoming increasingly ineffective.²⁹ In reality, perceived prevented losses may actually be negated because the risk is inherently increased by occupying high risk areas which are thought to be protected.³⁰ This further underscores the importance of pursuing non-structural measures in conjunction with structural mitigation measures.

Military disaster risk management initiatives have the potential to increase economic development as a second primary objective, as well as other co-benefits as secondary objectives in general.³¹ In a post-disaster context, the deployment of military personnel can have a positive morale benefit for citizens affected by disaster.³² By committing to mitigation projects in vulnerable Canadian communities *pre-disaster*, it may be possible to influence a positive perception of the armed forces. Further, Canadian military demographics are not generally representative of Canadian society, especially pertaining to visible minorities.³³ By reaching out to geographically and demographically isolated enclaves, mitigation projects have the potential to foster bridging social capital³⁴ between these groups and the CAF.

Although military involvement in disaster management has the potential to develop the economy through construction contracts to private industry,35 there are several potential threats. Successful military interventions, such as the 1998 Ice Storm response, may alter public perception of the military from warfighting to disaster response, thus impacting the posterity of the armed forces through reducing combat readiness and capabilities.³⁶ Further, in the United States, there is a growing concern that military leaders may attempt to supplant paid DEM civilian positions.³⁷ Similarly, militarization creates perceptions that an armed force will be in a position to "exploit [the] country's citizenry." Referring to the Posse Comitatus Act, which prevents the U.S. military from enforcing laws in a civil context, there are numerous threats posed by domestic military disaster response, including potential or perceived coercion at voting sites, gratuities to soldiers as responders, and formal jurisdictional disputes.³⁹ In a Canadian context, some posit that one of the most important aspects of military involvement in disaster management is that military forces are not put in a position of "direct confrontation with the citizens of Canada." 40 While these examples are contained to a post-disaster context, it could very well become the case for attempted mitigation and preparedness efforts.

Recommendations

paradigm shift from employing the military in disaster response to risk reduction would counteract rising disaster costs in Canada. This transition may be feasible through extant regulations, new orders-in-council, or both. Firstly, to maintain impartiality, which is an important internal motivator, the Minister of National Defence should retain existing limitations on the provision of services to the Canadian public. Specifically, these regulations state that a service may be provided so long as it is consistent with government policy, is seen as a benefit to a community (as opposed to individuals), and "promotes... community development." As such, a new policy or an order-in-council will not necessarily confound existing military regulations.

Secondly, defence management directives and routines drive internal context. Canada's current national defence policy, *Strong, Secure, Engaged*, ⁴² should either expand the core mission for international capacity building to encompass domestic capacity building, or expand the core mission for domestic disaster response to encompass disaster management holistically and thus mitigation and preparedness. In the U.S., the American Recovery and

Reinvestment Act of 2009 appropriated considerable spending to the Department of Defense and the U.S. Army Corps of Engineers for civil construction projects aimed at reducing vulnerability to disasters. Given that the administration of public safety in Canada is often difficult to navigate due to its asymmetry, the Department of National Defence and the CAF should *not* be considered to lead or implement a new program. Rather, Public Safety Canada should continue to implement the National Disaster Mitigation Strategy with the support of the CAF. Cost-sharing for federal-provincial and federal-territorial mitigation investments would conceivably remain the same for project materials. However, the Canadian Military Engineers would provide labour and expertise necessary to complete select disaster mitigation projects where private industry cannot reasonably be expected to develop a capacity.

Conclusion

Federal financial assistance stemming from weather events in Canada is expected to rise to \$902 million annually. 46 While the CAF presently has a mandate to respond to disasters in Canada, DEM literature and defence budgetary planning suggest that this mandate is going to increase with time. Just as some Canadians come to expect financial assistance, there



Members of 408 Tactical Helicopter Squadron, Edmonton, fly a CH-146 *Griffon* in support of the Province of Alberta's wildfire emergency response efforts in the Fort McMurray area, 5 May 2016.

are increased expectations that the military will reinforce its capacity to respond to domestic incidents. Applying Saritas's Systemic Foresight Methodology, this article specifically examined prudent external and internal drivers associated with this trend. What is needed is a paradigm shift to prioritize mitigation and preparedness over response and recovery. To address increasing disaster costs, Canada should consider a fundamental transition in the employment of the CAF. Just as the U.S. Army Corps of Engineers contributes to disaster risk reduction, the CAF should be authorized to work in conjunction with Public Safety Canada to execute specific hazard mitigation projects.

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Telework in the Reserves: An Idea Whose Time is About to Come

by Dan A. Doran

Introduction

he Canadian Armed Forces (CAF) has pushed over the past decade to further professionalize the Reserve Force. This objective has manifested itself through adjustments within the training system to achieve training parity with the Regular Force, as well as to give the Reserve Force more opportunities to serve overseas and in domestic operations, to name but two examples.

The challenge for members within this new Reserve Force paradigm is military workload versus available time. Reservists typically parade one evening a week and one weekend a month, and it is theoretically within this timeframe that they are 'officially' supposed to accomplish their tasks - with exceptions made for senior members who are permitted to attend duties more often, if required to do so.

This is not the reality... Senior reservists must commit hours of work from home to accomplish the tasks assigned to them. These tasks mainly take the form of staff work and administration, which cannot always be achieved exclusively within the armoury. This situation leads to Reservists either doing work for which they are not remunerated, or alternatively, Commanding Officers paying their members for work done at home. The latter practice, while seemingly fair and equitable to the member, does not align with any current CAF policy on payment for work.

It is the aim of this article to discuss this policy gap within the CAF Reserves as well as present real-time solutions that have been tested and implemented by the 34th Canadian Brigade Group to realign *policy* with *practice* in the context of telework remuneration to its members. Further, this article intends to underscore the fact that the increasingly complex nature of the work required of Reservists makes the old industrial-era 'pay sheet' ways obsolete, and makes flexible remuneration essential for the Reserves (and hence the CAF)



to be able to remain adaptable and relevant, not just as an employer, but also as a public institution of last resort charged with the defence of the nation.

Background

The 'elephant in the room' with respect to the work done by CAF Reservists outside the confines of their respective armouries and headquarters is the question of monetary compensation policies relating to telework. Before going further, it is worthwhile briefly discussing the concept of telework, and how it is used in various industries.

The concept of telework was first developed by the American physicist Jack Nilles, touted as father of telecommunications and telework. In the 1970s, he defined telework as follows:

"...the partial or total substitution of information technology - telecommunications and, often, computers - for work related travel; it involves sending the work to the worker rather than sending the worker to the work." The term *telework* is very broad and has a number of sub-sets such as telecommuting and telelearning (i.e. distance learning). At its core, the main impact of telework is "location independence - teleworkers can work anywhere when they are teleworking. The relative geographic locations of teleworker and employer are largely a matter of indifference."

The CAF has employed the distance learning model extensively through its numerous schools, most notably, its staff colleges. Courses such as the Army Operations Course (Canadian Army Command and Staff College) and the distance-learning version of the Joint Command Staff Program (Canadian Forces College) include substantial distance learning components that members complete prior to attending their training in residence.³ Reservists who complete these distance components are remunerated for this work accomplished principally at home. The amount remunerated is determined by the school, and published in the course joining instructions. The current challenge is that this model has not been expanded to apply to telecommuting within the CAF, and more specifically, within the Reserves.

Innumerable studies have examined the advantages of telework, as well as the specific work types where it would be most appropriate. Some of the advantages of telework include an improved work life balance for workers, in addition to a reduction in cost to employees and employers. Workers who are able to conduct some of their work from home have been shown to exhibit greater happiness as a result of the greater flexibility in how they get work done - shifting from a presence-based paradigm to one that is mainly output-based. This approach has been directly correlated with greater retention among employers who allow telework within their organizations.4 From a cost point of view, teleworkers consume fewer resources – this relates mainly to the elimination of commuting costs.⁵ For employers that have developed this concept within their companies, they too have enjoyed cost savings through a smaller office footprint due to employees using shared workspaces when at the office.6

These advantages have a direct correlation to the Reserves – telework presents 'low hanging fruit' to policy leaders who continue to experiment with solutions to low retention; experimentation that has yet to result in any visible improvement in the troop lines. Further, this work mode presents potential relief from the seemingly ever-present desire to reduce capital costs such as expensive Reserve armoury infrastructure that lies empty most of the time due to the part-time nature of Reserve service. The option of telework presents a simple means of encouraging retention through greater work flexibility for leaders, and greater potential for higher work satisfaction and empowerment by members unable to be fully effective in their positions due to an outdated paradigm of location-based work.

When Reservists attain a senior rank and position, it becomes impossible for them to complete all their assigned work during the evenings and weekends allocated for normal regimental activity. This creates a situation whereby the member has to work from home on certain projects and tasks. Further, those members with full-time civilian employment must make time during breaks and lunch hours to address more urgent issues, typically by means of communicating with full-time and part-time regimental and brigade staff over the telephone, or through e-mails.

Since telework happens by necessity outside any policy framework, there is little consistency in how members are compensated. Each Reserve unit manages these realities differently either through informal measures, or through local policies within the unit's Standing Orders. This approach presents risks to the CAF, as well

as to inconsistency in salary policy applied to its members – both of which are bad for the institution, and its members.

The above section provided a broad description of the current situation relating to compensation for telework within the CAF Reserves. The following sections explore the risks and impacts of this current situation.

Analysis

In researching the subject of telework in the context of the Reserves, the first step is to determine how the CAF define duty in the context of reserve service. Section 9.04 of the Queen's Regulations and Orders defines duty as any activity that is "...military in nature and includes any duty involving public service authorized under section 273.6 [of the National Defence Act]." The reference in the definition refers to the section in the National Defence Act (R.S.C., 1985, c. N-5), which defines public service in the context of aid to civil power, and refers to authorities, including the Governor in Council, the Minister of Public Safety and Preparedness, and the Minister of National Defence. However, the NDA explicitly excludes the need for these levels of authority for military duty that is defined as being "... of a minor nature and limited to logistical, technical or administrative support." Through this exclusion, it appears that duty is not constrained to any specific location (i.e. an armoury), but more so by the nature of the work done during that defined period.



53

The next step is to explore under what conditions reservists must work to merit compensation. Section 204.51 of the Compensation and Benefits Instructions: Pay Policy for Officers and Non-Commissioned Members describes the rates of pay for reservists, based upon rank and incentive scales within each rank. It further describes the duration of work required to qualify for either a half-day's pay or a full-day's pay. Nowhere in this section is there reference to a condition of remuneration related to work at a specific or pre-designated location. Further, a note at the end of the section stipulates that "... in the determination of rates of pay, [compensation] may be accumulated within a period extending beyond a calendar day." What this implies is that a reservist can work for short periods and sum these periods to claim a unit of compensation, even if these work periods extended beyond a single calendar day. This note could be interpreted as permission for reservists to engage in shorter work periods (potentially including telework) over the course of several days, and in return, be compensated according to the sum of work over that period.

This research represents the sum of all discovered policies that exist with respect to reserve pay and compensation in the context of conditions of service and payment. Through this research, it became clear that there is very little in the way of existing policy to stand in the way of implementing a coherent policy and procedure for telework compensation. This conclusion, however, does not take into consideration the inherent risks involved in paying members for work done at locations other than on government property and potentially done outside the expressed authority of the officer in charge of the member's organization.

This is significant in that it relates to the risks and impacts of injury incurred in non-DND approved activity carried out while on duty. If members are teleworking, what happens if they are injured while doing said work? What policy formally authorizes this work and under what formal procedure? Were the activities executed legal and in line with overarching National regulations? What is a member injured at home while teleworking entitled to in the form of compensation from the military, if anything? What is the responsibility of DND if the member on duty engages in criminal activity during telework?

These are very tricky questions, but in the context of this analysis, not devastating. The reality of telework in the context of the reserves is that it is almost entirely administrative, involving answering e-mails, drafting orders, memos, and the like. Clearly, the risks to health and safety associated with this type of work are negligible, but there is currently no clarity on what type of work would be considered acceptable or unacceptable, and this 'keeps the door open' ever so slightly to damaging impacts as a result of what on the surface appears to be a trivial risk.

As far as the risk of criminal activity being undertaken, this is a non-issue in that such transgressions would be dealt with by the military justice system once caught in the same manner as if the member was present at a base or armoury.



RP004-2016-0023-175 by Corporal Guillaume Gagnon



These present risks can be further mitigated through a clear policy that includes strict procedures and rules as to *who can do work* and *what types of work* are deemed acceptable, based upon a combination of institutional needs and objective risks associated with said work.

Lastly, it should be noted that implementation of a formal policy with respect to telework will facilitate Reserve Brigades in planning their manpower budgets on a more predictable and activity-based structure in the context of telework. Presently, telework is not explicitly represented as a distinct activity in the context of a Reserve unit's budget. Telework costs are couched in generic administrative budgets, or alternatively, in budgets allocated for primary training activities. While providing a functional solution, this approach fails to effectively track budget expenditures for this type of work, which in turn, hampers transparency in its reporting. Formalizing telework would allow units to plan and allocate fixed budgets according to a standardized, task/responsibility-based attribution making telework activity predictable to plan and transparent to report.

An exhaustive examination of the policies currently in place that regulate salary and terms of service within the Reserve Force makes it evident that no existing policy expressly prohibits telework, nor confines the definition of Reserve duty to a specific location. Further, the present absence of a telework policy in the reserves brings with it an acceptance of certain easily-mitigated risks related to potential injury or activities not in line with the DND Code of Conduct and Ethics.

In addition, not having a clear policy with respect to this type of work ignores the reality of Reserve service, whereby large volumes of administrative and planning work are conducted not within the four walls of a militia armoury but in the homes and civilian workplaces of dedicated Reservists wanting nothing more than to support the aims and objectives of the organization.

Solving the Problem

The issue of resolving this policy gap for telework has been a topic of study within the 34th Canadian Brigade Group since 2015. Over the past three years, success has been made with respect to both the development and implementation of a policy that regulates and standardizes the payment of Reservists for work done at home.

The process began with a draft policy that outlined the parameters of telework – specifically, what work is *permitted* and what work is *prohibited*. Further, the policy proposal included procedures on control measures for remuneration with respect to maximum telework days allocated by position, in addition to justification required by members prior to work being approved and remunerated.

After several revisions and briefings to military legal, financial, and Command staff, a final policy was tentatively approved for pilot implementation in September 2017 at two units in the Brigade.

After a one-year implementation period, units then had the opportunity to present feedback on the policy, so as to ensure it was functional, and had achieved an effective balance between prescriptiveness to reduce risk and flexibility to allow unit Commanders sufficient latitude in achieving their objectives and supporting their staff.

The success of the pilot project has, in turn, led to Brigadewide implementation of the policy as of September 2018.

This policy initiative within 34th Canadian Brigade Group has dramatically changed how the Reserves formally recognizes work. Feedback from units has been positive, mainly because it brings telework 'out of the dark' and serves to underscore to the CAF the reality of Reservists' necessary approach to work – recognizing the value this work has, and how instrumental telework is to the effective functioning of the Reserves. That said, Brigade leadership remains focussed upon ensuring that this new process does not unnecessarily add any administrative burden to units in the form of additional salary related paperwork.

Further anecdotal feedback with respect to the policy thus far has shown it to have the positive impact that the earlier-cited studies described regarding workplace happiness and empowerment. Only time will tell if this single policy has any impacts upon retention, but previously cited studies suggest that such an outcome is very possible.

Conclusion

Transforming policies is always difficult, especially when the policy in question represents a fundamental shift from what had been considered an institutional norm for several generations. Telework itself received substantial pushback from numerous government agencies when it was initially applied.⁷ This opposition is centered around technological problems and management resistance. The former has become a progressively-fading barrier over the past decade as a result of the Internet and the scores of easily available multi-media platforms, such as Skype and WhatsApp. As for the latter, the 34th Canadian Brigade Group has the desire and capability to innovate within the realm of policy, and has been deliberately driven to explore new approaches to member remuneration.

Policy shifts such as this reflect the need for the CAF to become more adaptive to the expectations of Millennials now dominating the broader work environment. If the CAF wishes to do more than simply survive the changes being propelled by the new generation of soldiers, it must decouple itself from many of the 'Boomer' policies of the past and embrace not only telework, but additional workplace environment shifts to remain competitive and be able to recruit and retain the best Canada has to offer.

In short, the CAF needs to do more to align employment policies with those of industry – failing to adapt in this way will only lead to a progressive atrophy of the organization as a result of being unable to *attract* and *retain* the talent required to operate in a complicated globalized conflict environment that only stands to get more complex as time goes by.

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NOTES

- Jack Nilles, The Role of Telework in Internationalization – Trends and Opportunities, (Pólo Científico e Tecnológico da Madeira, JALA International, Inc., 1997), p. 2.
- 2 Ibid, p. 3.
- 3 https://www.cfc.forces.gc.ca/248-eng.html
- United States Office of Personnel Management, 2012 Status of Telework in the Federal Government Report to Congress, (Washington D.C, US Government Press, 2012), p. 49.
- Alvin Toffler, *The Third Wave*, (New York, Bantam Books, 1989), p. 209.
- 5 United States Office of Personnel Management..., pp. 59-60.
- 7 *Ibid*, p. 38.



Canada's 2017 Defence Policy: A Triple Boost for Canadian Defence Intelligence

by Hristijan Ivanovski

"...spying is as old as history itself, and...it has always been of crucial importance to military commanders and political leaders."

Rose Mary Sheldon, 20051

"The ability to collect, understand and disseminate relevant information and intelligence has become fundamental to the military's ability to succeed on operations. This provides earlier warning of threats, allowing the Government to identify emerging events and crises, intervene earlier in the conflict cycle if necessary, and minimize the destructive effects of prolonged conflict."

Canada's Defence team, 2017²

Introduction

ntelligence matters, no matter the era. A state which in peace or times of crisis tends to save taxpayers' money at the expense of its security and intelligence apparatus pays with unnecessary blood during both peacetime and wartime. Similarly, a sovereign government that fails to prevent small-scale and strategic threats to its national security as far away from its borders as possible, including as a result of the inefficiency and failure of its foreign intelligence

service(s), is not only incapable of shaping events in line with its vital national interests, such as providing for its population's safety and general welfare, but is moreover inviting, however unintentionally, conflict domestically.

These fundamental truths have long served as axiomatic premises for strategy making and implementation in the national security domain. Today, they remain as valid as ever, if not even more so. As such, they have always been thoroughly understood within the broader, Anglo-American, "Three-to-Five Eyes" defence and intelligence community, with Canadian defence strategists and decision-makers being no exception. What's more, Canada's 2017 Defence Policy Review (DPR)³ takes a step further in acknowledging and emphasizing the strategic relevance of the state's intelligence functions, Chapter 6 literally proclaims: "Intelligence is Canada's first line of defence."

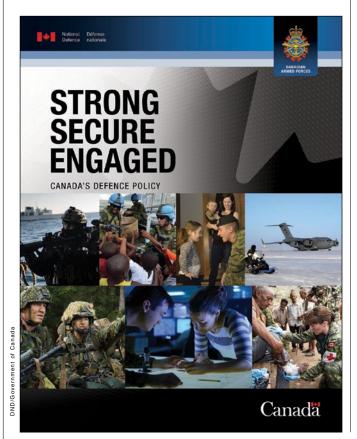
But, why now, and why in such a forthright fashion?⁵ Is it because Canada's defence, in all of its aspects—homeland security and disaster relief, overseas operations, and global engagement—has been so "...heavily dependent upon the systematic collection, coordination, fusion, production, and dissemination of defence intelligence?" Or, it is because "intelligence has become fundamental" to any military success? Certainly both, but still, there

is more to the story, since the 'whys' are always resting deeper than just existing at the surface.

Strategic Culture and Strategic Environment

n an implicit or purely declaratory level, most, if not all, countries deem intelligence as their 'first line of defence.' This is understandable given the popular metaphorical portrayal of the spying craft as a government's 'eyes and ears,' and occasionally even its 'sword' (i.e., sabotage, targeted assassinations including drone attacks), in distant foreign lands. However, what distinguishes Canada's new, trident phased approach to defence ("Anticipate. Adapt. Act."),7 is the formal and very much lucid prioritization of ISTAR (intelligence, surveillance, target acquisition, reconnaissance) capabilities over other crucial defence needs. For Ottawa, placing high priority upon "joint intelligence, surveillance, and reconnaissance" (JISR), as well as upon "enhancing defence intelligence" and "academic outreach,"8 is not simply a matter of continuity— a mere conceptual reflection of a time-honoured strategic culture of forward defence, that is of the prudent notion and understanding that the risks of conflict and war within the North-Atlantic core of the Western hemisphere should be minimized at all costs, including through forward deployment of any proper mix of military and intelligence assets.9 It is, rather, necessitated by the growing complexity and "sweeping changes in the character" of the global strategic and operational environment.¹⁰

In assessing these changes, Canada's 2017 DPR, while basically conforming to allied equivalents generated over the past two decades,¹¹ nonetheless renders a refreshed strategic picture, which is, moreover, nuanced from a Canadian perspective



(i.e., Arctic issues). ¹² According to this up-to-date scan of the global strategic landscape, there are three 'mega-trends' of particular concern to Canada and its closest allies: the shifting balance of power and influence, not just in regions of particular importance to Canada and its allies, but globally; ¹³ the changing nature of conflict ("grey zone[s]," hybrid warfare), ¹⁴ and the rapid advance of technology, especially in the space and cyber domains. ¹⁵ Taken together, these global tendencies are currently putting enormous pressure upon the Canadian and allied security and intelligence services.

In response, the Government of Canada and the Department of National Defence (DND) have recently undertaken to improve Canada's intelligence capabilities. In the DPR, this commitment is captured by a single word: "Anticipate." While there is nothing novel about using this term in a defence and security context, 17 its inherent connotation and semantic profoundness are seldom exploited with both practical (capabilities) and psychological (PR/cognitive retention) objectives in mind. Seen through such lenses, the DND's decision to use the term to designate the first phase of its new "AAA" approach to defence looks like a well-measured strategic move, despite giving away a couple of important aspects of its strategy:

Ottawa's enhanced awareness and preventive attitude towards the surge in national security challenges ("better safe than sorry," "better prevent than cure"); and, as a result, the imperative for the Canadian (defence) intelligence to "match the frantic pace of change." 18

Terminology aside, the DPR is quite elaborate in defining Phase I and the concept of strategic anticipation for Canada. To "Anticipate" means to remain mindful of the strategic utility of "Accurate, [and] timely information," "to better *understand* potential threats to Canada [uppercase by author]," and based upon "better situational awareness" and "earlier warning" capabilities not just to make Canadian Armed Forces (CAF) personnel "more secure" and effective when deployed, but "...to enhance our [overall] ability to identify, prevent or prepare for, and respond to a wide range of contingencies." While success in this anticipatory phase is inevitably contingent upon collaboration with federal departments and entities beyond the defence portfolio, 21 nothing can be done without an adequate set of military tools and strategic initiatives.

Bolstering Defence Intelligence via Three 'Meta-Measures'

To provide for this, the DPR outlines three general, overarching measures (already mentioned earlier), each representing a cluster of steps, procurement projects, and/or new defence initiatives. For analytic convenience, the first measure, concerning priority investments in JISR, can be divided into three pillars:

- investing in multiple JISR platforms, "including next generation surveillance aircraft, remotely piloted systems, and space-based surveillance assets;"
- integrating all existing and yet-to-be acquired JISR assets "into a networked, joint system-of-systems" for better operational command and control; and



A CP-140 Aurora photographed during Operation ARTEMIS, 31 March 2019.



HMCS Windsor in transit of Halifax harbour, 14 December 2017.

 focusing, in particular, upon Arctic JISR as a research and development priority so as to come up with "innovative solutions" for sovereignty challenges in the North.²²

As for the first, key pillar, the DPR provides some insight into ongoing and upcoming acquisition or modernization projects. These specifically include the 2018 RADARSAT Constellation Mission,²³ the projected replacement of the modernized CP-140 *Auroras* by "the early 2030s" with a new Canadian Multi-Purpose Aircraft, a brand new ISR platform for the Special Operations Forces, and "the incremental modernization in the mid-2020s" of the *Victoria*-Class submarines.²⁴

The remaining two 'meta-measures' are needed to bolster Canada's defence intelligence and related academic outreach. Within the first, DND/CAF intelligence personnel are first and foremost encouraged to continue with the reciprocal intelligence-sharing practice, especially within NATO and the Five Eyes Community, while also respecting the principles of the rule of law and civilian control.²⁵ Then, given the ambitious agenda surrounding the future of the Canadian Forces Intelligence Command (CFINTCOM), which, *inter alia*, envisages an enhanced PSYOPS role for the Command,²⁶ the Defence team fleshes out three "new initiatives:" boosting CFINTCOM's operational support capacity (i.e., enhanced forecasting, smooth integration with next-generation



The three RADARSAT Constellation Mission spacecraft will be evenly spaced on the same orbital plane at an altitude of 600 kilometres.

platforms, excellence in emerging domains such as cyber and space), recruiting up to 300 new defence intelligence officers (120 military personnel, including reservists, and 180 civilians), and establishing a CAF targeting capability.²⁷

Finally, mindful of the fact that the best intelligence information often resides in open sources and informed academic discussions, the Government of Canada and DND have lately been keen on allocating a more generous amount for the country's well-nurtured academic and analytic community. Consequently, the DPR projects "\$4.5 million per year" for expanding traditional DND programs (i.e., expert briefs, the Defence Engagement Grant) and creating more diverse collaborative expert networks across the country.²⁸

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When disaster strikes, first responder Warrant Officer Marc Pouliot relies upon RADARSAT data to provide advice on the ground about the best way to respond.

NOTES

- Rose Mary Sheldon, Intelligence Activities in Ancient Rome: Trust in the Gods, but Verify (Abingdon, UK: Routledge: 2005), p. xiv.
- 2 Department of National Defence, Strong, Secure, Engaged: Canada's Defence Policy (Ottawa: DND, 2017), p. 63, at: http://dgpaapp.forces. gc.ca/en/canada-defence-policy/docs/canada-defence-policy-report.pdf.
- For practical reasons, in this particular text the acronym DPR refers to the end-product (Canada's Defence Policy), rather than the related (review) process.
- 4 Strong, Secure, Engaged, p. 65.
- 5 The most direct answer, as formulated by the Defence team, reads: "The defence of Canada, the ability to operate effectively overseas, and the capacity to engage internationally are heavily dependent on the systematic collection, coordination, fusion, production, and dissemination of defence intelligence." *Ibid.* However, the aim of this somewhat analytical piece is, while explaining the relevance of (defence) intelligence to Canada along DPR lines, to shed as much light as it could on some more fundamental factors.
- 6 Ibid. Here, the Defence team is laconically effective: "No ship goes to sea, no aircraft takes flight, and no boots hit the ground anywhere in the world without the input of specialists from the defence intelligence community."
- 7 Ibid, pp. 63-87.
- 8 Ibid, pp. 63-67.
- 9 Speaking of continuity, observers ought not to be misguided by phraseology, such as the DPR's promotion of "a fundamentally new...approach to defence." *Ibid*, p. 63). While Canada's defence strategy has, indeed, been well rethought in many respects and as a whole, the role of intelligence has always been taken seriously in Ottawa, London, and Washington.
- Frank A. Smith, "The Importance of Why: An Intelligence Approach for a Multi-Polar World" (MA thesis, National Defence University, Joint Forces Staff College, Joint Advanced Warfighting School, Norfolk, VA, 2016), abstract, pp.1, 51, at: https://apps.dtic.mil/dtic/tr/fulltext/u2/1017795.pdf Approaching the issue from a joint force perspective, Smith is more precise: "Sweeping changes in the political, social, and economic aspects of the strategic and operational environments..."
- See for instance, European Council, European Security Strategy, "A Secure Europe in a Better World," Brussels, 12 December 2003, p. 3, at: https://www.consilium.europa.eu/media/30823/ qc7809568enc.pdf; NATO, Strategic Concept, "Active Engagement, Modern Defense,"

- Lishon 19-20 November 2010 at: http://www nato.int/cps/en/natolive/official_texts_68580. htm; James R. Clapper, "Statement for the Record: Worldwide Threat Assessment of the US Intelligence Community," Introduction, Washington, D.C., 18 April 2013, at: https:// www.dni.gov/files/documents/Intelligence%20 Reports/UNCLASS 2013%20ATA%20SFR%20 FINAL%20for%20SASC%2018%20Apr%20 2013.pdf, or the latest US defence and national security strategies. All these documents more-orless pinpoint to complexity, multifaceted threats. blurring lines, and uncertainty. Being consistent with them to a reasonable degree, Canada's 2017 DPR contains phrases such as "an extraordinarily complex security environment" or "the increasing complexity of the security environment..." Strong, Secure, Engaged, pp. 63, 65.
- 12 See Strong, Secure, Engaged, pp. 5, 49-57.
- 3 This trend has to do with recent geopolitical and geostrategic developments. Underlying it is the partial return of the nation-state on the global scene, mainly through political realism, sovereignty, and social conservatism. Its defining features, on the other hand, are revived state competition, unrelenting influence by non-state actors, and, as a result, growing complexity.
- 14 In addition to the debatable end of "the era of terrorism," the world is witnessing a new, more intense variant of special or hybrid warfare where state-sponsored non-state actors are all the more factorized.
- 5 Ibid.
- It should be immediately pinpointed here that, while Phase I ("Anticipate") of the DND's new, "AAA" approach to defence "best supports the assertion that intelligence is Canada's first line of defence," it is by no means all-encompassing. For instance, according to the DPR, Phase II of the same approach, entitled "Adapt," envisages improvements in the "Use of Space and Cyber Capabilities," which would no doubt affect Canada's defence intelligence capabilities at least indirectly. Strong, Secure, Engaged, pp. 67, 70-73. Also, among the projected capability improvements in the Royal Canadian Air Force, the Canadian Special Operations Forces Command, as well as in terms of joint force, many are ISTAR-relevant. Ibid, pp. 38-42.
- 17 General Charles Bouchard, for instance, recently recalled how he had first heard this resonating word being used in a strategic manner in a NORAD context, namely as early as 2007-2008. Charles Bouchard, speech, 60th Anniversary Celebration, "NORAD at 60," Royal Aviation Museum of Western Canada, Winnipeg, 24 May 2018.

- 18 Arndt Freytag von Loringhoven, "Adapting NATO intelligence in support of 'One NATO'" in NATO Review, 8 September 2017, at: https://www.nato.int/docu/review/2017/also-in-2017/adapting-nato-intelligence-in-support-of-one-nato-security-military-terrorism/EN/index.htm, quoted in DND, "NATO Military Intelligence Committee Conference Comes to a Close," 25 May 2018, at: https://www.canada.ca/en/department-national-defence/news/2018/05/nato-military-intelligence-committee-conference-comes-to-a-close.html.
- 19 The fact that here the DPR substitutes two key verbs in the world of intelligence, "to analyze" and "to assess," with "to understand" is sufficiently telling. It carries an essential message that intelligence is about understanding threats in all relevant aspects and beyond, in the widest possible context.
- 20 Strong, Secure, Engaged, p. 63.
- 21 Ibid.
- 22 Ibid, pp. 38-40, 65.
- 23 Ibid., 65; and Canadian Space Agency, "RADARSAT Constellation," last updated March 30, 2017, http://www.asc-csa.gc.ca/eng/satellites/radarsat/Default.asp This yet-to-be-launched expanded constellation of all-weather, day-and-night RADARSAT satellites represents a cardinal JISR asset as it contributes to achieving two major and complementary JISR objectives: to "enhance surveillance and domain awareness" along with satellite communications.
- 24 Department of National Defence, Strong, Secure, Engaged, 65.
- 25 Ibid., 66.
- PSYOPS stands for psychological operations. The DPR is very explicit in this regard (Ibid., 66): "The Defence team will increase its intelligence capacity, and will examine its capabilities to understand and operate in the information environment, in support of the conduct of information and influence operations."
- 27 Department of National Defence, Strong, Secure, Engaged, 66.
- 28 Ibid., 67.



Task Force members in Mali, together with German and French allies, participate in a CH-147F Chinook helicopter crash simulation exercise during Operation PRESENCE-MALI, 6 March 2019.

Shared Responsibility: Civil-Military Relations in the Humanitarian Space

by Marissa Gibson

Introduction

ilitaries are no strangers to providing aid and assistance in conflicts and natural disasters. Equipped with immense logistical capabilities, highly trained staff, government backing and funding, and the ability to operate in insecure environments, they are a logical choice when it comes to assisting a vulnerable population. They are not the only actors in these insecure environments however, and often share the space with a multitude of other actors, including international and local non-government organizations (NGOs), each with their own projects and goals to implement. These actors operate within the 'humanitarian space,' a term first coined by former president Rony Brauman of Médecins Sans Frontières (MSF). Brauman spoke of an 'espace humanitaire' in which humanitarians should be "...free to evaluate needs, free to monitor the delivery and use of assistance, free to have dialogue with the people." Despite being coined by one of the most influential NGOs in the world, the humanitarian space is not an exclusive space for humanitarians,' but is usually occupied by a variety of institutions and actors, such as the military, human rights organizations, development specialists, national governments, and various other organizations.

The increase in military counter-insurgency operations has led to the development of winning the hearts and minds of local population by integrating humanitarian and aid projects into overall strategy in an effort to win over civilians and weaken support for insurgent groups. Military development projects often coincide or clash with the projects of NGOs that have been in the region prior to military intervention, and will likely remain long after troops have been withdrawn.² Aid agencies also attribute military presence as a threat to their security and neutrality. The purpose of this brief policy article is to address the lack cooperation and coordination among military and NGO actors within the humanitarian space – specifically in conflict zones, and to propose a potential policy for the Canadian government that can assist in improving inter-organizational relations with local and international NGOs in conflict zones. A review of the literature has revealed a lack of a new Canadian policy on civil-military relations in the field. Using Queen's University Professor and Chair of Defence Management Studies Dr. Douglas Bland's theory of shared responsibility, in conjunction with the distinguished American professor of anthropology Dr. Robert A. Rubinstein's anthropological perspective, I will discuss its application to civil-military relations in the field and determine the effectiveness of the theory. Shared responsibility understands that both civil and military actors are necessary to create stronger government policies, and in conflict zones, both actors are crucial to building better humanitarian efforts. Lastly, the conclusion reveals that Canada should build upon its current Whole-of-Government approach to facilitate relations with international and local aid agencies that are already in the field.

Policy/Literature Review

ithin Canadian policy, there is limited literature on how the military should interact with NGOs in the field, apart from the 2003 Guidelines on Humanitarian Action and Civil-Military Coordination. I have been unable to access these guidelines, but they are said to mirror two main UN guidelines: the Oslo Guidelines on The Use of Military and Civil Defence Assets In Disaster Relief (originally published in 1994) and, the Guidelines on the Use of Military and Civil Defence Assets to Support United Nations Humanitarian Activities in Complex Emergencies (originally published in 2003), better known as the MCDA Guidelines. As the Oslo Guidelines examines the use of civil and military assets in disaster relief, it is not pertinent to this policy brief. The MCDA Guidelines will be used as a frame of reference to the Canadian guidelines.

It should be noted that the 2003 Canadian guidelines were drafted just as Canada was beginning to engage in Afghanistan, and since then, a number of reports on lessons learned have emerged from the Canadian experience, which could be implemented within a new policy on civil-military interaction. Even the MCDA Guidelines faced their last revision a decade ago. The guidelines stress the importance of coordination between groups, and not cooperation, as cooperation is perceived as blurring the lines between military and civilian actors, thus damaging the impartiality and neutrality of humanitarian organizations. The hope for this policy is to create a framework that improves not only coordination, but also cooperation, as the guideline explains, "...when there is a common goal and agreed strategy, and all parties accept to work together, cooperation may become possible."

Current literature among the academic community has demonstrated a need for better coordination and cooperation amongst military and humanitarian action, but neither the Canadian military nor major aid organizations have pushed for a change in current practices. Academics agree on one key issue: that civilian agencies view militaries involved in combat, who are also conducting humanitarian operations at the same time, as a risk to both civilians caught in the conflict and the civilian agencies assisting them. The increasing militarization of aid is damaging to the humanitarian principles outlined in the United Nations Office for the Coordination of Humanitarian Assistance (UNOHCA) Glossary of Humanitarian Terms, which are composed of humanity, impartiality, and neutrality. Much of the literature concedes that better practices of communication are required between



During Operation LIFELINE SUDAN, a UN mission to help displaced people in southern Sudan, a Doctors without Borders nurse from the NGO based in Belgium is giving a baby an oral rehydration solution.

actors in order to facilitate cooperation, however it is Robert A. Rubinstein who brings the field of anthropology and sociology into the realm of war and security studies in order to examine the relationship, not only between belligerent groups, but also civilian and military organizations who interact together. Rubinstein examines the role of culture in organizations, and how it can create friction among military and civilian groups. His main argument is that by understanding cultural differences, groups can better work together. This unique perspective among the literature will provide the backbone of my policy proposal, in coordination with the theory of shared responsibility.

The theory of shared responsibility, proposed by Douglas L. Bland in 1999, relies upon the understanding that civilian leadership maintains civil control over some aspects of the military,

while military leadership retains control over others. The theory rests upon two assumptions: first, that "civil control" infers sole responsibility and legitimacy of the military to civilians outside of the military/defence establishment; and second, civil control is a fluid process that reacts to changing ideas, values, circumstances, issues, and personalities, and to the stresses of war. Bland's theory is meant to be applied at the national level between senior civilian officials and senior military officers. However, for the purposes of this brief, I will apply it at the local level between military and civilian agencies in conflict zones.

Analysis

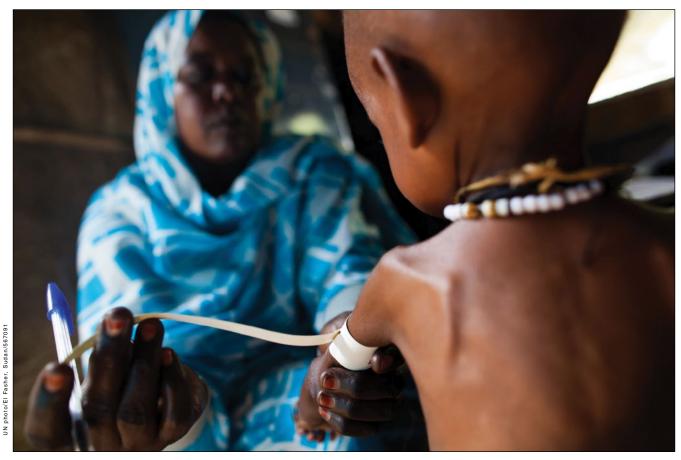
S hared responsibility acknowledges that there are circumstances in which military input is required at the

decision-making level, and vice-versa. At the local level of conflict this means that shared responsibility crosses organizational boundaries and that both the military and civilian agencies can benefit from input from one another. The understanding is that both actors play complementary roles when providing humanitarian assistance and development aid, and sharing responsibility ensures a higher chance of success in project implementation. The MCDA Guidelines acknowledge that a working relationship between militaries and civilian groups can be beneficial. Nonetheless, they concede that interaction between the two should remain absolutely minimal in order to enforce the image of NGO neutrality and impartiality. The maintenance of neutrality and impartiality are of significant importance to NGOs because they provide a means of security in order for agencies to operate in insecure environments - if they are lost, the NGO can become a target for belligerents.

The theory of shared responsibility challenges the notion of NGO impartiality and neutrality by creating a platform in which militaries and NGOs work side-by-side. Applying the theory of shared responsibility requires civilian and military groups to come together to discuss solutions to humanitarian problems. Bland states: "...civil authorities are responsible and accountable for some aspects of control and military leaders are responsible and accountable for others."8 In the context of complex emergencies, the theory makes the assumption that there are aspects of humanitarian development in which civilian expertise outweighs the military, and others where military expertise outweighs civilian knowledge. To put it succinctly, there are times when one group should defer to the other in order to create the best chance of success for the implementation of humanitarian aid.



A UN flight surgeon from Canada carries a young girl injured in the Hombori bus incident to a casualty collection point so she can receive treatment at a MINUSMA medical facility in Gao, Mali, 24 April 2019.



A nurse measures the arm of a severely-malnourished child at a clinic run by the international NGO Kuwait Patients Helping Fund in Abu Shouk camp for Internally Displaced Persons, North Darfur. The NGO provides medical care and nourished children, as well as for pregnant and lactating women.

Despite the desire of NGOs to remain outside the sphere of political and military influence, humanitarian space is inherently influenced by politics and military action. Rather than being distinct from politics, humanitarian space is inherently political, as argued by Collinson:

Humanitarian space can be derived from a recognition that most of the important aspects of humanitarian space are determined by the interplay of interests among a variety of political, military, economic and other actors, organizations and institutions(including legal institutions), in addition to humanitarian agencies and affected population.⁹

Determining the nature of humanitarian space is only one of the challenges faced by humanitarian actors in their interaction with military agents. In applying the theory of shared responsibility to militaries and aid agencies in the field, a variety of difficulties are encountered. Militaries and NGOs may share overlapping goals, but each function independently of the other, with an overarching end goal that may not be applicable to both parties. Organizational and structural differences can also create friction. These challenges and others will be discussed further in the next section.

Discussion

In order to determine if Bland's theory of shared responsibility is viable in the context of local coordination between military and humanitarian actors, it must be assessed against current challenges faced in the field. Bland's theory "...provides an instrument for organizing and managing civil-military relations... in the context of their history, culture, and politics while allowing the harmonization of these arrangements with those in other like-minded states." There are two key hurdles that cause problems between civilian and military actors in conflict areas. The first conflict between military and aid agencies in insecure environments is the belief that militaries threaten the neutrality and impartiality of civilian organizations and their employees. The second, and most problematic issue is the overlap, implementation, and purpose of military and humanitarian aid projects.

Militaries are unique in their ability to operate in dangerous regions, providing not only their own security but also assisting the population at the same time. The Provincial Reconstruction Teams (PRT) in Afghanistan were able to function in areas of the country where tenuous security conditions made it nearly impossible for aid groups and other humanitarian organizations to establish a presence. This ability has been criticized by the aid community of damaging their neutrality and impartiality in the conflict, and increasing the risk of being targeted by belligerents who now perceive them as working alongside military actors. This perception is understandable from the perspective of aid agencies,

and is a hurdle that may be nearly impossible to resolve using the theory of shared responsibility. It would require a shift in opinion by the aid community that the humanitarian space is no longer neutral territory, but one that is shared by myriad actors. "The key challenge for humanitarian organisations is how to engage and influence all the key actors involved so as to promote a more humanised politics and more effective humanitarian action." Militaries will continue to provide assistance in conflict zones as a way to win the hearts-and-minds of the population, and it would be best for aid agencies to capitalize on the strengths provided by militaries in order to improve and increase the reach and impact of their aid. The reality however, is that a more robust means of protecting civilians while simultaneously establishing and enforcing humanitarian space is ideal, neither the capacity nor the will exists within the international community. 13

In counter-insurgency operations, the development and implementation of aid projects by the military is seen as a crucial facet in the fight to win over local support and undermine the legitimacy of insurgent forces. Militaries in these situations are often considered to have a tendency to focus on short-term, nonparticipatory, and decisive action. According to Dr. Volker Franke of the Strategic Studies Institute, U.S. Army War College, "...the military typically favours conditions where it can go in, provide technical assistance or logistics support, and then get out quickly."14 Military personnel also often lack the expertise and experience required to implement humanitarian projects, and favour projects that create rapid and tangible results that are neither sustainable nor supported by the population. NGOs, on the other hand, have usually been operating in the area long before military intervention, and have built networks among relevant local actors within the population. They are invested in long-term projects that are built in conjunction with the needs of the supported population, and will likely remain long after the military has departed the region. It is within this context that the theory of shared responsibility can provide a solution.

Civil and military actors have their own strengths and weaknesses, and when functioning in an integrated and cooperative relationship, they can build upon each other's strength and minimize weaknesses. Militaries have immense logistical capabilities and the capacity to operate in insecure environments. NGOs tend to hold a deeper understanding of the needs of the population, and the expertise needed to implement effective and relevant projects that can be sustained by the population being supported. This is not to say that full integration is required on all joint projects, as it is understood that the military has its own strategic goals to accomplish (and aid projects are only a portion of the overall strategy), and NGOs are subject to the project demands of their donors, but rather that cooperation and coordination should be a priority where there is the potential to implement projects together.

Shared responsibility understands the different contexts of military and civilian history, culture and politics, and works to harmonize them. Its strength lies in creating a platform for shared understanding that can facilitate better relations between civil agencies and the military in order for them to work together. Militaries can provide protection and logistical support to aid agencies, whereas NGOs can provide ideas for more appropriate projects that will be sustainable, rather than short-term projects with minimal benefit to the population. In applying the theory to conflict level relationships, there is undoubtedly difficulty in

bringing together separate entities with different mandates and objectives. In order to do so, the work of Robert A. Rubinstein should be considered.

Rubinstein is an anthropologist who applies his craft to conflict resolution, peacekeeping, and international security, and provides a unique perspective among the literature of civil-military relations. He states: "International security work is conducted by a community, the social and cultural dynamics of which affect the decisions taken by its members."15 He elaborates further in a 2003 article, "Cross-Cultural Considerations in Complex Peace Operations," in which he discusses the cultural differences between military and civilian actors. He presents culture as a model for understanding military and humanitarian participants in peace operations and suggestions to improve interaction amongst actors. Within the framework of shared responsibility, Rubinstein's work provides a platform for improving understanding between actors. Using five common frameworks of cultural models, each with two opposing styles, the reader can clearly decipher which style military and humanitarian actors prefer, and how these styles impact their own decision making processes.

In order for the theory of shared responsibility to succeed in its application, the first hurdle of defining humanitarian space must be addressed. Unless aid agencies are willing to accept that humanitarian space is no longer a neutral and independent sphere, but rather, an entity that is influenced by the actors within and outside of it, including their political natures, it will be nearly impossible for fluid coordination and communication amongst militaries and NGOs. Despite this, shared responsibility can still improve current standards of civil-military cooperation by fostering greater understanding for the roles played by the military and humanitarian agencies, and the benefits that can be gained from a stronger working relationship.

Conclusion

The civil-military relationship in the field is already complex, and can be exacerbated by the conflict around it. Cooperation between civilian and military actors is made difficult by civilian perception that military involvement increases risk against agencies and their employees, and damages their protective image of neutrality and impartiality. Project implementation by militaries, while occasionally successful, is more often than not beset by failure due to the development of quick impact projects that look good for the media but have no use to the population meant to benefit from it. These issues are hampered by the unclear definition humanitarian space, which is no longer the sole territory of humanitarian actors, but is now host to militaries, local and international government agencies, non-government agencies and international bodies, such as the United Nations.

An ideal policy created by the Government of Canada would involve the amalgamation of the theory of shared responsibility into its discussion. The Whole-of-Government (WoG) approach currently embraced by Canada is certainly a start, but only pertains to inter-agency cooperation among the Department of National Defence, and the two former Departments, Canadian International Development Agency and the Department of Foreign Affairs and International Trade, now rebranded together as Global Affairs Canada, as well as other key departments. A more embracing

policy is necessary in order to facilitate better cooperation with non-government agencies – particularly those that have significant influence within the aid community, ICRC or MSF, for example. The remaining question is twofold: Is Canada willing to take the steps to open up improved dialogue within the aid community and to create a new policy, based upon the lessons learned from the civil-military experience in Afghanistan? And is the aid community willing to embrace the changing nature of humanitarian space? This second question can only be answered if the aid community (and their donors) find cooperation with the military to be in their

best interests, and will benefit not only the organization, but also the population they are supporting.

Second Lieutenant Marissa Gibson is a reservist with the Princess of Wales' Own Regiment in Kingston, Ontario. She has a Bachelor of Social Studies in Conflict Studies and Human Rights from the University of Ottawa, and a Master of Arts in War Studies from the Royal Military College of Canada.





A volunteer with the International NGO Kuwait Patients Helping Fund prepares a mixture for malnourished children in Abu Shouk camp. The mixture is distributed by the World Food Program (WFP) through a program called Integrated Blanket Supplementary Feeding.

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Dam Busters: Canadian Airmen and the Secret Raid against Nazi Germany

by Ted Barris

Toronto: Harper Collins Ltd – Patrick Crean Editions, 2018 i-xxxiii, + 562 pages, extensively illustrated including maps, HC - \$24.75

ISBN - 9781443455435

Reviewed by David Bashow

ith *Dam Busters*, the distinguished Canadian Journalist and bestselling author Ted Barris has crafted an outstanding, exceptionally-comprehensive and highly-readable tribute to one of the most audacious, and perhaps until now, one of the more *underappreciated* combat actions of the

Second World War. By way of background, the Royal Air Force

Bomber Command raid by 617 Squadron on the hydroelectric dams of the Third Reich's industrialized Ruhr Valley in May 1943 was a marvel of technological ingenuity, and a supreme test of human resolve, courage and determination. What is not widely known is that Canadian airmen factored proudly and significantly in this daring attack. Specifically, of the 133 aircrew participants, 29 were Canadians, and of that number, 14 were killed on the raid. And this book is, in particular, a celebration of the Canadian contribution.

It has many strengths, commencing with the excellent Foreword written by Canadian broadcasting luminary Peter Mansbridge, whose father was a Bomber Command veteran and Distinguished Flying Cross winner, and I found Peter's words very moving, eloquent and highly-appropriate. Scholars will also appreciate Barris' Preface, in which he detailed the historiography of the raid, and the manner in which he

introduced the 'cast of characters' individually, as he does throughout the manuscript, because it really helps the readership to get to know these brave young men.

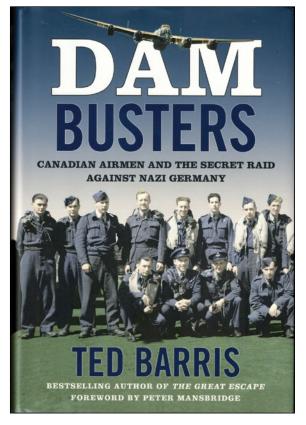
Structurally, the book follows a logical flow from comprehensive background, including the evolution of the *need* for the attack, the germination of the attack *concept*, and the subsequent development of an appropriate *weapon*. The narrative then progresses through the arduous and innovative training phase, the operation itself, the results obtained, and a comprehensive

aftermath and epilogue. Throughout the book, the technical and human factors, the attack plans, and the operational execution of the raid are covered in meticulous detail.

However, I believe the very soul of the book rests with the marvellous first-person recollections of the participants themselves, gleaned from myriad sources, including the manner in which the extended families were brought into the narrative. The author's sources are rich and varied, both primary and secondary, and the text is replete with little-known details, such as the rationale for the shape change of the weapon itself, the importance of providing it with backspin, the critical nature of adhering to *very* specific, constrained and stringent attack parameters, and so on. Particularly impressive was the cataloguing of the results obtained, and the downstream effects of the bombing upon German industry and wartime morale, especially as the latter applied to *both* sides. Barris also tackled the issue of both the physical and the psychological casualties very well, including the effects upon loved

ones. In terms of visual support for the narrative, the maps and figures are simple, clear, and effective, and the images are all carefully chosen and highly supportive.

On a personal note, a number of years ago, I was being driven from a Kingston automobile dealership to my place of work at the Royal Military College of Canada. In the course of a discussion with the driver, who was perhaps eight years older than myself, and who hailed from Geraldton Ontario, he revealed that his uncle had flown in the dam's raid. During the course of our conversation, he spoke fondly about his "Uncle Jimmy," whom he remembered as a child in Geraldton. It turned out that "Uncle Jimmy" was Jimmy McDowell of Geraldton, Ontario, the rear gunner in Vernon Byer's crew, and he and his entire crew would be among the first to die that night, shot down by devastating ground fire at low level over Holland while inbound to the target. It's a small world...



In sum, this book is exceptionally well-researched and balanced between the technological challenges and the stellar courage and innovativeness of the participants. It is a definite must read. Highly recommended.

David L. Bashow, OMM, CD, a former fighter pilot, is the author of several books dealing with wartime Bomber Command, including the highly-acclaimed No Prouder Place – Canadians and the Bomber Command Experience, 1939-1945. He is currently an Associate Professor at the Royal Military College of Canada, and the Editor-in-Chief of the Canadian Military Journal.

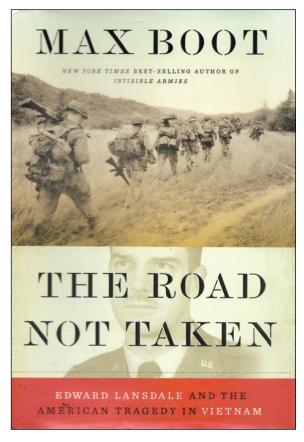
The Road Not Taken: Edward Lansdale and the American Tragedy in Vietnam

by Max Boot
New York: Liveright Publishing
Corporation, 2018
598 pages, \$35.00 (USD) HB

ISBN: 978-0-87140-941-6

Reviewed by Robert Davidson

e was one of the most interesting men in the world: college dropout, corporate advertiser, military officer, agent provocateur, 'king maker.' Examining the life and times of Edward Lansdale, author Max Boot proceeds down a previously-untraveled path toward a better understanding of the man known as "Lawrence of Asia."



Boot, a critically-acclaimed author and analyst at the Council of Foreign Relations, returns to the jungle of guerrilla warfare with his latest book. An authority on the subjects of counter-insurgency and American foreign policy, he builds on his previous best-sellers *War Made New* and *Invisible Armies*. In *The Road Not Taken*, Boot focuses upon Lansdale and uses the spy's experiences in the Philippines and Vietnam to provide a commentary with respect to US national strategy, then and now.

Striving for more than a biography, Boot highlights Lansdale's 'hearts and minds' campaigns, psychological operations (PSYOP), and battles against a bureaucracy ill-prepared for counter-insurgency. Boot touts Lansdale's successes in the Philippines and pre-American-intervention Vietnam, excuses his failures in Cuba, laments his stagnation in Washington, and ultimately asks his readers to ponder a simple question: What if the United States leadership had listened to Edward Lansdale? This question leads to the author's central argument that Lansdale's methods, as opposed to conventional warfare, would have better served America in attempting to stop the spread of Communism during the Cold War.

Boot takes his readers back to the late-1940s and the infancy of the Central Intelligence Agency (CIA), an organization whose ethos then more closely resembled a Silicon Valley garage start-up than today's vast intelligence network. Against the backdrop of Washington politics, Soviet aggression, and American domestic unrest, *The Road Not Taken* reveals the CIA's expansion beyond its charter and into the unknown.

It is when Lansdale arrives in the jungles of the mid-1940s Philippines that Boot hits his stride. Relying upon recently declassified documents and previously unseen personal correspondence, Boot begins to present his case for Lansdale's unorthodox methods of Communist suppression. At the outset of the Korean War, the Philippines were uniquely positioned as a country that was domestically volatile and ripe for Communist takeover, and yet, strategically- unimportant enough for serious US intervention.

It is in the Philippines that Lansdale, with almost no resources, sought to introduce the ideals of democracy and to establish a model of government for which Filipinos would be willing to fight and die. Armed with only a harmonica and a quick sense of humor, Lansdale ventured into the heart of the violent Communist *Hukbalahap* rebel zones, searching for a leader. After being nearly killed by the *Huks* him-

self, Lansdale returned from the war-torn region alongside the fearless anti-Communist Philippine Army commander, Ramon Magsaysay. That Lansdale was able to single-handedly get the incorruptible Magsaysay elected and the country stabilized supports Boot's thesis. However, the declassified tales of behind-the-scenes CIA payments and covert war-crime activities weaken his argument that Lansdale's ideology alone could have made a difference.

Boot's anecdotal style presents tales of PSYOP and high-level political maneuvering that showcase Lansdale's creativity and unconventional warfare prowess. The Philippines, however, was only the first act; the crisis in Vietnam was looming, and Lansdale was summoned across the South China Sea.

It is in the setting of mid-1950s French-controlled Vietnam where Boot's interpretations seem more strained. On the heels of his victory in the Philippines, Lansdale arrived in Saigon in search of a strong leader like Magsaysay to reinforce the country. His efforts instead yielded Ngo Dinh Diem, a well-connected but uninspiring Catholic in a predominately-Buddhist and Taoist country. Diem, who fit Lansdale's idealistic mold, endured military coups and assassination attempts before helping stabilize South Vietnam as its President. Beyond the fact that Diem was a far cry from the intrepid Magsaysay, the socio-political nature of Vietnam (now divided into two countries) would prove to be a bigger obstacle in Lansdale's path. Lansdale's second but qualified success at installing a democratic leader again aids Boot's thesis. However, his methods leave much to be desired. Evidence of CIA-backed militia attacks, rigged elections, and Geneva Accord violations haunt Lansdale's efforts, and they ultimately undermine Boot's

stance. Once again, Boot's style illuminates tales of urban warfare, enemy sabotage, and frustrating Washington miscalculations.

Lansdale's triumphs in the Philippines and South Vietnam birthed the legend of the master spy who would be immortalized in such literary works as *The Ugly American*, *The Best and the Brightest*, and *A Bright Shining Lie*, and they served as the basis for movie characters in Oliver Stone's *JFK*, and Joseph L. Mankiewicz's *The Quiet American* (a screenplay that was re-written by Lansdale himself). *The Road Not Taken*, however, does not stop there. Max Boot ventures into the Oval Office, the halls of Congress, the CIA-funded radio stations of Miami, and ultimately returns to Vietnam (now transformed by U.S. escalation and carpet-bombing). Unlike Washington's wavering faith in Lansdale, Boot remains steadfast in his belief that Lansdale's methodologies would have yielded a better result in Indochina.

Lansdale's actions, while successful in the Philippines but prematurely undermined in Vietnam, are hard to reconcile as 'idealistic,' with the existing evidence of CIA machinations. Boot is correct in his assertions that Lansdale was a trailblazer, but he occasionally looks past the variables that made the Vietnam 'quagmire' unwinnable in any limited warfare scenario. Boot's belief in the three "L's" of 'Lansdalism,' (Listen, Like, and Learn) is compelling and has practical application in America's modern conflicts. It is for these reasons that this book deserves a reading. *The Road Not Taken* would benefit any senior officer in charge of counter-insurgency policies, and any service member charged with winning 'hearts and minds.'

Edward Lansdale used a harmonica in the time of the machine gun and diplomacy in the time of 'war hawks.' He hacked his own idealistic trail through the jungle, while his counterparts cleared the road with bombs. What if the United States leadership had listened to Edward Lansdale? Unfortunately, the answer to this question will never be known, because in the history of Vietnam, Edward Lansdale's path was the road not taken.

Major Robert Davidson is a Special Operations Navigator in the United States Air Force with deployments to Iraq, Afghanistan, and Africa. He is currently a candidate for a Master of Science degree in Defense Analysis at the United States Naval Postgraduate School.

The Price of Alliance: The Politics and Procurement of Leopard Tanks for Canada's NATO Brigade

by Frank Maas

Vancouver: University of British Columbia Press, 2017

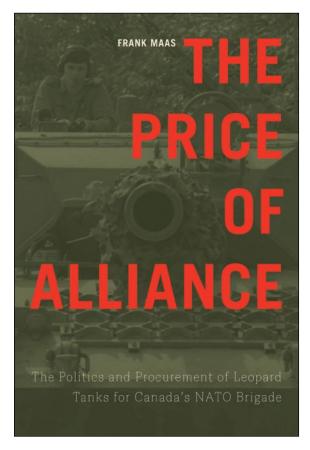
188 pages, Illustrated

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PB~ISBN 978-0-7748-35190, \$32.95

Reviewed by Andrew B. Godefroy

anada's defence policies and priorities during the late-1960s and early-1970s have long been the subject of heated and emotional debate. This controversial period is also often described by both scholars and practitioners as being the root



cause of the long slow demise of the Canadian Armed Forces' professionalism over the last half of the Cold War era, which ultimately led to its denouement in the early-990s in Somalia. Interestingly, this persistent traditional historical narrative is rarely re-examined, let alone contested, probably because for the many who lived through it, over time, it became far easier to blame unpopular politicians or military leaders than to be inclined towards more objective introspection. And yet, while there is little doubt that from the mid-1960s to the mid-1970s, Canada's defence organizations were subjected to considerable bureaucratic upheaval and turmoil, historians on both sides of the argument have tended to focus only upon those issues that negatively impacted the military. Few have sought to instead examine the successes achieved during this period (and there were many), in all likelihood because these topics tend to challenge the

status quo as well as the beliefs of those authors who prefer to *blame* rather than to *explain*.

Frank Maas' new book, The Price of Alliance: The Politics and Procurement of Leopard Tanks for Canada's NATO Brigade, offers a welcome departure from other more heavily-biased works examining this period. Drawing upon untapped archival sources, including Cabinet records, land force policy planning documents and procurement files, as well as interviews with several of the main actors involved, Maas employs the successful procurement of the army's Leopard C1 Main Battle Tank as a focal point for a broader re-examination of Canada's defence priorities, as well as its ongoing relationship with the North Atlantic Treaty Organization (NATO). In doing so, he offers his readers a far more balanced and evidence-based analysis of Trudeau's defence agenda during these years than has often been previously articulated. He effectively dismantles and does away with previous arguments suggesting that Cabinet sought to eliminate Canada's heavier mechanized forces in Europe completely, while the military sought every opportunity to undermine that stance. His book shows instead that the problem was indeed far more complex, and the responses to it far more nuanced. The military was, in fact, often just as big a proponent as was the government for converting Canada's NATO brigade from a heavy force to a light force, and for moving it out of the British-led Northern Army Group (NORTHAG) south into the US/German Central Army Group (CENTAG). Similarly, his work also reveals that senior members in Cabinet, including Prime Minister Trudeau himself, were at various times strong proponents for sustaining the army's heavier mechanized capabilities, as it directly affected larger political objectives and outcomes between Canada and the rest of the Western alliance.

Maas also offers a fresh look at the relationship between Canada and the Federal Republic of Germany in this study, and similarly deconstructs the long popular myth that the West German Chancellor, Helmut Schmidt, forced Trudeau into purchasing the Leopard C1 in order to secure other trade. The often-heard quip, "no tanks, no trade," Maas reveals, was just another construct of the traditionalist historical narrative that sought to highlight the general incompetence of Canadian politicians and senior officers. The evidence presented in this book clearly demonstrates once again that Canadian policy makers and planners were often far more competent than previous analyses have suggested.

Beyond the politics of the subject, this book also offers a solid combat development history of the Leopard C1 project, and it should serve as an essential reference for those with an interest in defence economics and procurement. Last but not least, Maas also challenges the traditionally-assigned split between the army's preintegration 'command era' and its post-unification 'management era,' instead showing that key actors from before integration in 1964 continued to have an impact well after unification took effect in 1968. While other historians have also done this to a degree, unlike other historians, Maas' research and analysis reveals a far more objective and accurate account of events. The result is a book that is far more valuable to both scholars and practitioners alike.

New works that effectively challenge the status quo and give historians pause to reconsider past events seem to appear with less frequency these days, but Frank Maas' *The Price of Alliance*, stands out from the crowd in this regard. This book is highly recommended as essential reading for post-1945 Canadian military historians, as well as for students of Canadian political history, Cold War defence policy, and those with an interest in defence economics and procurement.

Lieutenant-Colonel Andrew B. Godefroy, CD, Ph.D, is the Chief of Army Professional Military Education at the Canadian Army Command and Staff College in Kingston, Ontario.



Chilean Navy frigate CNS Almirante Lynch (FF 07) and Indian Navy stealth multi-role frigate INS Sahyadri (F49) perform a replenishment-at-sea with Royal Canadian Navy supply ship MV Asterix (centre) off the coast of Hawaii during Exercise Rim of the Pacific (RIMPAC), 28 July 2018.



Canadian flags fly during the National Day of Honour on Parliament Hill in Ottawa, Ontario.