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Canadian Armour in Afghanistan

Major Trevor Cadieu, CD

Learning on the Run: Company Level Counter-Insurgency in Afghanistan

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Learning from the Seven Soviet Wars: Lessons for Canada in Afghanistan

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Opening the North: Technology and Training at the Fort Churchill Joint Services Experimental Testing Station, 1946-64

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Note to File—The Reserve Forces Foreign Service Agreement

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Book Reviews

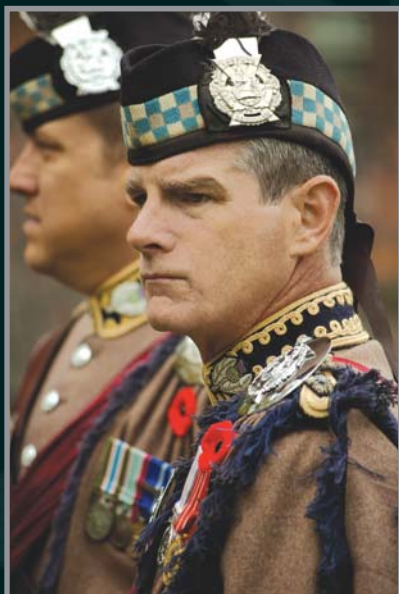


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FROM THE EDITOR— THE NEXT STEP: A CANADIAN ARMY (VIRTUAL) LAND WARFARE STUDIES CENTRE?

Major Andrew B. Godefroy CD, PhD



They say that one of the best compliments is imitation. Over the past several months I've had a couple of informal discussions with my colleagues over at the Canadian Forces Aerospace Warfare Centre (CFWAC) about the value of professional debate through a service journal, and it seems the idea has finally taken root over there. CFWAC is planning to publish their own first issue of *The Canadian Air Force Journal* in the spring of 2008, and I want to congratulate them on taking this decision and wish them well in their future endeavours. You will be able to find the new Air Force journal at their website (http://trenton.mil.ca/lodger/CFAWC/eLibrary/Journal_e.asp/).

The CAJ has been a tremendous asset for the Canadian Army, and I am sure the Air Force will benefit greatly from having a professional peer reviewed journal of its own. Will the Navy follow suit? That service currently enjoys the support of the *Canadian Naval Review* published through the Centre for Foreign Policy Studies at Dalhousie University, a magazine format journal covering a wide berth of naval affairs. We will have to wait and see if a modern version of the venerable 'Crow's Nest' will appear next to it.

The promotion of the publication of ideas has often been the subject of my CAJ editorials and, needless to say, we are enjoying perhaps one of the most stimulating periods of professional discourse in our institution's history. With the Army so actively engaged around the globe, soldiers are stepping forward to take an aggressive and active interest in shaping their army. This is not only commendable, but also critical to the Army's successful evolution. These ideas and debates also form the basis for an indigenous legacy of achievement of which we can be proud. Hard lessons learned on the battlefields and across the various missions must be transformed into best practices, which can then influence future conceptual and doctrinal design. Thus it is essential that they are captured for both present and future soldiers. The constant challenge, of course, is to separate the wheat from the chaff. How do we ensure that the relevant ideas are incorporated quickly enough to properly inform the decision makers who will shape not only the army of today, but also the emerging army of tomorrow?

Several members of the American, British, Canadian, Australian and New Zealand Armies' Association (simply ABCA for short) have created centres for land warfare studies that focus their research and development of land warfare theory, history, future concepts, doctrine, and design. For example, the Australian Army Land Warfare Studies Center (<http://www.defence.gov.au/Army/lwsc/>) has the mandate to, "promote the wider understanding and appreciation of land warfare; provide an institutional focus for applied research into the study of land warfare; and raise the level of professional and intellectual debate within the Australian Army." The U.S. Combat Studies Institute (<http://usacac.army.mil/CAC/csi/>) at Fort Leavenworth, "is a military history 'think tank' which produces timely and relevant military history research publications and

contemporary operational history for the U.S. Army.” Along similar lines, the U.S. Army’s Strategic Studies Institute (<http://www.strategicstudiesinstitute.army.mil/>) has a mandate to serve as the “U.S. Army’s institute for geostrategic and national security research and analysis”, while, “publishing security and strategic reports and publications which serve to influence policy debate and bridge the gap between military and academia.” Finally the UK promotes similar land warfare research through the Defence Academy of the United Kingdom (<http://www.da.mod.uk/our-work>).

The current Canadian Army effort resides across a number of organizations located in Edmonton, Kingston, Ottawa, and Gagetown and the constant challenge is to synchronize all of these efforts. A first step may lie in the creation of a virtual centre on the DIN as well as the World Wide Web that could bring many of the Army’s ideas to a single forum. The Directorate of Land Concepts and Designs (DLCD), for example, has been working over the last year to bring together many facets of land warfare studies in Kingston together on its DIN website in this way. This includes an expanded publications program consisting of *The Canadian Army Journal*, the *JADEx Occasional Papers Series*, the *DLCD Monograph Series*, conference and experiment proceedings, as well as special publications such as the new *Army of Tomorrow Force Employment Concept*. In addition, DLCD has synchronized its own website with that of the CAJ as well as the Fort Frontenac Army Library, which over the coming months will be aggressively developing assets in the areas of small wars and counterinsurgency, army capability development, army operational research, and land warfare studies to support both local and cross country research and development. Ancillary to the Army organizations, Kingston is also home to a number of other institutions such as the Royal Military College, the Canadian Defence Academy, the Canadian Forces Leadership Institute, the Peace Support Training Centre, Land Force Doctrine and Training System and the Canadian Land Force Command and Staff College, to name but a few. All of these contribute to further land warfare studies in some way. It would be of tremendous benefit if a dedicated website or gateway could provide “one-stop shopping” for soldiers, scientists, students and scholars to take advantage of new studies and works-in-progress as well as attract new academic research that would serve to benefit the Army. Perhaps it is not yet time for a true brickworks like the Australian Army Land Warfare Studies Centre, but certainly there is opportunity for a virtual Canadian Army Centre for Land Warfare Studies.

As the last issue of Volume 10, this journal is dedicated to several high-quality and focused analyses of current Army operations in Afghanistan. Major Cadieux presents a ground-breaking study on armour in theatre, while Major Adair examines the role of infantry. Lieutenant-Colonel St.Louis and Capt French examine strategic aspects of the Afghan mission, while Lieutenant-Colonel Villeneuve debates the role of intelligence. Finally, Dr. Iarocci takes us back to the Army’s preparation for earlier conflicts, and the enduring nature of clothing and equipping the soldier for battle. A very interesting *Note to file* on Canadian Army Reserve exchange service in the UK is offered by Lieutenant Winegard, and this issue begins our new feature—Army Biography—with a startling story of young bravery by Mike Bechthold. All this and book reviews to boot makes for a great conclusion to our tenth volume. Enjoy and we look forward to hearing from you.

What the Editor is reading ...

This quarter I’m tackling three books, all of which were written to fill gaps in otherwise well covered areas of military history. At 562 pages, the first book, *Colossus: Bletchley Park’s Greatest Secret*, by Paul Gannon, should keep me preoccupied for a good while as this highly technical but very readable history of decryption and code

breaking focuses on the “other” famous code machine (the most common one being the Enigma machine) of the Second World War. The second book is a second volume. Terry Copp’s, *Cinderella Army: The Canadians in Northwest Europe, 1944-1945*, follows the operational history of the First Canadian Army as it subdues the “long left flank” of the allied advance on Germany. It is a critical reassessment of Canadian Army performance during the liberation of Holland and the advance into Germany, and should be considered a must-read for anyone about to go on the Army Operations Course. The last book on my desk is the recently published, *Here is Hell: Canada’s Engagement in Somalia*, by Grant Dawson. A remarkably well researched and dispassionately objective analysis of the planning and deployment of Canadian Forces to this theatre in 1993, I suspect that this book will shed much new light on how and why Canada went to Somalia, and what happened there beyond just the incidents that later became synonymous with the mission. In due course I’ll report back on these publications in the book review section.

CORRECTION!

Last issue we accidentally botched several of the photo captions in Captain David Grebstad’s article, “The Role of the Artillery in Afghanistan” (Vol.10/3 pp.13-26). The following corrections were immediately brought to our attention by Sergeant Kenneth J. Leet, currently serving in the FSCC Cell, K Coy, Optimized Battlegroup Experiment, 2 RCR, Gagetown:

“Page 15—Should have been identified as M777 firing live in Sperwan Ghar not a 105mm LG1 firing in Kabul , this photo was my detachment during TF-306 deployment with 2 RCHA E Bty.

Page 21—This gun is an LG 1 and it is not firing in Sperwan Ghar, but in Kabul.

Page 23—This area is not FOB Sperwan Ghar.”

Our thanks to Sgt Leet for bringing this to our attention. We make mistakes, but we have helmets and ballistic vests, so if you spot an error please let the Editor know. We are constantly working to bring the soldiers the best product possible and we appreciate your feedback.



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<http://www.army.forces.gc.ca/caj/>

CANADIAN ARMOUR IN AFGHANISTAN

Major Trevor Cadieu, CD

By deploying tanks and armoured engineers to Afghanistan in October 2006 and supporting the acquisition of the Leopard 2, the leadership of the Canadian Forces (CF) has acknowledged the importance of maintaining heavy armour in a balanced force. While the continued development of sensors and technology will be extremely important to achieving improved situational awareness (SA) on the battlefield, the hard-earned experiences of the Canadian Army and our allies in sustained combat in Afghanistan and Iraq have proven we must be prepared to get our hands dirty and come into physical contact with the enemy if we wish to define their strength, composition and intentions, and subsequently kill them. Canadian tanks and armoured engineers have better protected our dismounted infantry soldiers in Southern Afghanistan, allowing them to close with and destroy a fanatical and determined enemy in extremely complex terrain.

This article will review tactical lessons learned of Canadian armour in Afghanistan since October 2006, provide a candid assessment of the challenges faced by tankers in this counter-insurgency (COIN) environment, and consider the introduction of the Leopard 2. Nowhere in this editorial is it implied that Canadian armour is the predominate arm, or that it should be reinvigorated at the expense of other battlefield enablers. On the contrary, our recent experience in combat has provided irrefutable evidence that all elements of the combined arms team remain fundamental to the delivery of decisive combat power in the contemporary operating environment (COE), and that our efforts in training and operations should reinforce this grouping.

Background

After fighting a protracted counter-insurgency battle across Southern Afghanistan, 1st Battalion Princess Patricia's Canadian Light Infantry Battle Group (1 PPCLI BG) was confronted in the spring of 2006 with a significant increase in insurgent activity in the Panjwayi and Zhari Districts of Kandahar Province. Although the Canadian BG working closely with the Afghan National Army (ANA) was able to disrupt the enemy in a series of BG-level operations culminating in Operation ZAHAR (as part of Operation MOUNTAIN THRUST), Taliban forces quickly re-asserted their presence in the region once hostilities had ended. The International Stabilization Assistance Force (ISAF) could not ignore the threat posed by this massing of insurgents on the doorstep of Kandahar City, the coalition centre of gravity in the south of Afghanistan. A significant information operations (Info Ops) victory would be awarded to the Taliban if they could not be dislodged from these areas, and the ability of the International Stabilization Assistance Force (ISAF) to achieve its stated mission of reconstruction would be virtually impossible to achieve without the confidence and support of the local populace. Within weeks of arriving in theatre in August 2006, the 1st Battalion The Royal Canadian Regiment (1 RCR) BG was tasked to clear the Taliban from Panjwayi and Zhari Districts in Operation MEDUSA, the largest combat action undertaken to date by the North Atlantic Treaty Organization (NATO).

Rather than adhering to small unit attacks and ambushes, and retreating in the face of direct confrontation with NATO forces, the Taliban chose to make a conventional stand at Pashmul. They occupied well dug-in defensive positions amongst densely packed grape and poppy fields and they covered with direct fire and improvised explosive



Soldiers from Lord Strathcona's Horse stand guard over their new Leopard 2 tank at Forward Operating Base Masum Ghar, Afghanistan. They are part of the 3 R22R Battle Group.

devices (IEDs) all ingress routes suitable for wheeled vehicles. The BG Commanding Officer (CO), Lieutenant-Colonel Omer Lavoie, realized quickly that restoring tactical battlefield mobility would be essential to dislodging the enemy from this complex terrain. Without armour at his disposal, he introduced civilian-pattern tracked dozers to the fight in order to slice through grape fields and allow dismounted infantry soldiers to get “up close and personal” with the insurgents. The tactic was extremely effective. Advancing under the cover of heavy artillery and aerial bombardment, the dozers allowed the BG to seize key terrain and facilitate the systematic clearance by dismounted soldiers of all compounds and infrastructure. By 13 September 2006, Taliban forces operating in

Pashmul and Zhari had capitulated. Hundreds of insurgents had been killed and many others were forced to flee to the west.

While two successive infantry-heavy Canadian BGs conducted successful counter-insurgency operations for nearly nine months without integral armour, the lessons of Operation MEDUSA reinforced the importance of retaining all combat enablers in full spectrum operations. According to Lieutenant-Colonel Lavoie, "If you'd asked me five months ago, 'do you need tanks to fight insurgents?' I would have said, 'No, you're nuts.'" He added, "Because [the Taliban] are acting conventionally, then conventional assets like tanks, armoured engineering vehicles, and armoured bridge-laying vehicles certainly have their place here."¹ The leadership of the CF and the Government of Canada agreed with Lieutenant-Colonel Lavoie's assessment. At the request of Commander RC(S), Canadian Brigadier-General David Fraser, the Government announced on 15 September 2006 the imminent deployment of an enhancement package to better facilitate "reconstruction and stabilization efforts in Afghanistan." In addition to an infantry company designated to serve as close protection for the provincial reconstruction team (PRT), the enhancement package was to include a squadron of Leopard C2 tanks from Lord Strathcona's Horse (Royal Canadians) [LdSH(RC)] and an armoured engineer troop from 1 Combat Engineer Regiment (1 CER).²

The Army generated, trained and deployed a 15-tank squadron and armoured engineer troop across the globe within six weeks of receiving a warning order. Within days of the first Leopard C2 arriving at the Kandahar Airfield (KAF) on 3 October 2006, the B Squadron Advance Party had arrived to receive equipment and parts, and establish with the leadership of the BG the tactical employment and sustainment concepts for armour in Afghanistan. The Squadron took advantage of every moment at KAF to prepare equipment for battle, and conduct training and rehearsals based on the hard-learned experiences of the 1 RCR BG in combat.

Canadian Armour in Counter-Insurgency Operations

After deploying forward on 2 December 2006, the tank squadron and armoured engineers featured prominently in all major combat operations undertaken by the Canadian BG. B Squadron was tasked initially to establish attack-by-fire positions in support of infantry companies and form the nucleus of a BG counter-moves force capable of responding throughout the entire Canadian area of operations (AO). Many Taliban insurgents learned the hard way the capabilities of the Leopard's main gun during this period when attacking Canadian strong points with rocket propelled grenades (RPG) and indirect fires. Leopard tank crews fired 105 mm rounds that destroyed enemy ambush parties and mortar groups that had infiltrated the Zhari District. On 19 December 2006, the Canadian BG recommenced offensive operations as part of Operation BAAZ TSUKA, a mission intended to deny the enemy sanctuary in Kandahar Province and reduce their capacity to mass for a spring offensive. Grouped with an infantry company and armoured engineer troop to form a square combat team, the tank squadron was tasked to disrupt insurgents in Howz-e-Madad and the Maywand District.

Throughout January and February 2007, B Squadron worked closely with A Company 2 PPCLI and the ANA in a series of offensive operations aimed at expanding the BG's security zone. Conducting several complex deliberate breaching and cordon and search operations in Zhari District, the ANA and Canadians demonstrated clearly their capacity and resolve to go after the Taliban at a time and place of their choosing. After securing the Siah Choy area with the ANA, the tank squadron united with American Special Operations Forces (SOF) and the Canadian Reconnaissance Squadron to dominate the Dowrey-Arghandab peninsula, keeping the enemy off balance in the

region. Following the transition of command authority to 2 RCR, B Squadron remained in theatre for nearly a month conducting disruption operations along the Helmand-Kandahar provincial border and reinforcing Afghan National Security Forces (ANSF) in contact with insurgents in Howz-e-Madad and Sangsar. While sub-unit integrity was maintained for specific missions, B Squadron was tasked as a steady state to support two different operations concurrently: the squadron minus (two troops of four tanks and the squadron headquarters) usually formed a combat team with A Company, while the third tank troop was detached to another sub-unit elsewhere in the AO. Tanks never worked independently and the value of the combined arms team was evident. The tank squadron commander led routinely during the advance and break-in phases of operations, while infantry company commanders naturally retained control of the fight through/clearance and consolidation phases. By the end of the deployment, all operations were conducted with Canadian infantry, the ANA and Afghan National Police (ANP).



Combat Camera AR2007-2041-08, 23 Oct 2007 Panjwai, Afghanistan

Soldiers from Lord Strathcona's Horse stand guard over their new Leopard 2 tank at Forward Operating Base Masum Ghar, Afghanistan. They are part of the 3 R22R Battle Group.

A Squadron LdSH(RC) relieved B Squadron in early March 2007, in time to join Hotel Company 2 RCR BG for Operation ACHILLES, another effort on the part of ISAF to blunt the Taliban's ability to wage a spring offensive. While the bulk of fighting during this mission was left to TF Helmand and SOF, the tank squadron proved its ability to conduct sustained combat operations at great distances from the re-supply nodes at each of the forward operating bases (FOBs). In fact, the tank squadron A1 echelon, under the command of the Squadron Sergeant-Major (SSM), was called on to re-supply multiple sub-units concurrently. In spite of initial reluctance on the part of sustainment planners to commit to the tank squadron a dedicated echelon, this organization has now become the model for integral support in the Canadian BG. Elements of the ISAF Reserve Battalion were certainly relieved to see the tanks during Operation ACHILLES, especially when the Leopard mine ploughs were used to extract several of their utility vehicles and crews that had found the hard way an old Soviet minefield.

Since May 2007, the tank squadron has fought almost constantly alongside Canadian and Afghan infantry in close combat with the Taliban. Supported by the artillery, combat engineers, attack aviation and fast air, mechanized combat teams from the 2 RCR BG have achieved decisive victories against insurgents in the Howz-e-Madad, Nalgham and Sangsar areas of Zhari District, where vineyards and imposing compounds render wheeled vehicle movement particularly difficult. Leopard tank crews have used extensively the 105 mm High Explosive Squash Head (HESH) round to eliminate insurgents attempting to attack dismounted soldiers. More importantly, tank rollers and ploughs have continued to mitigate risk to coalition soldiers by clearing routes of pressure-plate detonated IEDs, while providing intimate support and a breaching capability to dismounted infantry companies. A testament to the tremendous contribution tanks are making to counter-insurgency operations and their high demand throughout the Canadian AO, A Squadron has routinely been split into troop-sized elements or less and attached to each of the infantry companies. This decentralized employment of armour and extremely high temperatures has strained the sustainment concept and serviceability of the tanks, while dispersing the breaching assets integral to the sub-unit. The impact of this squadron has been felt as far west as the Helmand border, and north towards Ghorak and Shah Wali Kot.



Combat Camera AR2007-2042-05, 25 Oct 2007 Zhari, Afghanistan

A new Canadian Leopard 2 tank passes a light armoured vehicle 3 (LAV III) near Forward Operating Base Wilson, Afghanistan.

The “Limitations” of Armour

Soon after the Government of Canada announced the deployment of Leopard tanks to Afghanistan, military experts rushed to criticize the decision. One such pundit, Mr. Michael D. Wallace, a political science professor at the University of British Columbia, argued in his article *Leopard Tanks and the Deadly Dilemmas of the Canadian Mission in Afghanistan* that the “...risks of putting our 1960s-designed Leopard 1 C2 tanks in harm’s way surely outweighs any additional protection they can supply to Canadian Forces in Afghanistan.”²³ He continued that the deployment of Canadian armour was misguided as tanks are vulnerable to a variety of weapons employed by insurgents, such

as anti-tank guided munitions (ATGM) and IEDs, and their quickly evolving tactics. Although Wallace was correct to say, "...even the most modern and capable tanks are vulnerable to a variety of attacks,"⁴ he evaded the obvious fact that there is not, nor has there ever been, a system on the battlefield that is immune to enemy assault. The Leopard tank is arguably the best-protected vehicle currently employed by coalition forces in Afghanistan. It has been sent there to shield our dismounted soldiers. Recoilless rifles, ATGMs and IEDs are capable of tearing much more easily through human flesh than rolled homogenous steel, and these systems feature prominently in the arsenal of Taliban weaponry in Afghanistan. When we possess the advantage of heavy armour, it would be reckless to purposely eliminate from our inventory this key enabler and confront symmetrically an insurgency that is accustomed to fighting in the harsh terrain and conditions of Afghanistan. Specialized weapons or concentrated attack may be capable of destroying tanks, but the survival rate of their crews is high and the protection they offer to dismounted infantry from fragmentation and blast weapons is unquestionable.



Photo courtesy of author

Mr. Wallace and others have also charged that collateral damage caused by Canadian tanks could turn locals against foreigners and isolate soldiers from the civilians they were sent to help. While it is true that the loss of innocent civilians and excessive damage to infrastructure from NATO military operations would impair our ability to achieve a mandate of reconstruction in Afghanistan, suggestions that the use of tanks has alienated the local populace more than other weapon systems have proven completely unfounded. Since commencing combat operations nine months ago, Canadian tanks have killed dozens of insurgents in battles throughout Kandahar Province, yet there has been no suggestion of civilian deaths attributed to tank fire during this entire period. Equipped with a fire control system that allows our soldiers to acquire and engage targets with precision and discrimination, by day and by night, the Leopard tank has in many instances reduced the requirement for aerial bombardment and indirect fire, which have proven to be blunt instruments. The deployment of armour to Afghanistan has also reinforced with the local populace the resolve of Canada and NATO to bring stability to the region, and it has sent to the Taliban a clear message that

we have the tools and determination to pursue them at a time and place of our choosing. A strong case can be made that Canadian tanks have actually reduced collateral damage in the Canadian AO. We know through experience that the more combat power we commit to a mission, the less kinetic that operation is likely to become.



Photo courtesy of author

While every effort must be made to minimize damage to local infrastructure, there have been and will continue to be occasions when we must be prepared to use the destructive capabilities of our armoured forces to dislodge insurgents from complex terrain. While we would want nothing more than to meet the enemy in the middle of an open desert, the Taliban find sanctuary amongst dense vineyards and urban compounds. They frequently use women and children to shield themselves from coalition attack, rendering the use of close air support, aerial bombardment and artillery fire risky. To mitigate collateral damage, the tank squadron leadership includes in all operational planning a collateral damage estimate and satellite imagery is relied upon heavily by break-in forces to avoid habitable structures. Rules of engagement (ROE) that protect our soldiers and innocent civilians are reviewed in orders, as is the open fire policy that delineates clearly the types of weapons to be used to engage enemy in urban terrain where a normal pattern of life has been observed. Manoeuvre damage caused by armoured vehicles to irrigation systems and croplands is repaired whenever possible by armoured engineers on exfiltration. Elements of the Kandahar PRT travel routinely with mechanized combat teams to determine the long-term needs of locals, and facilitate if required the funding and reconstruction of damaged fields and infrastructure.

The ability of the Army to generate, train and deploy a 15-tank squadron and armoured engineer troop across the globe within six weeks of receiving a warning order does not support the notion that armour cannot be rapidly deployed. Prior to acquiring the C-17 Globemaster the CF did not possess a strategic airlift capability, and all fleets of vehicles were impacted congruently. The LAV III, for example, is not strategically deployable by C-130 Hercules. This airframe can transport one LAV III for a short distance, but certainly not from Canada to Afghanistan. Accordingly, a Canadian LAV-equipped force is moved in the same manner as a tank fleet: either by sea or leased

strategic airlift. Canada's Leopard tanks were deployed to Afghanistan in October 2006 by a combination of leased Russian AN-124 Antonov and United States Air Force (USAF) C-17 Globemaster aircraft. The recent acquisition by the CF of four C-17 aircraft will enhance our ability to deploy tanks (and LAV IIIs for that matter), while reducing our current reliance on allies for heavy lift.

Doctrinal and Tactical Lessons Learned (and Re-learned)

Although tanks provide increased firepower, protection and mobility to the BG, they are extremely vulnerable when operating independently in a COIN environment. Lacking the ability to dismount soldiers without rendering turrets inoperable, tank crews without close infantry support cannot ensure security or force protection at the scene of an IED strike, casualty evacuation, enemy ambush or even a simple vehicle accident. What might normally be routine friction can become incapacitating or deadly when armoured forces are not capable of creating stand off between friendly and hostile forces. As important as infantry are to ensuring the security of armoured forces, so too are tanks vital to the protection of our dismounted troops. We should never plunge our dismounted soldiers into confrontation with the enemy without first taking every precaution to ensure their protection. The enemy in direct confrontation on the objective has killed very few Canadian soldiers in Afghanistan. It is on the way to the fight that our troops have been more regularly maimed and killed by mines, IEDs and fanatical suicide bombers. Tanks, with their superior armoured protection and mobility, have led as a default during all moves in both open and close terrain. We should rarely be in such a rush so as to prevent our engineers from conducting vulnerable point searches at defiles and chokepoints. The notion of grouping the different arms to benefit from their collective strengths is not new, but it has again been validated in combat.



Photo courtesy of author

While few commanders today will argue the importance of armour in the COE, there is considerable debate on how best to group and employ tanks. Should the integrity of the tank squadron be maintained to allow the BG CO to mass his direct fires and breaching assets while ensuring their sustainability, or should armoured assets be decentralized and attached to infantry platoons to ensure more vulnerable, dismounted

soldiers can benefit from the capabilities of the tank in complex and urban terrain? The answer to this question lies somewhere in between the two extremes. Gone are the days we must consider the smallest tactical grouping of armour to be the squadron. Fighting through urban areas and the dense vineyards of Afghanistan requires the decentralization of forces that are difficult to control at even the lowest tactical level. Exposed routinely to intense hostile fire from unknown sources, dismounted infantry troops often lack sufficient firepower to destroy well-protected and camouflaged enemy positions. Tanks provide the punch required for breaching structures and they were deployed specifically to increase the protection of our dismounted soldiers, even if that means the division of resources.



Photo courtesy of author

An individual tank might provide intimate support to infantry and engineer sections while advancing in canalizing terrain, but it would be a grave error to consider this grouping a miniature-combined arms team that is sufficiently led, equipped and sustained to achieve independently the destruction of a determined and experienced insurgency. There are obvious and unassailable logistical and tactical constraints that dictate the requirement to preserve at a minimum the integrity of the tank troop. The only guarantee when employing armour in the harsh environment of Afghanistan is that tanks will break. Their timely recovery from the battlefield is dependent on the immediate availability of other armoured assets mounted on the Leopard chassis. The extraction of a tank is a troop task: one tank, or one of the two armoured recovery vehicles (ARVs) in theatre, is required to tow the downed vehicle, while the remaining two tanks in the troop are required for mutual support and command and control. The tactical decisiveness of the combined arms team also diminishes when operating with anything less than a tank troop. The combat team commander is precluded from massing direct fires, and he will not have a credible breaching force if required to break into complex terrain (each tank troop is equipped with a dozer blade, plough and roller set). The division of the squadron into more than two elements creates other problems. With only two each of the Leopard-qualified technicians—vehicle, weapons, fire control systems (FCS) and land

communications information systems (LCIS)—in the tank squadron echelon, serviceability rates deteriorate notably when tanks are employed on multiple operations concurrently.

These observations are not hypothetical. B Squadron 1 RCR BG and A Squadron 2 RCR BG maintenance deficiencies skyrocketed when the sub-unit operated in more than two locations at once. Without qualified technicians available to provide timely and responsive support to all deployed elements, proactive maintenance was neglected and vehicle serviceability suffered as a result. Of greater concern was that tanks actually became a liability to infantry soldiers when this valuable resource was too thinly spread across the BG. Tasked to support multiple operations concurrently, and struggling to maintain the serviceability of the Leopard fleet of vehicles in the heat of the Afghan summer, A Squadron was challenged throughout June 2007 to generate sufficient armour for Quick Reaction Force (QRF) tasks. In one instance, A Squadron was tasked to detach to an infantry company two tanks for the reinforcement of an ANP checkpoint that had been ambushed by Taliban forces. With all mine ploughs and rollers deployed elsewhere in the AO, tank crews were forced to clear high threat routes that ANP refused to traverse by simply driving over them. The importance of maintaining troop integrity was reinforced further when one of the tanks became trapped in a deep wadi system. While attempting to extract the jammed Leopard, the second tank became incapacitated, requiring the infantry company to wait as last light approached for the deployment from a forward operating base (FOB) of additional recovery assets. Although the combat team was able to chalk this experience up as a near miss, the incident demonstrated clearly the risks of splitting armour.

Proponents of the piecemeal employment of armour might also be inclined to relegate tank squadron commanders to the role of support arms advisor to the CO, as they would not have troops to command. This would be a mistake. Since tanks first joined the Canadian BG in combat in December 2006, infantry company commanders acting in the capacity of combat team commander have left routinely the advance and break-in phases of combat operations under the control of the tank squadron commander. It is imperative that a leader who understands the intricacies of the tank implements and breaching in complex terrain control that part of the fight. Combat arms officers understand manoeuvre and are trained early in their careers to appreciate the collective strengths of the combined arms team. While either the tank squadron commander or infantry company commander will lead the combat team, assigned tasks or terrain might dictate that tactical control rotate several times in the execution of an operation.

Tanks, regardless of their vintage, are extremely maintenance-intensive and they possess an insatiable appetite for combat supplies and commodities. Recognizing the sustainment demands of the Leopard fleet of vehicles, the National Support Element (NSE) deployed to Afghanistan has allocated to the tank squadron a dedicated echelon. Commanded by the SSM, the tank squadron echelon is equipped with fuel, ammunition and commodities trucks, mobile recovery teams, recovery vehicles and a wheeled ambulance. 105 mm ammunition is frequently transported from KAF to manoeuvre elements via medium lift aviation, while other combat supplies are moved by road with combat logistics patrols. The tank SSM assumes responsibility for all combat supplies at the FOBs and deploys forward with Leopard qualified technicians as required to conduct routine and emergency replenishment of the squadron. Recovery and medical vehicles always travel with the combat team to ensure their immediate responsiveness to the needs of the soldiers. The echelon system has worked extremely well for the armoured corps for decades and it continues to be effective in combat today.

None of the other arms have been allocated a dedicated echelon in Afghanistan. Without integral maintenance resources, infantry companies have been incapable of

conducting proactive repairs requiring technical support to the LAV fleet of vehicles. Cognizant of the sustainment challenges confronting each of the infantry companies and other elements of the combined arms team, both the TF 3-06 and TF 1-07 tank squadrons sustained multiple sub-units over a continuum (up to four concurrently) without an increase in resources or qualified technicians. In the interests of training as we fight, building cohesive teams and addressing the intense sustainment demands of combat operations, the Chief of the Land Staff (CLS) has directed that integral echelons should be allocated to every sub unit in the BG, including the artillery battery and composite engineer squadron. It does not matter who technically owns the resources, whether it is the NSE or the sub-unit being supported. Sub units just need to know they will have continuous and uninterrupted integral support, without exception.

While armoured crewmen have traditionally filled driving and leadership positions in the tank squadron echelon, the NSE has directed they be replaced by truckers. The rationale for employing tankers in the echelon has only been reinforced in combat. As Leopard-qualified soldiers, the crewmen serving in the echelon are the only redundancy integral to the tank squadron deployed. Tankers are trained to work in an armoured squadron and they understand implicitly the support demands and tactical employment of this organization. While conducting emergency re-supply operations in December 2006, armoured crewmen in the echelon were able to break down and distribute different natures of 105 mm ammunition quickly. They assisted in emergency tank maintenance and were able to forecast the specific petroleum, oil and lubricants (POL) requirements of the Leopard fleet of vehicles. While the truckers serve an extremely important role in the sustainment concept of the BG, they simply do not have a congruent understanding of tank-specific requirements.

While coalition soldiers will as a default confront traditional hit and run insurgency tactics in Afghanistan, it is not inconceivable that the enemy might again mass and take a conventional stand against ISAF, as they did in Pashmul in September 2006. Pre-deployment training must therefore be progressive and prepare the BG to conduct both COIN and conventional combat operations, from the troop-platoon to the BG level. Individual training should focus on the perfection of basic soldiering skills to include physical fitness, marksmanship, combat casualty care and trade specific duties, such as driving, gunnery and the handling of implements in the case of armoured crewmen. Collective training must hone the ability of sub-unit commanders to synchronize battlefield enablers inclusive of the combined arms team. Training should start with a re-familiarization of tank-infantry cooperation to include a review of the capabilities and safety precautions of the Leopard tank, marry-up drills, tactical movement, communications and target designation. Collective training scenarios should validate the proficiency of the BG in conventional war fighting operations (offence including the attack in complex terrain, defence including counter-moves, advance to contact, deception operations), while getting troops accustomed to the friction of the COIN battle space (vehicle breakdown/recovery, mine and IED strikes, suicide attack, ambush, casualty evacuation). Deploying soldiers and leaders should be familiar with combined arms operations from the troop-platoon level to BG, by both day and night.

Theatre mission specific training (TMST) and battle procedure should provide the training audience an appreciation of the complexities of the Afghan culture. In addition to the cultural awareness and language familiarization lectures that are routinely incorporated in the TMST package, subject matter experts should be employed to indoctrinate our soldiers on the dynamics and relationship between the three main threat groups in Southern Afghanistan: Taliban/Opposing Military Forces (OMF), narcotics leaders/fighters, and tribal factions. Training scenarios should include both simulated or real ANSF (ANA/ANP) play and civilians in the battle space (women/children, media and

private security firms), as well as an introduction to operations with SOF and other coalition partners (who may or may not have specific national caveats that affect their ability to support Canadian ground operations). Training scenarios should be replete with the same friction soldiers will face while deployed to include the unavailability of enabler support and a routinely ambiguous intelligence picture augmented at times with questionable yet important human and signals intelligence (HUMINT and SIGINT) feeds.

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While the ability of the Leopard tank fleet to restore tactical mobility in different types of complex terrain is the bread-and-butter of tank squadron operations in Afghanistan, pre-deployment collective training has included limited opportunities to plan for and perfect the use of the tank implements. Before unleashing the tanks to breach complex terrain in Afghanistan, all levels of command plan carefully with satellite imagery. Wargaming is conducted to maintain the element of surprise, remove the enemy's terrain advantage and minimize collateral damage. It is imperative that we institutionalize in training the same planning and battle procedure considerations that will be essential to mission success in operations and that the first time a dozer tank crew commander is seeing a deliberate grape field breach is not while conducting it under contact with the enemy. The complex terrain of Afghanistan should be replicated as much as possible in training at Canadian Manoeuvre Training Centre (CMTC), and combat teams should be afforded opportunities during force-on-force and live-fire training to conduct deliberate breaching operations with tank implements, while testing the effects of main gun ammunition on structures similar in composition to grape-drying huts and walled compounds. The replication of Afghan terrain and structures will cost money, but will save the lives of Canadian and coalition soldiers.

Immediately following the completion of pre-deployment training, all tanks and engineer vehicles were cleaned, brought to serviceable condition and suspensions were replaced. Following the application of MEXAS add-on-armour and completion of required maintenance, tanks were quarantined at 1 Service Battalion for shipment to theatre. Vehicles deployed from the Edmonton International Airport to an Intermediate Staging Base (ISB) at Manas, Kyrgyzstan via civilian AN 124 Antonov, where they were cross-loaded on to USAF C-17 Globemaster aircraft for the move to KAF. Leopard qualified drivers accompanied each chalk into theatre, while an armoured Master Warrant Officer (MWO) served in the capacity of Liaison Officer (LO) at Manas to facilitate the cross-loading and timely onward movement of vehicles. An ARV was positioned at the ISB, while the second recovery vehicle proceeded to Afghanistan on an early chalk. An advance party from the tank squadron and a tank activation team (TAT) met the 17 tanks and four AEVs at KAF. The TAT consisted of an EME MWO with previous experience in Afghanistan, one each of vehicle weapons and FCS Leopard-qualified technicians, and a handful of Leopard-qualified armoured crewmen. In the three weeks that followed the arrival of the first tank in Afghanistan, the advance party and TAT worked diligently to identify and establish a tank maintenance facility at KAF, receive and account for all vehicles, and prepare the tanks for combat operations. The tank squadron leadership took advantage of this time to influence the sustainment concept and collaborate with the 3 Close Support Group technical assist visit (TAV) to source sufficient spare parts, major assemblies and tooling holdings, while implementing an aggressive in-theatre training package and rehearsals for the remainder of the squadron.



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The successful deployment of the tank squadron in extremely compressed timelines was a testament to the competence and determination of countless soldiers, leaders and staff officers at all levels in the CF, both at home and abroad. The generation and early deployment of a LO to the ISB and a TAT into theatre to receive and kit tanks was vital to the timely introduction of this capability into combat. This TAT/TAV concept should be sustained and implemented again in the future; however, there are other considerations that should be assessed more carefully the next time we send armour into combat. Most important of these factors is the need to address early in the planning process the

consolidated sustainment requirements of the Leopard fleet of vehicles over a continuum in operations. While installing MEXAS add-on armour and effecting vehicle repairs in Canada, a great deal of tooling, crew and safety equipment went missing prior to the quarantine of vehicles. As spare parts, tooling and POL products were not scaled for properly in Canada, these critical supplies were late in arriving at KAF and the serviceability of the Leopard fleet of vehicles suffered early on as a result. It was not until late November 2006 that a complete upload of 105 mm ammunition had arrived at KAF, precluding the timely deployment of the entire squadron forward.

While the image of a Leopard tank rolling off the back of a C-17 is perhaps more appealing to the media, the first chalks into theatre should be filled with the armoured recovery assets, mobile repair team vehicles, specialty tooling and POLs, and sufficient spare parts for 30 days of operations. Without these critical parts and combat supplies identified, received and organized at KAF, the tanks are useless. In addition to generating a LO for the ISB, escorts for the vehicles and a TAT for reception of the vehicles, the generating formation should deploy a LO team to Ottawa to inform Canadian Expeditionary Force Command (CEFCOM) and Canadian Support Command (CANOSCOM) planning and battle procedure. The LO team should consist of an armoured officer and senior maintenance technician, ideally with previous experience in the deployment of armour on operations.

All moves outside the relative security of KAF or a FOB in Afghanistan are considered combat operations. Accordingly, orders are issued for all operations, using the standardized NATO orders format. When time was particularly constrained or when it was important leadership at all levels understood clearly the sub unit commander's intent and concept of operations, the A Company/B Squadron 1 RCR BG Combat Team Commander frequently issued orders to the crew and section commander level. Given the complexity of COIN operations and the need to minimize collateral damage during breaching operations, rehearsals were always conducted to include a rehearsal of concept (ROC) drill, review of actions-on and war game of potential "what-if" scenarios. Satellite imagery was used extensively to plan breaching routes through vineyards and dense terrain, while Information Management System for Mine Action (IMSMA) data provided current situational awareness on **known** minefields and historical IED locations. The battle captain submitted intelligence and terrain analysis requests, and products were normally pushed forward to the squadron within 24-48 hours of receipt of the request. The ANA with Operational Mentor and Liaison Team (OMLT) personnel attended routinely orders groups and were invited to participate early in the planning process. Representatives of higher-level enablers (tactical unmanned aerial vehicles [TUAV], close air support [CAS], aviation) were rarely available for orders, but unit and brigade operational staffs conducted extensive liaison to coordinate resource requirements when necessary. Immediately following the completion of a mission, either the officer commanding or battle captain consolidated feedback from each of the troops and platoons on areas to improve and sustain for future operations. These points were discussed at the squadron level, changes were institutionalized if pertinent, and reports were forwarded to the Army Lessons Learned Officer at KAF.

Since deploying to Afghanistan in October 2006, Leopard tank crews have fought alongside Canadian, American, British, Dutch and Afghan soldiers, and have relied extensively on critical enabler support provided by a multitude of other troop contributing nations. The issue of national caveats has received extensive media play in recent months, and there has even been speculation the initial deployment of the tank squadron forward to link up with the BG in contact was delayed in part by the pending Dutch general election in November 2006. While it is important to be cognizant of these caveats and sensitivities, troops at the tactical level only need to know what support they

can rely on in a fight with insurgents. Sub-units were normally required to submit to BG operations staff 48-72 hours in advance of requests for dedicated TUAV, aviation and intelligence support, while the CAS line-up was pushed on a daily basis. While TUAV support was generally accessible to the sub unit as required, attack aviation and CAS were normally held in reserve, responsive on short notice to the declaration of Troops in Contact (TIC). The sub unit forward observation officer (FOO)/ joint terminal attack controller (JTAC) team normally controlled the allocation of indirect fires, CAS and attack aviation; however, calls for gun and close combat attack (Apache) fire were routinely conducted by troops on the ground.

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The risk of fratricide in a coalition environment requires commanders at all levels to plan operations carefully. Language barriers, tactical differences, battle fatigue and the fog of war all conspire to obscure the situational awareness of troops in close combat with the enemy. To mitigate the threat of 'blue-on-blue' fire, the Canadian BG has standardized vehicle and personal identification friendly force (IFF) markings and standard operating procedures (SOPs). IFF marking schemes are communicated to coalition partners during orders and rehearsals, and direction related to the open fire policy and authorized ROE is also reviewed to minimize the potential of collateral damage. It is imperative that communications information be exchanged during orders, and that radio checks are conducted during battle procedure prior to crossing the line of departure. American SOF and OMLT, for example, routinely reported as outstations on the tank squadron combat net when working with armour.

The Leopard C2 tank allows us to reach out and touch the enemy with precision direct fires to ranges of 4000 meters, nearly twice the effective range of the M242 25 mm chain gun mounted on our LAV fleet. The Taliban choose not to fight us in the open desert for obvious reasons. Rather, our enemy finds sanctuary in grape-drying huts and

compounds with concrete-like walls measuring over a meter in thickness. Prior to the deployment of the Leopard tank, massive volumes of 25 mm fire from the LAVs achieved limited results against these structures, often requiring the BG to resort to the use of aerial bombardment or risk the deployment of dismounted soldiers forward to affect a breach with anti-tank weapons or demolitions. One 105 mm HESH round from the Leopard C2 can punch a hole in excess of five by five meters through a grape-drying hut or compound wall, penetrating structures with reduced collateral damage to surrounding infrastructure and less risk to our dismounted soldiers. While the importance of infantry in the fight-through and deliberate clearance of objective areas is irrefutable, it makes little sense to send dismounted soldiers onto an enemy objective without first eliminating known resistance from a distance with 105 mm HESH. The tank squadrons attached to the TF 3-06 and TF 1-07 BGs have been able to kill numerous insurgents at ranges of 150-3800 meters while mitigating the exposure of our dismounted infantry soldiers to enemy direct fire. Both the coaxially mounted and anti-aircraft configured 7.62 mm C6 General Purpose Machine Guns (GPMGs) mounted on the Leopard C2 have been used to engage and suppress dismounted insurgents at close range. The wooden stock assembly on all anti-aircraft MGs has been replaced with a spade grip assembly to allow crews to bring the weapon to bear more quickly, while maintaining a lower profile in the turret.

A common misconception is that the tank is primarily an anti-armour platform. This is false, especially in the environment in which we currently find ourselves fighting. The Taliban seek tactical advantage in terrain impassable to wheeled vehicles and when able to predict ISAF avenues of approach, they have used, effectively, hit and run tactics that include the use of small arms/RPG ambush, suicide attacks and IEDs. Equipped with a dozer blade, mine roller and mine plough in each troop of four tanks, the Leopard fleet of vehicles has restored tactical mobility to the combined arms team in Afghanistan through its ability to penetrate grape and marijuana fields, clear mine and IED belts and breach mud walls and compounds that were previously impassable to the LAV III. The mobility options created by the tanks and armoured engineers afford the combat team commander additional ingress routes, making it more difficult for the enemy to sight defensive positions, while decreasing the risks to less protected coalition soldiers. Combat teams grouped with armour have created on numerous occasions throughout the past year improvised roads suitable for wheeled vehicle movement during cordon and search and offensive operations. The enemy was kept off-balance, constantly guessing from where the combat team would advance, and the tanks were able to form a "ring of steel" around the infantry as they conducted deliberate clearance operations in urban areas. Both tank squadrons have used the dozer blades and ploughs extensively to conduct hasty and deliberate minefield breaches and break into complex terrain in order to destroy the enemy and extract personnel and vehicle casualties.

The experience in Afghanistan has demonstrated that existing Canadian breaching doctrine works. By default, mechanized combat teams move in column, with tanks leading, unless extremely confident of the absence of mines and IEDs. When required to slice through complex terrain to close with and destroy insurgents or extract coalition casualties, combat teams always attempted two lanes to ensure freedom of movement. A breaching team consisting of a command and control element, tank troop, (armoured engineering vehicle) AEV Badger, field engineer section, infantry platoon and recovery and medical assets was assigned to each lane. Dozer tanks or AEVs led in close terrain in order to slice through vineyards and irrigation systems, and plough tanks were pushed forward in open/flat terrain to confirm routes for the presence of mines/IEDs. Run-up positions were dozed away from the lane every 50 meters, ensuring the route remained clear for recovery and medical vehicles to effect extraction, and to ensure the all-around

protection of the combat team as it advanced in complex terrain. The field engineer section with dismounted close protection conducted vulnerable point searches at all choke points and suspicious areas to confirm the presence of mines/IEDs. Unless the combat team could maintain observation on the entire lane throughout the duration of the operation, it would exfiltrate the area on another route or would confirm lanes with the plough tank leading. The tank squadron commanders controlled the move to and break into enemy objectives, while the infantry company commander naturally retained responsibility for the fight through and consolidation phases.

There are limitations to the tank implements. As discussed already in this paper, the collateral damage caused by tanks and the aggressive use of their implements can impair our ability to achieve mission success in Afghanistan, where reconstruction is the focus of our efforts. Equally important, there is no system on the battlefield that has the capacity to neutralize without exception all mine/IED threats. While tank ploughs have pushed countless anti-tank mines into their spoil, saving coalition soldiers' lives, IEDs have occasionally detonated on impact with the implement, rendering it ineffective. A Squadron 2 RCR BG has used effectively the tank rollers as an improvised route clearance package (RCP) to **mitigate** the impact of pressure plate detonated IEDs (PPIED); however, we should not gain a false sense of confidence that this implement can protect our soldiers from command detonated and remote-control detonated IEDs. Further, the rollers take considerable time to mount, they require a larger turning radius and they keep us on the tight, canalizing roads of Afghanistan—exactly where the Taliban prefer to plant mines and IEDs.

Leopard C2 tanks have saved Canadian and Afghan lives. While no vehicle on the battlefield is invincible, the Leopard C2 is equipped with add-on MEXAS composite armour panels and spall liner to increase crew protection from direct fire attacks. The Leopard 2A6M will also be prepared with additional turret protection and an improved belly blast protection package to reduce the threat of mines and IEDs. Leopard tanks and their crews deployed to Afghanistan have survived numerous IED and anti-tank mine strikes and recently recoilless rifle, RPG 7 and suicide attacks that may have been catastrophic to other fleets of vehicles. More important than the protection the Leopard offers to its crewmembers, however, is our ability to put 55 tonnes of steel between our dismounted soldiers and the enemy. The tank squadron in Afghanistan is routinely called upon to establish a cordon around objective areas and provide tanks in intimate support to dismounted infantry soldiers as they conduct fight-through and clearance operations in close combat.

The psychological value of the tank is well recognized. Knowledge of the increased firepower and protection offered by the Leopard tanks raised the morale and offensive spirit of the 1 RCR BG, a battle-tested unit that had sustained near continuous combat with the enemy for two months prior to the arrival of B Squadron. The enemy has been less enthusiastic with the capabilities of the tank and the synergies developed by the combined arms team. Numerous signals and HUMINT reports confirm that low-level Taliban fighters are terrified of the tanks and their ability to manoeuvre, and they are often reluctant to attack coalition forces equipped with integral armoured assets. While the tanks have clearly had a significant psychological impact on the insurgency, armoured leaders serving in combat are not so naïve to think the enemy will not work aggressively to find a way to kill Canadian tanks.

2 RCR BG tank operations have been impacted significantly by the heat of the Afghan summer, and a lack of air conditioning and the hydraulic turret drive systems on the Leopard C2 has exacerbated the situation. With external temperatures routinely approaching 50 degrees Celsius in the sun, armoured crews have endured temperatures in excess of 65 degrees Celsius inside the Leopard tank. Tank squadron leadership at all levels has been called upon to develop innovative solutions to minimize the impact of

the heat on the health of our soldiers and the serviceability of the tank fleet. Combat operations are routinely conducted at night or early in the morning to take advantage of cooler periods of the day, and leaders have been mandated to institutionalize in their battle rhythm forced hydration. Cooling suits have recently been introduced into theatre and feedback from the soldiers using them has been tremendous. These water-cooled vests have reduced significantly the core body temperatures of armoured crewmen, allowing them to sustain combat operations for longer periods. B Squadron 1 RCR soldiers also developed for each of the tanks improvised dust skirts to reduce the intake of dirt and debris into the tank exhausts. These modifications have increased several times over the operating range of the Leopard before it over-heats.



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The Next Round: Recommendations on the Way Ahead

While the Leopard C2 has performed in combat exceptionally well, this platform is 30 years old and is starting to show its age. B Squadron 1 RCR BG soldiers submitted to the chain of command in November 2006 a summary of recommended modifications to make the Leopard C2 more suitable for COIN operations in the harsh environment of Afghanistan. Indicative of the tremendous support provided to our soldiers by both military and civilian leadership, the Government of Canada announced in April 2007 that it would not only address Leopard C2 deficiencies in the interim, but that it would authorize the lease for immediate combat operations of 20 Leopard 2A6M from the German Army and a subsequent purchase of 100 Leopard 2A4 and 2A6 from the Dutch. While this tank has not yet been tested in combat, many countries revere the Leopard 2 as one of the best in the world. Weighing in at over 60 tonnes, the Leopard 2 boasts an impressive 1500 horsepower engine (compared to the 830 horsepower of the Leopard C2), and it is equipped with the L55 120 mm smooth bore gun. An electric drive turret allows the gun to be traversed much more quickly, while reducing significantly the heat inside the vehicle. Most importantly, the Leopard 2A6M will provide to our soldiers unprecedented protection from the mine and IED threat in Afghanistan.

Unfortunately, the Leopard 2 is not yet equipped with the tank implements that have saved many lives in operations. An armoured engineer vehicle on a Leopard 2 chassis

(Kodiak) is employed by the Swiss Army; however, it is unarmed and not yet employed by other countries. In order to ensure our tactical battlefield mobility and protection is not impaired with the introduction of the Leopard 2, technical staff should seek to design and apply immediately a modification to the Leopard 2 that will allow implements to be mounted. Tests will need to be conducted on the impact of mounting implements on to this chassis, which is already 15 tonnes heavier than the Leopard C2. Consideration should be given to retaining a mixed fleet of Leopard C2 and Leopard 2 vehicles in theatre until this technical issue can be resolved. While the deployment of the Expedient Route Opening Capability (EROC)—Canada's version of the RCP—will reduce the risk to our soldiers while forced to move on routes and through canalizing terrain, this system does not have ploughs capable of conducting hasty minefield extractions, nor is it equipped with dozer blades to slice through complex terrain when required. Many of the protective advantages of the Leopard 2 will be negated with the absence of implements.

The 105 mm HESH round is the bread-and-butter munition for the tank squadron in theatre: each round knocks five-by-five meter holes into grape-drying huts and we have found it highly effective against dismounts at ranges of 150 to 3800 meters. Although the Swedish Army has apparently fielded a 120 mm high explosive round and experimentation in the United States is ongoing with a 120 mm Insensitive Munitions High Explosive—Tracer (IMHE-T) munition, Canadian Leopard 2A6M tanks will deploy initially without this capability. Until we are able to introduce to combat a tested 120 mm HE round, we should assess immediately the accuracy and breaching capability of different variants of 120 mm High Explosive Armour Piercing (HEAT) and practice ammunition, and we should consider the acquisition of a canister round for the anti-personnel role in close combat. Armoured Piercing Fin Stabilized Discarding Sabot (APFSDS or Sabot) will continue to have limited value in Afghanistan. This munition is most effective against other armoured vehicles, with which the Taliban are not equipped. The Sabot round offers minimal breaching capability, and it actually threatens increased collateral damage because it does not explode on contact with its intended target. Tests conducted by the Danish Army on the DM 12 HEAT round have shown positive breaching effects, and modifications to the DM 33 APFSDS round have also increased the fragmentation of the round on impact with the target.

Canada's role in Afghanistan is changing, and it will continue to evolve until the end of our current mandate in February 2009. Cognizant that our ticket out of that country will be the creation of a credible and effective military and police force, the Chief of the Defence Staff (CDS), General Rick Hillier, announced recently his priority now is to devote more energy to the capacity building of the ANSF.⁵ Effective with the immediate deployment of the 3rd Battalion Royal 22^e Régiment (3 R22^eR) BG, one of the three infantry companies previously committed to combat operations in Kandahar Province will be tasked to assume the responsibilities of an OMLT. The OMLT, embedded with three Kandaks (battalions) will train and mentor Afghan soldiers and will maintain liaison with ISAF forces in order to facilitate enabling support for ANA operations. Two mechanized infantry companies, a tank squadron, a reconnaissance squadron, an artillery battery and a composite engineer squadron have been retained in the Canadian BG for continued security operations.

The Canadian BG will continue to buy time for the advancement of ANSF capacity building and reconstruction initiatives by keeping the Taliban off balance through aggressive security operations. With fewer than 1000 soldiers available for kinetic operations, we will be challenged to find an appropriate balance between holding key terrain in areas where the Taliban are most likely to undermine support for the Government of Afghanistan while being able to project devastating combat power throughout the entire AO. Assuming other countries will not in the near term contribute

additional ground forces for operations in Kandahar Province, the Canadian BG will likely have to task as a steady state one infantry company, augmented with key battlefield enablers, to seize and hold ground of strategic importance to ISAF. This company could retain two to three FOBs within the designated Canadian AO, in which steady state operations would be synchronized closely with ANSF and the PRT initiatives, while disrupting insurgents attempting to infiltrate the area.



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The tank squadron and the remaining mechanized infantry company should form the basis of a mobile strike force, capable of surging rapidly and violently throughout Kandahar Province to locate and hammer Taliban cells. In order to promote the credibility of the ANA, all operations should be, or at least perceived to be, Afghan led. The mechanized combat team would serve as a very visible indicator of the combat power at the disposal of the ANA, and it could facilitate the transition and evolution of our commitment to Afghanistan. As conventional forces thin out in favour of bolstering the OMLT and PRT, the mechanized strike force could be retained as the Joint Task Force Afghanistan Reserve. We should avoid the temptation to re-deploy to Canada first the Task Force Afghanistan Enhancement Package simply because it was last on the ground and perceived to be of least importance to the continued success to our mission. By the time we are ready to declare the ANA capable of ensuring the security of Southern Afghanistan, this force will have sufficient dismounted soldiers in its ranks. It will not, however, have its own integral enablers provided currently by the coalition.

A reinforced Canadian mechanized combat team organized with a tank squadron, infantry company, armoured engineer troop, reconnaissance/Intelligence, surveillance, target acquisition and reconnaissance (ISTAR) troop, artillery battery (with FOO/JTAC team), integral echelon and PRT/civil-military cooperation(CIMIC)/psychological operations (PSYOPS) detachments should remain on the ground until another coalition partner is prepared to assume our responsibilities in Kandahar, or until the ANA is able to truly stand on its own. Although a combat team is normally commanded by a major,

a lieutenant-colonel should command this tactical grouping as it would be stacked with multiple enablers and to ensure the ability of this organization to influence JTF-AFG battle procedure.

Conclusion

Sustained combat in Afghanistan for the past 18 months has confirmed the effectiveness and professionalism of the Canadian Army; however, many of our observations from battle are not new. Perhaps most obvious of the lessons we have relearned is the importance of the combined arms team in full spectrum operations, and the continued significance of the tank and armoured engineers in the COE. While our understanding of the threat and the complexity of operations in the modern battle space is sound, we have been excessively optimistic about our ability to find the enemy and determine his intentions without having to fight for information. We will strive to achieve knowledge-based and sensor-led operations, but we are not there yet. Until we can deny the enemy a vote, it will be necessary to form and deploy flexible combined arms teams capable of advancing to contact, and crushing opposing forces with overwhelming combat power and manoeuvre in extremely complex terrain, by day and by night.

Many of the force developers and critics of armour that informed recent Army Transformation initiatives argued that tanks had become increasingly irrelevant in the COE for a multitude of reasons: they are expensive to maintain, they are not easily deployable and they can be vulnerable in complex and urban terrain. These observations are true, but they are self-evident and apply to most other elements of the combined arms team, all of which have their own weaknesses and deficiencies when operating independent of the other enablers. Providing increased firepower, protection, tactical battlefield mobility, and a definitive psychological impact, the tank will remain an invaluable tool in the arsenal of the Canadian Army for the foreseeable future.

About the Author...

Major Trevor Cadieu is serving as Second-In-Command Lord Strathcona's Horse (Royal Canadians). He returned recently from his second tour in Afghanistan, where he was honoured to command and serve with the great soldiers of B Squadron, a Leopard tank squadron, and 1st Battalion The Royal Canadian Regiment Battle Group, in combat operations.

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LEARNING ON THE RUN: COMPANY LEVEL COUNTER-INSURGENCY IN AFGHANISTAN

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Unlike its principal allies, Great Britain and the United States, Canada has relatively little experience in fighting irregular enemies. Although Canada did engage in conflict with the Boer guerrillas at the turn of the 20th Century, the first half of the century saw Canada pitted against conventional foes in unlimited warfare in the two World Wars. The latter half of the century saw Canada fighting a conventional foe in a limited war in Korea followed by engagement in a number of successful peacekeeping operations around the globe. These stability operations characterized the Canadian military experience for the latter half of the last century and were reinforced by the type of, and approach to, training embraced by the Canadian Army. It was based on the foundations of these experiences that the Canadian Army entered the current conflict in Afghanistan. Arguably, the complexity of stability operations when combined with experience gained in peacekeeping operations prepared the Army well for the demands of counter-insurgency operations, but there remains one marked difference—combat and the ever present potential for it. Intrinsic to countering an insurgency is the conduct of counter-guerrilla action—the defeat of an insurgency’s fighters. For the first time in over fifty years the Canadian Army finds itself directly embroiled in a close fight against guerrillas with the aim of improving security in southern Afghanistan; a small war that is the focus of Canada’s military contribution in the larger Global War on Terrorism (GWOT). These operations are being conducted within the context of a limited, small war with very specific strategic aims using limited military means, in an environment that directly defines the manner in which tactical objectives are achieved. Further, while Canadian allies re-learned counter-insurgency lessons from Malaya and Vietnam and applied them in Iraq and Afghanistan, the Canadian Army entered a small war with no recent experience of its own. While that may have had the positive effect of reducing ‘baggage’ the Army brought to the fight, it also demanded the Army adapt quickly. This new experience is having significant impact on the organization, doctrine, culture and training of the contemporary Canadian Army.

Clausewitz surmised there are three ways armies learn about warfare. These methods include the study of history, the study of foreign experience and the best and most obvious—direct experience.¹ Prior to direct involvement in countering the insurgency in Afghanistan in 2006, leaders in the Canadian Army relied heavily on the US experience to cognitively prepare for operations and inject relevant experiences into training. After the Canadian Battle Group replaced US units in Afghanistan, general US practices continued to be used at the tactical level.² As time passed and Canadian soldiers gained valuable experience, these practices shifted to reflect Canadian equipment, organization, culture and an increasingly fluid situation in southern Afghanistan. Amidst ongoing institutional transformation within the Army, the Afghanistan experience has accelerated change and shaped the nature of transformation efforts. The experience also provides insight into the Canadian way of war as it applies to small wars and in particular, counter-insurgency. Eighteen months into the deployment, the experience of infantry companies operating in Afghanistan is providing an unfettered tactical perspective of the most recent Canadian small war experience.

Aim

After providing background and defining the operating environment, this article aims to provide a Canadian perspective of the counter-insurgency fight at the company level in Afghanistan during 2006. This will be done by comparing and contrasting personal experiences with generally accepted counter-insurgency practices.



Photo courtesy of author

Background

Against the backdrop of a resurgent Taliban movement, the Canadian Army deployed an infantry battle group to southern Afghanistan in the early winter of 2006 to replace the US 173rd Airborne Brigade in Kandahar Province. Within Regional Command South, the 1st Battalion Princess Patricia's Canadian Light Infantry Battle Group (Task Force (TF) Orion) conducted full spectrum operations in Kandahar Province from February to August 2006. These operations aimed to create security conditions that would allow for the success of numerous governance and development initiatives. They were conducted amidst an increasingly volatile environment created by the Taliban in their efforts to regain control of Kandahar Province. Broad full spectrum operations focused on maintaining security conditions in the province quickly shifted and became refined to operations aimed at isolating and defeating an insurgency that sought the very thing that we did—the support of the Afghan people. To understand the Canadian Army and in particular an infantry company as a counter-insurgent force in Afghanistan, a general understanding of the insurgency in Afghanistan and the characteristics of the operating environment as it existed in 2006 is required.

Defining the Environment

There are numerous layers to the insurgency in Afghanistan, but its foundations can be found within the Taliban movement, whose general aims are congruent with most insurgent movements. Insurgency is defined as: “A competition involving at least one non-state movement using means that involve violence against an established authority to achieve political change”.³ Key to this definition is the pre-eminence of political

change: although the insurgency in Afghanistan has religious ideological underpinnings, its fundamental goal is to invoke political change. As a Sunni and Pashtun Islamic fundamentalist organization that controlled Afghanistan from 1996 to 2001, the Taliban sought and continue to seek to regain control of Afghanistan and impart their strict, ultraconservative interpretation of Islamic law upon the state. This is a relatively new phenomenon in Afghanistan. Historically, the country has not been a source of Islamic fundamentalism. Indeed, it has only been a result of the tenuous security situation following the withdrawal of the Soviet Union in 1989 that fundamentalist organizations were successful in gaining a foothold in the country. The fundamentalist nature of the insurgency, coupled with the insurgent's blood ties to the population, is a key factor in characterizing the nature of the insurgency in Afghanistan.

Kandahar is one of 34 provinces in Afghanistan and lies in the heart of the Pashtun Belt. Based on and defined by the ethnicity of its inhabitants, this region stretches from western Pakistan to south-western Afghanistan, with the porous border being little more than a line on the map. Like most of the Pashtun Belt, Kandahar is a barren expanse of mountains and desert, chequered with mud-walled compounds, very few roads and a few small oases of grape and poppy fields. The economy is based on agriculture and the people rely on the land to survive. The people of the province, predominantly Sunni Pashtuns, are tribal people whose societal foundations go no further than their extended family. Ingrained tribal affiliations determine individual loyalties and it is within these tribal groups that communal decisions are made and one finds the basic level of governance. Having experienced nothing other than tribal decision-making, Afghans are extremely sceptical of the concept of a central government and subscribe to the strict code of Pashtunwali. An unwritten feudal code, it is based on the tenets of hospitality, justice/revenge and most importantly, the maintenance of individual honour.⁴ "At heart, twenty-first century Afghanistan is a society with strong tribal elements in which centralized power has at best been tolerated as a necessary stabilizing presence, secondary to the clan tribal identification and loyalty."⁵ Although fierce loyalties have routinely produced inter-tribal conflicts, a second Pashtun societal characteristic has particular relevance. In spite of their differences, Pashtuns have just as routinely united to counter foreigners whom they perceive as invaders.⁶ The British experienced this reality on three occasions and most recently the Russians were defeated and withdrew from Afghanistan in 1989. The nature of the land and the reliance of the people on the land for survival are a key to understanding the environment in Kandahar Province. Moreover, the primacy of the tribe within Afghan culture and the general adherence to the code of Pashtunwali by these tribes is a factor that is constantly leveraged by the insurgency to appeal to the population.

The Roots and Nature of the Insurgency

In 2006 and as they continue to be, the unstable conditions in Afghanistan are fertile ground for an insurgency. It is generally accepted that for an insurgency to flourish, three prevailing conditions must exist.⁷ The first of these is a vulnerable population. This vulnerability is created by poor economic and social conditions. An insurgency exploits these conditions by offering hope for change and improvement of living conditions. The second root cause is the lack of leadership providing direction. Leadership may come in the form of a person or an idea and has the ability to unify people towards a common cause or goal. Without leadership, people become focused on personal interests and in the most primal sense, survival. Again, insurgents seek to capitalize on the absence of leadership by offering direction and stability, serving the aims of the insurgency. Closely tied (but not exactly the same as the absence of leadership) is either the lack of government control or too much of it: where the people perceive the government as unresponsive to their basic needs or overly stringent in its control of them.

To varying degrees, all three conditions described above existed in southern Afghanistan in 2006. The vulnerability of the population was rooted in a lack of economic growth. This lack of growth was a product of an agrarian economy focused almost exclusively on poppy cultivation, supplemented by a few low-yielding crops, and dependant on an inadequate water supply. These physical conditions were exacerbated by psychological vulnerabilities: coerced by the Taliban and restricted by the worsening security conditions, many Afghan men were unable to fulfill their basic societal obligation and provide for their families. Symbolically, leadership within tribes remained relatively intact but failed to provide concrete direction out of fear for Taliban reprisal. Most predominant was the perceived lack of government influence in Kandahar Province. The inhabitants of the province, innately sceptical of the concept of central government in the first place, saw little government influence amidst a worsening security environment. Further, the relatively small size of the Afghan National Army meant these forces were rarely seen by the people of the province and the Afghan National Police, through their inconsistent and unprofessional actions, marginalized the legitimacy of the government. In response to these conditions, the majority of the population was ambivalent and passively supported both the Taliban and the government. Amongst the people there was an underlying sentiment to support the government but they feared the withdrawal of coalition forces. The passive support afforded to the Taliban enabled them to move relatively freely throughout the area of operations. It was into this environment TF Orion deployed in February 2006.

Countering Insurgencies

In retrospect, TF Orion did not deploy branded as a “counter-insurgent force” when it left for Afghanistan. Although the term counter-insurgency was used periodically and informally in the days leading up to deployment, there was a reluctance to label operations as counter-insurgency operations, as the resurgence of the Taliban had yet to occur. And that, arguably, had impact. It was only later, in April 2006, when Taliban activity had increased significantly, there was general agreement we had entered a counter-insurgency environment. By definition, “counter-insurgency is those military, paramilitary, political, economic, psychological and civic actions taken to defeat an insurgency.”⁸ Implicit in this definition is the multifaceted approach that must be taken to successfully defeat an insurgency. Galula emphasizes this in stating, “The expected result—final defeat of the insurgents—is not an addition but multiplication of these various operations; they are all essential and if one is nil, the product will be zero.”⁹ From the tactical perspective in 2006 the framework representing these facets existed but there was a disproportionate emphasis on military action probably in no small part due to the worsening security situation. Although the Canadian campaign was in its infancy in 2006, the primacy of the military's role contradicted enduring and proven counter-insurgency practices that dictate the military play a supporting role to political and economic initiatives within the overall campaign. Ideally, the military, with indigenous forces, should focus on the counter-guerrilla aspects of the campaign while other agencies capitalize on the positive security conditions created by the military. It is here that a key characteristic of the Canadian campaign in Afghanistan in 2006 is highlighted. On the ground, the military had the lead role and this had a direct impact on tactical operations. Companies, platoons and sections were the primary face of all facets of the campaign.

In itself, the tactical role of military forces is extremely complex and paradoxical. This statement is reinforced by John Shy as he comments, “The structural feature of modern revolutionary wars that has most impressed intelligent observers is not the use of guerrilla tactics but the triangularity of the struggle. Two armed forces contend less with each other than for the support and the control of the civilian population.”¹⁰ In a

departure from the focus of an enemy's moral and physical destruction and land dominance, all inherent in the Canadian Army's training, TF Orion faced the challenge of unobtrusively dominating the population in an effort to gain its support. Although popular support is variable, there are certain general divisions within it that determine the tactical and operational focus of the counter-insurgent. This spectrum ranges from active government supporters and sympathizers to insurgent supporters, sympathizers and fighters. Those who support the government must be credited and reinforced; those supporting and sympathizing with the insurgency need to be dissuaded and deterred; fighters need to be defeated.¹¹ There is yet another group critical to the fight and represented the majority in southern Afghanistan in 2006. This group was the uncommitted and neutral elements of the population, who through their ambivalence, allowed the insurgents to operate amongst them. As Mao reflected, "they were sea amongst whom the fish (insurgents) swam."¹² In retrospect, and from a personal perspective, when TF Orion began operations, there was an acknowledgement of the importance of focusing on the uncommitted elements of the population and an intellectual understanding of why and how other counter-insurgency operations had succeeded or failed. Moreover, as the security situation worsened, our focus shifted to reinforcing government support through the defeat of insurgent fighters.

The Company Level Counter-insurgency Fight in Afghanistan

It is quite simple to proclaim the intent to conduct counter-insurgency operations, but what did this mean to a rifle company in early 2006? The answer is not simple as the demands of operations were unique and constantly changing. The role of the rifle companies evolved throughout the six-month deployment and each of the companies in TF Orion faced different challenges. However, there were five common and enduring characteristics of company level operations. The first was that the supporters of the Afghan government had to agree, in principle, with our undertakings in order for them to be effective. Not only did this legitimize them and their positions but it solidified and galvanized the relationship between Coalition Forces and the government. In seeking their support we were also able to "test effects" and ensure our actions would not create negative consequences for cultural or underlying reasons we did not understand. Secondly, the blurring of the traditional strategic, operational and tactical levels of war was prevalent and had an impact on the conduct of all operations. Very early on in the deployment, it was recognized that privates and corporals were in fact "strategic". Their role of warrior, diplomat, and builder mirrored the campaign's three lines of operation: security, governance and development. In fact, this operational context was also embedded in the company's baseline mission statement: "B Company will assist Afghans in the establishment of good governance, security and stability, and reconstruction in Kandahar city, Panjwayi, Zhari and Maywand, in order to help extend the legitimacy and credibility of the GOA1 throughout the province of Kandahar." Simplistically, out of this enduring mission came three inter-related general tasks: defeating Taliban guerrillas, improving living conditions for Afghan people and mentoring low-level municipal leaders. The third feature of our operations was the primacy of information operations. These operations are not separate from combat. At the company level they are usually informally executed but are interwoven in every task regardless of purpose. In Afghanistan, perception is often accepted as reality and timely, precise information operations sought to bolster government support and marginalize the insurgency. Although we cannot change the Afghan view of us as foreigners, we found we could communicate effectively through our actions, which played an important role in shaping these perceptions.

The fourth consistent element of our experience was the conduct of simultaneous lethal and non-lethal operations. On numerous occasions, while focused on the delivery

of aid or completion of a low-level quick impact project, contact with the insurgents would ensue. This demanded resolve in both defeating insurgent fighters and completing the primary task. The fifth enduring trait was that very few operations were directed by the battle group headquarters. Operations were developed, proposed, synchronized and executed based on bottom-up intelligence and an understanding of the situation in a specific area. Clausewitz observed, "many intelligence reports in war are contradictory, even more are false and most are uncertain".¹³ We soon realized we could not answer our own information requirements and it was the Afghan population that had the answers. Counter-insurgents must develop strong relationships with local leaders and develop an understanding as to how to best access them. This proved to be a significant challenge. Although generally recognized as common features of the contemporary operating environment (COE), the aforementioned realities demanded an unprecedented level of situational understanding amongst all ranks and close cooperation with Afghan leaders in determining where effort was best focused.

Initially, within B Company, our specific role and general method of operating reflected the outgoing American company we replaced. This company had experienced significant short-term success based on effective and responsive (to local government) lethal action against insurgents, coupled with the infusion of significant funds into projects in the Panjawi and Zhari districts. Its approach to counter-insurgency can be summarized as "clear and build". Similarly, B Company proved capable of successful action against insurgent fighters, but we lacked the access to funds the Americans had for projects. This inability to provide tangible improvements in living conditions created some animosity between us and the population and there was a perception among some locals that we lacked the commitment of our predecessors. The population's view of the coalition forces was critical for us to understand, because in order to gain support at the grassroots level we had to offer the people a better alternative than the insurgency. We quickly learned that decentralization of all types of resources was essential to success in the counter-insurgency fight. Commanders had to have the freedom to set priorities and allocate resources based on their knowledge of a particular area.

In addition to meeting local leaders, building rapport and defining the environment, tasks completed by the company typified those expected within the COE. The critical tasks, those tasks that created the greatest effect to the greatest number of the neutral population, soon became apparent and were rooted in identifying grievances amongst the population. Determining these grievances provided a greater understanding of Afghan culture and circumstance and demonstrated an interest and concern for their well-being. In understanding specific issues, we soon realized we had uncovered an avenue of access to their support and an opportunity to dismantle the negative perception associated with our inability to deliver projects to a level Afghans were accustomed to. It worked at two levels. First, relying on our collective and ingrained experience from peacekeeping operations and capitalizing on the innate resourcefulness of the Canadian soldier we aimed to solve practical problems. One solution might be as simple as making minor improvements to a road to enable farmers to take their produce to market and represented the Canadian equivalent to our predecessors "build". Second, we aimed to support the Afghans in being responsive to their local security concerns. Afghans admire the qualities of strength and power and seek to be associated with the side they view as most powerful. Our response to an event such as the ambush of a police patrol was seen as a demonstration of commitment and resolve. These actions also had a secondary effect of maintaining the honour and integrity of local leaders and the government. Throughout the deployment and based on an increased understanding of the dynamics of the environment, we achieved a

reasonable degree of success in leveraging resources to achieve the greatest effects possible.

Another key shift that occurred during TF Orion's deployment, and one that was experienced by all rifle companies, was the move to forward operating bases in an effort to live amongst the population. Whereas the American unit we replaced operated from the Kandahar Airfield (from which they patrolled frequently and aggressively), TF Orion rifle companies moved to operating bases throughout the area of operations. In the case of B Company, we occupied two District Centres adjacent to Pashmul. Although this increased the percentage of forces within the company dedicated to force protection and increased sustainment tasks, the benefits were great. By the very nature of our presence, the insurgency was disrupted and de-legitimized as locals saw it as a deterrent to insurgent activity. This immersion within the population significantly increased interaction with local leaders, villagers, police forces, and improved relationships. Most importantly, perhaps, it resulted in improved intelligence gathering and increased responsiveness. In an extremely large area of operations, the increased responsiveness created an effect of appearing "larger than we were" and kept insurgent fighters off balance. In an evolution from the "clear and build" approach adopted by the company we replaced, B Company and TF Orion as a whole added another element to the tactical framework and focused on "clearing, holding and building", and endeavoured to "put an Afghan between us and problems that we encountered"¹⁴. Without fail, the Afghan solution proved to achieve greater long-term results.

Organizing for Success

From our experiences in Afghanistan, the Canadian infantry rifle company, with a variety of all arms attachments, other government departments (OGD) representatives and indigenous forces, proved to be the cornerstone organization required to successfully conduct operations across the spectrum of conflict. This suitability is rooted in a number of characteristics. In general, the majority of operations were decentralized and even when tasked to secure an operating base, the current infantry company had all the requisite resources to live, move, fight and survive independently. We found every task had the potential to become a company-sized operation and the size and robustness of the current organization promoted agility and flexible response. Further, the inherent depth in the command and control structure within the company headquarters provided sufficient command support to the company commander to increase his span of control and synchronize all elements during the fight, maintaining unity of command. The headquarters was also manned to complete effective low-level staff planning, intelligence collation and analysis, all of which are vital to counter-insurgency operations. There are a variety of employment options for the two captains in the company headquarters (company second-in-command and battle captain) but in general one of these captains can be employed in the command post, tracking the battle and organizing intelligence. Another trait of the rifle company that lends itself well to counter-insurgency is its size in terms of the number of soldiers. We found that the interface with the population increased because of the number of soldiers who could be deployed dismounted. In this regard, every soldier is used as a sensor but they are also key messengers to the population.

One aspect of a rifle company's organization that is uniquely Canadian is the use of the light armoured vehicle (LAV). B Company used a mixture of LAVs and G Wagons successfully. In a counter-insurgency environment the use of armoured vehicles has advantages and disadvantages. Clearly, they offer protection and prevent casualties, thereby denying insurgents the perception of victory while protecting Canadian public

support. Additionally, the LAV in particular, is an exceptional weapons platform. It also provides excellent surveillance, specifically in conditions of low visibility. All these capabilities had the added bonus of increasing the confidence of the Afghans working with us and, more generally, all coalition forces. The downside, of course, is that relying on mounted operations and the tactics associated with armoured vehicles reduced our flexibility and further separated us from our key terrain—the main point of our effort—the indigenous population that had not firmly committed to the insurgents' cause. Although these disadvantages need to be considered, and soldiers especially need to be seen among the people, our experience was that the advantages of the vehicle outweighed the negatives in achieving the aims of the campaign. The LAV and its potential as a deterrent could be leveraged to provide overwatch for dismounted troops working with the local Afghans.

Defeating the Guerrilla

Guerrillas, like conventional warriors, view war as a means to achieve political objectives. Guerrillas are the military arm of the insurgency and distinguish themselves from conventional enemies by their aims and the manner in which they fight. When contrasted to the capabilities and objectives of the counter-insurgent there is significant asymmetry. The use of classic guerrilla tactics by insurgents is an acknowledgement that they cannot successfully confront a conventional military force. For the most part, this underlying tenet was reflected in the tactics employed by the Taliban in 2006. They are best summarized by Mao, "The enemy advances, we retreat; the enemy camps, we harass; the enemy retreats; we pursue."¹⁵ The reality of these tactics can be further summarized: "The enemy will never attack a force to destroy. It will never get in a fight it can't win. It merely attempts to 'attrit'¹⁶ or harass effectively."¹⁷ Simply put, the guerrilla fights to survive, divert counter-insurgent attention from the population and outlast the political will of the counter-guerrilla. As has become folklore in Afghanistan, the Taliban have often exclaimed, "the Coalition may have all the watches but we have all the time".¹⁸ It was this type of enemy that confronted TF Orion.

Although trained for and confident in our ability to win in the traditional close fight, this kind of engagement becomes infinitely more complex when the enemy lives and fights amongst the people, and the battleground is the local village compound. The soldiers of B Company experienced this reality on numerous occasions. I can recall driving along Highway 1, west of Kandahar City, and being ambushed, thus causing a traffic jam. After the engagement was over, the normal flow of traffic resumed. I can also recall seeing successive air strikes in Pashmul as life continued with relative normalcy on the highway a kilometre away. Fighting guerrillas is a key part of counter-insurgency warfare as they are the most obvious impediment to improving security. In effect, military action disrupts the insurgency, buying time for governance and development initiatives to gain traction. Although blurred with the seemingly competing tasks along the other lines of operations this was certainly true at the company level in Afghanistan.

To kill or not to kill? This is a common question faced by the counter-insurgent and one a soldier engaged in a conventional close fight would not take long to consider. In counter-insurgency, killing the enemy does not necessarily result in success and in fact can create greater negative effects than not killing him. This is not to suggest there are not insurgent fighters who need to be killed; but it must be remembered that killing insurgents has relatively short-term effects when what is really sought are long-term effects. As an example, in Pashmul in 2006 it was well known the Taliban were paying local farmers, who were unable to harvest their grape crops as a result of ongoing fighting, to conduct ambushes along Highway 1. Although unpleasant at the time, these ambushes were relatively ineffective in terms of hurting us. The mere fact of their

occurrence, however, destabilized security and prolonged the problem that induced the farmers to operate against us in the first place. Moreover, although Taliban fighters were killed when we responded to these ambushes, in some instances so were farmers, and as a result we saw the insurgency steadily grow and gain more intensity. The people of Pashmul were losing their sons at the hands of the coalition, a fact the Taliban used to gain the support of the villagers. Although the situation was more complicated than described, it highlights the delicate issue of applying deadly force and hints at the validity of another enduring counter-insurgency tenet: guerrillas need to be defeated with the minimum use of force. This was again evident in a specific incident where the Taliban used a graveyard to fire mortars at one of B Company's operating bases. We knew they were firing from this location but to return fire into a graveyard would have had extremely negative effects and had the very real potential of turning neutral elements of the population into insurgent supporters. While all ranks well understood the concept that, in contrast to conventional operations focused on the enemy and ground, our focus was human terrain and gaining the support of the Afghan population, the reality that sometimes it was better not to shoot took time to comprehend. This environment demanded adaptation and introspection as to how the Taliban could be defeated without eroding support of the populace.

An indication of the requirement to adapt was the concept of defeating rather than destroying insurgent fighters. Developed by the Commanding Officer of TF Orion, this unofficial mission task was defined as, "diminishing the effectiveness of the enemy so that they could not sustain their presence or any action so that the initiative is lost and they are unable to move freely and influence the population."¹⁹ This definition and the context in which it was delivered, is symbolic and represents the maturation of a Canadian tactical unit in the field adapting to its environment. At the company level there was significant imagination applied in defeating the enemy that focused on physically separating the insurgents from local Afghans and creating an environment in which they could not operate. More often than not, this did not include direct action against fighters but rather denied them access to resources they relied upon.

Conclusion

Just as it was in 2006 the war in Afghanistan continues to be a test of wills. In this limited, protracted war, success will come as a result of the Government of Afghanistan and its coalition partners maintaining an unwavering resolve that transcends the tactical, operational and strategic levels. In this conflict amongst the people that continues to evolve, the Canadian Army has demonstrated its ability to learn and adapt. I experienced this firsthand in B Company, TF Orion in 2006 at a time when rifle companies were the face of the Canadian campaign. In particular, these organizations achieved positive results while performing tasks to which they were unaccustomed. Prepared for the conventional close fight but possessing an understanding of the requirements of stability operations from years of peacekeeping, the company performed well within a counter-insurgency environment. During the early days of the deployment of TF Orion, soldiers developed an awareness of the complexities of counter-insurgency and in a few short months that awareness turned into understanding and an increased ability to fulfill the roles of warriors, diplomats and builders. Although we, as professionals, are in a position to measure our performance, it is the Afghan people who ultimately will measure our effectiveness.

About the Author ...

Major Jason Adair joined 3 PPCLI in 2000 serving as a Rifle Platoon Commander for two years that included a deployment to Afghanistan as part of Operation APOLLO. He was then posted to NDHQ for two years as SO DGIMSD. He was posted to 2 PPCLI in 2004 and was a Company 2IC during Operation ARCHER, Roto 1 in 2006. Upon return, he became the Adjutant of 2 PPCLI and is currently the Operations Officer preparing to deploy to Afghanistan as part of the TF 1-08 BG.

Endnotes

1. Carl von Clausewitz, *On War*, Ed and trans by Michael Howard and Peter Paret. Princeton: Princeton University Press, 1984, p. 122.
2. This deduction is based on the author's experience within a rifle company after taking over from a unit of the 173^d Airborne Brigade in February 2006.
3. Definition as developed by a counter-insurgency study group during USMC Joint Warrior 2005. This definition has been adopted by the Canadian Army and is cited in B-GL-323-004/FP-003 Counter-insurgency Operations (Final Draft) Chapter 1, p. 2/24.
4. An overview of Pashtunwali can be found at Wikipedia: <http://en.wikipedia.org/wiki/Pashtunwali>, accessed 30 August 2007. See also Barnett Rubin, *The Fragmentation of Afghanistan*, New Haven, CT: Yale University Press, 2002, pp. 28-29.
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6. The fact that tribes will unite to fight a common foe is a common theme in Afghan History. See Willem Vogelsang, *The Afghans*, Malden, MA: Blackwell Publishers, 2002, pp. 311-314.
7. Mark Ulrich, Presentation given during the US Army/US Marine Corps Counter-insurgency Seminar, 21 July 2007, Fort Leavenworth, KS.
8. Definition as defined by the NATO Allied Administrative Publication (AAP) 6 NATO Glossary of Terms and Definitions. This definition has been adopted by the Canadian Army and is cited in B-GL-323-004/FP-003 Counter-insurgency Operations (Final Draft) Chapter 1, p. 3/24.
9. David Galula, *Counter-insurgency Warfare: Theory and Practice*. Westport, CT: Praeger Security International, 2006, p. 61.
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11. This summary is based on the model provided in the USMC Small Unit Guide to Counter-insurgency, Quantico: US Marine Corps Combat Development, 2006, p. XX.
12. As cited in Frank Kitson, *Low Intensity Operations: Subversion, Insurgency and Peacekeeping*, London: Faber and Faber, 1971, p. 49.
13. Carl von Clausewitz, *On War*, Ed and trans by Michael Howard and Peter Paret. Princeton: Princeton University Press, 1984, p. 75.
14. This was a common phrase used by the 173^d Airborne Division. Email from US Army Major Matt Seifert 12 September 2007.
15. Mao Tse-tung, *Selected Writings of Mao Tse Tung* as cited in Robert Taber, *War of the Flea: The Classic Study of Guerrilla Warfare*, New York: Brassey's, 2002, p. 17.
16. Attrit—military jargon for causing attrition losses to the enemy.
17. This was another common phrase used by the 173^d Airborne Division. Email from US Army Major Matt Seifert 12 September 2007.
18. David Barno, "Challenges in Fighting a Global Insurgency", *Parameters*, Summer 2006, p. 24.
19. "Defeat" as defined by Lieutenant-Colonel I.C. Hope, Commanding Officer, this was briefed to TF sub-unit commanders at a War Cabinet 19 May 2006.

LEARNING FROM THE SEVEN SOVIET WARS: LESSONS FOR CANADA IN AFGHANISTAN

Captain Nils N. French

In the final days of 1979, the Soviet Union, under the direction of the Soviet General Secretary Leonid Brezhnev, invaded Afghanistan.¹ Soviet Special Forces and KGB agents assaulted Tajbeg Palace and executed President Hafizullah Amin the evening of December 27th as Soviet ground forces started their entry across the northern border. Brezhnev had decided to intervene when it became clear that Soviet advisory and aviation support to the threatened Afghan government was insufficient. Recent governments had attempted to reform the country too rapidly, making Afghanistan vulnerable to an Islamic overthrow similar to that of Iran. This, combined with numerous other reasons, led Moscow to its decision. Soviet forces faced an immense challenge. It was presented with not only the vast and rough terrain of Afghanistan, but also by its xenophobic Islamic population, which at the time was in a state of civil war. Fighting from ambush sites inherited from their ancestors² and aided by men and materiel from around the world, the Afghan mujahideen fought a protracted insurgency against the Soviets. Although Soviet military forces completed every military task they were assigned, the tactical victories combined to result in strategic failure. Analysis through the lens of an appropriate model clearly demonstrates why.

Our nation, as part of the international community, currently faces a very similar challenge and has approached it in a somewhat similar manner. Although the Soviet experience is often dismissed as a complete failure, referred to only as proof that stability in Afghanistan is unachievable, it offers many lessons. The most important lessons are focused on as an analysis of the Soviet case as compared with an analysis of the current situation. This focus is achieved with the use of the SWORD model, an empirically-developed framework that presents seven dimensions or 'wars' that must be won for a given counterinsurgency effort to succeed. The seven wars are:

- ◆ the legitimacy war;
- ◆ the shooting war;
- ◆ the war to isolate insurgents from internal support;
- ◆ the war to isolate insurgents from external support;
- ◆ the war to stay the course and maintain commitment;
- ◆ the intelligence and information war; and
- ◆ the war for unity of effort.

In the legitimacy war, the shooting war, and the war to stay the course, the considerable advantages and notable achievements of Canada's current effort contrast those of its predecessor. In the other wars, similarities emerge with respect to the challenges faced and the mistakes being made. The advantages that benefit Canada and its allies are presented as are examples of the progress they have made in comparison with the

Soviet approach. More importantly, clear lessons for the Canadian involvement in Afghanistan emerge, allowing leaders to step forward while keeping the past in mind.

The SWORD Model

The effectiveness of the SWORD model originates from the empirical approach used to develop and validate it. In the late 1980s, Max G. Manwaring, current General Douglas McArthur Chair of Research at the Strategic Studies Institute of the US Army War College, studied 43 post-Second World War insurgencies to distill from them the correlates of success.³ The end result was a set of seven 'dimensions' or 'wars within the war' that could be used to predict the outcome of a counterinsurgency effort. To later test the model, Manwaring partnered with John Fishel and identified 72 variables likely to affect the outcome of an insurgency. He then developed a questionnaire where the importance of each of these variables to the eventual outcome of the insurgency could be rated on a four-point scale. The questionnaire was given to a number of experts that were directly involved in the conflict or had intensely studied its history. Each insurgency was also rated as a win or a loss. This data was then statistically combined and used to test the SWORD model against five other models. The SWORD model rated highest, outscoring the closest competitor by 20 per cent.⁴

Such an approach is rare, but vital when attempting to study such a vast collective experience. Works on counterinsurgency are often based on a single conflict. Other works look at several different counterinsurgencies and the author judges which elements are the most important, often selecting common factors based on their individual merit, rather than their value as part of an integrated whole. Doctrine attempts to overcome this by combining the lessons of great swaths of military experience and the works of numerous different authors, thus inheriting the faults mentioned above. Military leaders or decision-makers can choose to focus on certain elements of doctrine more than others, distorting doctrine while locked in the "vice of previous (and often limited) experience."⁵

Manwaring did not theorize any of the dimensions of the model. He and John Fishel have indicated that the model is "original only in the way that the dimensions were combined and in how they were derived and tested."⁶ Those that may be inclined to see the model as too abstract and academic in nature, perhaps proclaiming themselves as more 'reality-oriented,' are thus forced to accept that the only academic element was the actual method of refining the collective decades of field experience that form its source data.

At the same time, Manwaring was mindful of the fact that "every conflict is situation-specific" but also contended that no situation is entirely unique.⁷ For the development of the model he therefore focused on the "analytical commonalities"⁸ of counterinsurgencies. In addition, the common elements are often those that are large-scale and most important; the elements that are uncommon between situations are typically less important.

The SWORD model (or Manwaring Paradigm) has been tested time and time again. Early analysis validated the model, showing it capable of correctly predicting the outcome of a counterinsurgency nine times out of ten,⁹ with the tenth usually being some obvious anomaly.¹⁰ More than two decades of use have further polished and tested the model since. In the words of the model's creators: "Although the model has been refined over the years, we have not been able to refute it. And we have certainly tried."¹¹

In short, evidence demonstrates that a challenged government must adhere to the dimensions of the SWORD model if it wishes to defeat a given insurgency. The

converse is also true; failure to do so will result in the eventual failure of the challenged government and those that have come to its aid.¹²

Approach

This paper will first seek to point out where Canada and its allies have considerable advantages and have made considerable progress over the Soviet experience in Afghanistan. More importantly, the paper will draw from the Soviet experience the most salient lessons for Canada and its allies. The seven dimensions or seven 'wars' of the SWORD model will be used to narrow the focus onto the elements that are most critical.

When discussing Soviet involvement, the term *mujahideen* will be used to describe both the local and foreign fighters that fought the Soviet presence. The term is meant to include both the rebel fighters and also everyday Afghans who sought to protect their local tribal interests. The term Soviet security forces will be used to describe all elements of the Soviet Army, Navy, and Air Force, and will also include the KGB and other paramilitary elements.

When discussing Canadian and international involvement, to prevent the oversimplification that would result from the use of solely "al Qaeda" or "Taliban", I will borrow the term "anti-government forces" (AGF) from Colonel Thomas Hammes' *The Sling and the Stone* to describe the mélange of actors that we are countering in Afghanistan.¹³ The term will be used to describe the full spectrum of al Qaeda, Taliban, warlords and their militias, smugglers, drug dealers and others seeking personal gain, as well as personnel working covertly for foreign powers. Afghan citizens that have turned to violence out of frustration, revenge, or anger and actors that American General Robert Durbin labels "anti-change forces," which is to say any other actor wishing to preserve the status quo, are also included.¹⁴

Furthermore, the term "international security forces" will refer to troops of both the NATO ISAF (International Security Assistance Force) mission and the US-led OEF (Operation Enduring Freedom), including all Canadian troops. The term "Afghan security forces" is used to describe the Afghan National Army, the Afghan National Police, and other elements like the Afghan Border Guards.

The Legitimacy War

For the legitimacy war to be won, a supported government requires a high degree of domestic support, the ability to govern its people, a low perception of corruption, and a low incidence rate of political violence (indicating that issues were instead resolved through the democratic process)¹⁵. Statistical analysis of the SWORD model has firmly established the primacy of this dimension.¹⁶ The war that the Afghan government fought to preserve and increase its legitimacy was (during the Soviet war) and is (for our war) the most important of all seven. The Soviet-supported government lost the war for legitimacy in Afghanistan but Canada and its allies have considerable advantages in this war.

During the Soviet war, the Afghan government had little domestic legitimacy. The President, Babrak Karmal, was illegitimately put in power by the Soviets and was widely regarded as a puppet of the USSR.¹⁷ When looking at the current situation, the importance of Karzai's election in October of 2004 (with a voter turnout of 80%) cannot be understated.¹⁸ Karzai won with 55% of the vote, far ahead of his nearest competitor, establishing a legitimacy that the transitional government, or any government before it, did not have. Candidates agreed that these elections were free and fair, despite some minor discrepancies of process.¹⁹ Elections held for the National Assembly and provincial council were conducted in September 2005 and continued the momentum.

This presents a marked departure from the Soviet experience.

The legitimacy of intervening international powers must also be considered, as their legitimacy affects the legitimacy of the Afghan government by association. Moscow asserted that Afghanistan had asked for Soviet military assistance, but the Afghan government was under their full control.²⁰ Regardless of what reasons the Soviet Union gave for their involvement, be it the request for assistance or several other possible reasons, the invasion was seen as illegitimate by the international community and the USSR paid a heavy price for its actions over the next several years.²¹ Specifically, the Soviets were condemned by an overwhelming vote in the UN General Assembly immediately following the invasion and a resolution was passed calling for their withdrawal. The general Assembly continued with similar efforts through the entire conflict. Military action was ruled out by the use of the Soviet veto in the Security Council, but the illegitimacy of the Soviet actions (and the Afghan government by association) was obvious.

The legitimacy of the involvement of Canada and its allies is quite different. In Afghanistan, both Operation Enduring Freedom and NATO began operations under UN mandates; the two were established under resolutions 1368 and 1386 respectively. Other resolutions followed and the Security Council continues to be actively involved with efforts in Afghanistan. Broad participation on the part of the international community, particularly with respect to the NATO mission,²² also serves to increase the legitimacy of the international involvement in Afghanistan.

Another problem during the Soviet war was the very limited ability of the government to govern its people. Given Afghanistan's physical and social terrain, little more than control of the main cities was accomplished at the best of times. The same challenge exists to some degree today, but international assistance has helped considerably in expanding government influence. Corruption was also a problem: members of the poorly disciplined Soviet military were frequently using their positions for personal gain;²³ and the same was true of the Afghan regime in power.²⁴ This problem persists, but is less pronounced. Militaries are now a positive influence as opposed to a negative one in this regard. Political violence, including numerous assassinations of public figures and attacks on government forces and infrastructure were widespread during the Soviet occupation²⁵ and the same problem exists now. The solution to this last issue will not be direct and improvements in other areas will best remedy the situation.

The relative advantages that Canada and its allies hold in this war are considerable. UN mandates, the democratic election of President Karzai and the expanding ability of Kabul to govern the nation present a sharp contrast to the situation the Soviets faced.

The Shooting War

This dimension of the counterinsurgency deals directly with the intervening and domestic security forces. The model indicates several key guidelines for both. Considering the intervening forces, the data indicate that the use of relatively small numbers of foreign troops in primarily a support and training role will win this war.²⁶ The SWORD model requires that domestic security forces be well trained and highly-disciplined, willing to take casualties, and capable of effective small-unit tactics if they are to contribute positively to overall chances of success in the shooting war.²⁷ The Soviets lost the shooting war in Afghanistan, but Canada and its allies are doing much better.

With respect to the intervening Soviet forces, several elements of the occupation went against the tenets of the SWORD model. First, a large force was employed. Soviet troop strength has been reported as somewhere from ninety to one hundred thousand

and the total rises to more than two hundred thousand if one includes civilian advisors stationed in Afghanistan, other forces that were part of the operations but garrisoned in the USSR, and the airmen that flew from airbases in Soviet territory across into Afghan airspace.²⁸ Furthermore, although attempts were made to remain in a training and support role, the majority of Soviet troops were heavily engaged in combat.

With respect to the current situation, OEF and NATO have kept the number of troops in country below fifty thousand²⁹ and recent operations have shown a transition toward Afghan troops leading with international forces in support.³⁰ By keeping the troop count down to less than one half of what the Soviets had in theatre and by more effectively transitioning those troops to a support and training role, Canada and its allies appear more like an assistant than an occupier.

The troop numbers have, however, been increasing since the outset, mostly because building the necessary political will and military infrastructure is a long process. It will be important for the international community to gradually reduce troop strength as the Afghan government becomes stronger. It can easily be argued that the forces are required for security in the absence of a fully-capable Afghan force, but steady troop increases indicate that leaders perceive the problem as being primarily military in nature, which it is not. The SWORD model indicates the chances for failure of a counterinsurgency effort increase as the military actions of intervening powers become more intense and voluminous.³¹

When considering the indigenous Afghan army during the Soviet war, we must first consider the fact that they were trained by Soviet troops. If, by the SWORD model, troops had to be well-disciplined and highly-trained, the *undisciplined* and *poorly-trained* Soviet conscripts were likely not the best instructors. The result was an Afghan army that quickly lost half of its authorized ninety thousand men, primarily to desertion, in the early half of the war.³²

The present-day Afghan security forces are developing slowly but surely. The Afghan National Army (ANA) currently has a total of more than thirty thousand troops and is growing at a rate of one thousand per month with expectations for the final target of seventy thousand to be attained by 2009.³³ The ANA, despite some difficulties, including vulnerabilities to insurgent penetration and problems with junior leaders, is faring relatively well as an indigenous force when compared to those of other countries dealing with Islamist insurgency.³⁴ Canadian forces have credited them with impressive bravery and resolve.³⁵

Although training is cited as weak,³⁶ the expansion of the Afghan National Police (ANP) is also on track, with the force now numbering thirty-seven thousand.³⁷ The police force has seen a reduction of corruption through wage increases,³⁸ a rapidly increasing experience base and continual learning through close relations with professional international security forces. Billions of dollars of new equipment is arriving and will be phased in to meet requirements.³⁹

On the whole, Canada and its allies are ahead of their predecessors in the shooting war. With fewer troops in theatre, and with those troops performing more of a training and support role, chances for success are higher. Comparatively, more progress has also been made in developing Afghan security forces.

The War to Isolate the Insurgents Internally

To win this war, the intervening powers and the host government need to isolate the insurgents from their national and local sources of support and deny them sanctuary within Afghanistan's borders. The Soviets made some progress in this area, but lost this particular war. Canada and its allies have been having problems as well.

As with many insurgencies, the Afghan insurgency against the Soviets was internally supplied by locals that were supportive of the insurgent cause. Villagers would supply food, water, medical treatment, shelter and sometimes weaponry to the mujahideen as they traveled to complete their missions against the Soviets. Knowing this, the Soviets sought to both depopulate areas of the country and eliminate food production, thus “draining the pond” so that the “fish” could be caught. The Soviets bombed granaries, villages, destroyed crops and irrigation systems, mined fields and pastures and slaughtered herds of animals.⁴⁰ The entire agricultural system was essentially destroyed.⁴¹ These efforts did bring some success in this war, with the mujahideen approaching famine in some areas from 1985-1986,⁴² but the negative impact on the intelligence and information war far overshadowed any gain. Furthermore, losses in the intelligence and information war led the local population that remained to support the mujahideen, essentially bringing things full circle.

In the present situation, the Afghan population is shifting closer and closer to the government side, which sees them supporting the AGF less and less. The only possible exception is the southern ‘Pashto belt,’ which includes Kandahar province. In the Pashto belt there have been several challenges to government control in the last few years. Difficulties encountered in the Pashto belt also come as result of a certain ideological sympathy and the shared ethnicity and religious beliefs between the Taliban and the local tribes of these areas.

Other sources of support and supply for the mujahideen included Soviet troops trading their weapons to obtain drugs,⁴³ Afghan army deserters who left with weapons and ammunition,⁴⁴ and large quantities of arms, supplies, and even vehicles that were captured in frequent convoy attacks.⁴⁵ Furthermore, heavy Soviet bombing throughout the war had the side effect of littering the country with unexploded ordnance. The mujahideen would then use these munitions against the Soviet and Afghan troops, detonating them under bridges, viaducts, and roads as convoys passed by. Soviet mines were carefully dug up from known minefields by the mujahideen fighters and replanted elsewhere with the same devastating effect.⁴⁶

Looking at the current situation, the discipline of the international security forces is much higher and trading weapons for drugs is unheard of. The Afghan army has fewer problems with desertion than in the past, and anti-government forces rarely capture supplies from security forces. The amount of bombing being done is minimal and the percentage of munitions that fail to detonate (also known as the ‘dud rate’) is much lower. In fact, unexploded ordnance and land mines are being disposed of by security forces and humanitarian agencies with over two million pieces of UXO and thirty thousand mines disposed of in 2005 alone.⁴⁷

Leaving support from the population to be discussed later, the trend in this war is opposite to that which the Soviets faced. Soviet military activities increased internal supply for the mujahideen in unforeseen ways, Canada and her allies are steadily reducing it.

The War to Isolate the Insurgents Externally

This war’s objective is to isolate the insurgents from regional and international sources of support. This is best accomplished early in the conflict and is won when they have limited sanctuary outside the country and are isolated from their main sources of external support. On the whole, the Soviets lost this war. Canada and her allies are losing as well.

The major conduit of external support for the Afghan insurgency was and still is through Pakistan. The border was not closed off by the Soviets during the conflict,

although attempts were made,⁴⁸ including the use of scatterable mines.⁴⁹ The mountainous terrain and sheer vastness of the border area made the task extremely difficult, and the same challenges exist today. Notwithstanding Soviet efforts, arms, personnel and supplies continued to flow.

The current situation is similar. Although Pakistan has made efforts to secure the border areas, the Pakistani government surrendered almost all influence in the border areas by withdrawing its forces in September of 2006.⁵⁰ Pakistan aside, US forces have made progress in the area, although mostly within Afghan territory,⁵¹ and are putting forth an increased effort for border security.⁵² Unfortunately, if the Pakistani Army could not close off the border with upwards of one hundred thousand troops in the area, then Afghan and international security forces much more limited in numbers will likely not be able to either. When the freedom of action that the AGF and their allies now have in the border regions on the Pakistan side is combined with the porous thousand-mile border between Pakistan and Afghanistan, the insurgency has an open supply line of men and materiel and the capacity to cross over into sanctuary as needed. The prevalence of violence in the Pashto belt, which lies along the border with Pakistan, quickly demonstrates the end effect.

During the previous conflict, the United States, Saudi Arabia, and China⁵³ were the major supporters of the mujahideen. The massive influx had a noticeable effect on mujahideen assets; for example, the Panjshir valley was defended by thirteen heavy machine guns in 1982 and by two hundred just two years later.⁵⁴ China provided anti-aircraft guns, machine guns,⁵⁵ and mortars. The United States cooperated with Egypt⁵⁶ and Pakistan to supply small arms, rocket-propelled mine-clearing charges,⁵⁷ stinger and SA-7 surface-to-air missiles (in 1986), and mortars.⁵⁸ External support of this nature is reported to have started as early as 1980.⁵⁹ Military equipment items including sleeping bags, blankets, and boots were also provided.⁶⁰ In fact, some factions of the mujahideen were so well resourced that Soviet soldiers were known to pillage the dead mujahideen after firefights for supplies.⁶¹ The insurgent forces in the current conflict do not enjoy the support of a major world power and the impressive supply that this would provide, although a number of non-state actors do provide support.

Canada and her allies do profit from a degree of advantage given that no international power supports the AGF as was the case for the Soviets, but support provided by non-state entities still flows relatively freely across the Durand Line. This supply must be severed. The Soviet experience offers clear lessons for the war to isolate insurgents externally.

The War to Stay the Course

Success in this war is achieved through the sustained support of the threatened government by the intervening power. Key elements include consistent military support and a high degree of long-term overall commitment. Experience shows that when aid is withdrawn, the likelihood of success is greatly reduced.⁶² This war was lost by the Soviets, but is being won by Canada and its allies.

The overriding factor with respect to this dimension was the complete Soviet withdrawal from Afghanistan. Starting in October of 1988, troops were pulled out in two phases, with the last troops leaving in February of 1989.⁶³ The withdrawal came during the tenure of Mikhail Gorbachev, who had ordered victory in 1985 upon taking power.⁶⁴ Victory seemed impossible and orders were given to bring the troops home in 1986. Reasons included a lack of overall progress and low domestic support for the war. From a military perspective, the Soviet brass had requested withdrawal continually since the early years of the conflict.⁶⁵ The withdrawal of Soviet troops and most of the Soviet assistance paved the way for continued civil war and the capitulation of the Afghan government three years later.

Canada and its allies face the same 'asymmetry of stakes' that the Soviet Union did. In essence, winning means everything to the AGF and much, much less to the citizens of the troop contributing nations that are thousands of miles away.⁶⁶ The most critical element of this dimension is the popularity of the Afghan mission amongst the voting public. The stated goals of terrorism prevention and international security seem to have resisted public scrutiny rather well and are perhaps what keep the political will alive. Without such elements of national interest, the humanitarian appeal of the mission alone would likely be insufficient to maintain the necessary support and tolerance for casualties.⁶⁷ Governments have stressed the terrorism and international security aspects accordingly and must continue to do so. Leaders of troop-contributing nations have also been forthcoming, ensuring their populations realize that restoring stability to Afghanistan will take not years, but decades. They have also prepared them for the potential deaths of their soldiers. This shows that the politicians understand that a sustained long-term effort is required and also prepares the public for what will hopefully be a lasting effort.

Although the SWORD model holds that the outcome of any counterinsurgency is not determined primarily by the military battles that are fought,⁶⁸ one aspect of these battles does have a major (albeit indirect) impact on this dimension: the number of casualties. The military success that is important here is not so much the defeat of enemy forces, but minimizing casualties among our own troops while they attempt to do so. Here we can notice a major difference between the current experience and the Soviet experience. Current casualties in Afghanistan are in the area of five thousand and there have been five hundred fatalities (all nations). Total Soviet tally consisted of *four hundred thousand* taken casualty by injury or disease (typhoid and hepatitis were rampant) and fatalities in the area of *fifteen thousand*.⁶⁹ Advances in force protection, training, tactics, and medical countermeasures and treatment are partly responsible and the current operation is much more politically sustainable as a result.

Canada and her allies have suffered far fewer casualties and up to this point have been relatively steadfast in their support, maintaining or expanding their commitment as they move past the point in time where the Soviet government decided to withdraw. This, if continued, provides a considerable advantage in the war to stay the course.

The Intelligence and Information War

This war aims to win the support of the population and gain intelligence that will lead to the defeat of insurgent forces and their operational and leadership structures. In the information war, the security forces must counter the insurgents without alienating the local population.⁷⁰ If conducted successfully, the information war will often lead to success in the intelligence war by increasing the likelihood of support from the local population who will be more inclined to provide critical information to security forces. When analyzing the Soviet experience in Afghanistan, one notices a token attempt to gain support of the Afghan people that was far overshadowed by several overriding actions that lost this war for the Soviets. Canada and its allies have made a considerable effort to gain the support of Afghans but must still make improvements when it comes to keeping the support of the population.

Having some understanding of the importance of winning the hearts and minds of the people, the Soviet/Afghan forces took some actions with this in mind. Orphanages were built, medical treatment was provided, civil affairs teams were used, and entertainment was planned for villages.⁷¹ The Soviets also distributed food and other supplies.⁷² Furthermore, having understood the negative stigma surrounding communist atheistic beliefs, the Soviets ensured that Islam was guaranteed preservation as a sacred religion in Afghanistan's constitution while at the same time working to repair mosques, build Islamic schools, and give extra funding and supplies to religious leaders.⁷³

While it is certain that these actions increased support for the Soviet and the Afghan government forces, their positive impact was eliminated by both collateral damage and the intentional damage to fields and villages mentioned earlier in this paper. Over the course of the war 1.3 million Afghans were killed,⁷⁴ 4 million became refugees, and 2 million were internally displaced.⁷⁵ As a result, the Afghan population was reduced to one-eighth of its pre-war numbers.⁷⁶ All of this came primarily as result of Soviet attacks and destruction, most often in the form of indiscriminate bombing as the Soviets opted to use firepower instead of men.⁷⁷ The atrocities gave the mujahideen the will to fight, motivated the population to support them, and eliminated any possibility of gaining vital human intelligence.

In terms of reconstruction, Canada and her allies have completed projects similar to those completed by the Soviets, albeit on a much greater scale. In Kandahar alone, 700 local projects have been completed by community development councils empowered by the international community. Canada's contribution includes more than 1,000 wells, drainage and irrigation works, 150km of roads and bridges, generators and power lines, and schools and health clinics.⁷⁸

The goodwill generated by these projects cannot be understated, but it can be undermined. Collateral damage, no matter how limited, will have some degree of negative impact on the information war (and the associated intelligence war). A senior Afghan minister described the effects best when he indicated that "every time there is a bombardment in the south, it affects the credibility of the Afghan government."⁷⁹

Furthermore, the Afghan poppy fields that fuel the opium industry have either been destroyed or are believed to be threatened with this fate. As a result, the local population has either lost or is at risk of losing what they believe to be their only viable livelihood given the current situation in the troubled country. This has resulted in a resistance to government control followed by an increased acceptance of the AGF who in turn serve to protect crops from government destruction.⁸⁰ The Soviets destroyed crops that the Afghans needed for food; some of the forces in Afghanistan now are burning crops that the Afghans need for income to buy food. The end result is the same.

The Soviet-Afghan war demonstrated that collateral damage can have negative effects that far outweigh their tactical gain. Although Canada and its allies have exercised restraint far beyond that of their predecessors, a greater advantage can be gained by further adjusting the approach.

The War for Unity of Effort

Winning the war for unity of effort requires that parties involved with countering the insurgency cooperate for success. Those involved primarily include the host nation, the intervening power or powers and the different military elements. All of these actors are interconnected in numerous ways. If authority becomes ineffective and fragmented, problems become much more difficult to resolve and failure will likely follow.⁸¹ The Soviets lost the war for unity of effort in Afghanistan, Canada and her allies are facing a similar fate.

Regarding the Soviet war, reports expose incidents of Afghan military officers both subverting the regime and refusing to cooperate; at one point the entire leadership of the Intelligence Directorate of the Afghan Ministry of Defence was arrested for collaborating with the enemy.⁸² It should be noted that the minimal respect that the Soviet commanders had for indigenous troops had some role in this as well.⁸³

While it is difficult to judge the current situation without being on the ground, a series of shootings where Afghan security forces were mistakenly targeted by Canadian and other international forces indicate less than ideal relations. The separate OEF and NATO chains of command also cause problems for unity of effort. Even within these

chains of command, there is friction between contributing nations, primarily with respect to the restrictive rules of engagement assigned to some contingents. To add to all of this, private military companies operate under their own profit-oriented agenda.

There were problems within the Soviet government systems as well. The Soviet Union never had a central office in charge of the various delegations of its ministries. The chiefs of the KGB, the Ministry of Foreign Affairs, the Ministry of Internal Affairs and the Ministry of Defence all acted autonomously. The delegations sent "contradictory information back to Moscow and received conflicting orders in return."⁸⁴ The cooperation between the parties involved was much less than ideal.

The Canadian government has suffered similar difficulties, with Ottawa's reactions to the Afghan mission having been described as "fitful" by Professor Douglas Bland, Chair of the Defence Management Program at Queen's University.⁸⁵ Dr. Bland also noted that the government is "not ready for the whole of government approach." Dr. Michael Ignatieff, Leader of the Opposition, made similar observations, noting that the government has failed to bring together defence, diplomacy, and development. He notes that in Kandahar CIDA is not integrated and does not seem to want to be and that there is no single Canadian authority for all Canadian efforts in the country.⁸⁶ With respect to the last comment, an Associate Deputy Minister has since been appointed as the previously lacking authority, although this will not compensate for the six years spent without one. The nearly two thousand non-governmental organizations in the country are also a source of friction, sometimes finding themselves at odds with military forces and in other instances finding themselves at odds with the government of Afghanistan.⁸⁷ There is little that the government can do to easily resolve this particular issue, even if there is one single Canadian government authority.

In the current war for unity of effort, it is difficult to discern any advantage or progress over the Soviets. It could be said that the current effort is just as fragmented, indicating that this war's lesson has not been learned.

Conclusion

The SWORD model provides a proven framework for the analysis of counterinsurgencies. Its application has clearly demonstrated why the Soviets were defeated in Afghanistan at the hands of the mujahideen insurgency and is a valid framework upon which to base a comparison of the defeat to the current situation.

Effects of the Afghan war still reverberate in Russia and the former states of the Soviet Union today. To avoid a similar fate, Canada and its allies must push for further gains in three of the seven wars: the war to isolate insurgents from external support, the intelligence and information war, and the war for unity of effort. This being said, Canada and its allies profit from considerable advantages in most areas and have made a great deal of progress. If we build upon our strengths, and apply the lessons of our predecessors, success in Afghanistan may still be a possibility. Furthermore, if we can achieve success in a situation as challenging as this, we can achieve success elsewhere in the years to come. Success in Afghanistan is not only important to Afghanistan.

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A COMPREHENSIVE APPROACH TO STABILITY THE STRATEGIC ADVISORY TEAM IN AFGHANISTAN

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This is another type of war, new in its intensity, ancient in its origins—war by guerrillas, subversives, insurgents, assassins; war by ambush instead of by combat; by infiltration, instead of aggression, seeking victory by eroding and exhausting the enemy instead of engaging him . . . It requires in those situations where we must counter it . . . a whole new kind of strategy, a wholly different kind of force, and therefore a new and wholly different kind of military training.¹

As John F. Kennedy observed of the Vietnam War in 1962, this type of warfare is again at the centre of the present and future operating environment. The Canadian Forces (CF) in Afghanistan are attempting to bring stability to the country as it suffers such an insurgency, and this environment demands new approaches and new capabilities inspired by old lessons.

With respect to 'how' Canada would engage such environments, its policy was made clear in April 2005. The government of the day stated that our approach to intervention on the international stage, and in Afghanistan in particular, would be based on a 3D + C (diplomacy + development + defence and commerce) model. This approach is one in which diplomacy, defence, and development work together to synchronize efforts, improve effectiveness, and maximize the impact of Canada's contribution. It is an approach that demands a coherent policy and integrated activities by all elements of power within the government. After a change in government in January 2006, the Conservative Party ratified this approach, albeit under a different term, usually "whole of government", but also sometimes simply "Team Canada". For the purpose of this article, however, this concept will be referred to as the whole of government approach (WGA). In Afghanistan, Canada's efforts, both in the Kandahar region and in the capital, Kabul, are one example of this WGA. More specifically, in Kabul, at the national level, the CF worked in consultation with the Department of Foreign Affairs and International Trade Canada (DFAIT) and with the Canadian International Development Agency (CIDA) to employ the Canadian Strategic Advisory Team—Afghanistan (SAT-A) since 2005. This team comprised of a small group of military members, a defence scientist and a CIDA field officer, which worked in consultation with the Canadian Embassy towards strengthening the national government of Afghanistan, and ultimately, serve as a tool on the road to success at the operational and strategic level.

This article will trace the genesis of the SAT-A, and argue its usefulness in the fight against insurgency or in support of failing and failed (FF) states. It will also suggest some changes to our mission's design in order to use this capability in present and future areas of Canadian involvement. It will show that the CF had the ways and the means to participate in nation-building in order to accomplish its ends. It will conclude that a small, adaptable and professional group of planners from DFAIT, DND, CIDA and other relevant agencies, working together to support good governance, will help the host nation, Canada and the CF achieve its aims.

The genesis of the Strategic Advisory Team—Afghanistan (SAT-A)

In 2003, General Rick Hillier served in Afghanistan as the commander of the NATO International Security Assistance Force (ISAF). Working out of Kabul, he came to realize the magnitude of the task required to ensure stability and ultimately success. The complexity of the challenges facing Afghanistan called for an integrated, long-term approach to nation-building. Part of that approach included the work done with the Government of the Islamic Republic of Afghanistan (GIRA) by the members of the military planning staff in the ISAF Headquarters (HQ). This work centered on the development of a comprehensive roadmap for the strategy that Afghanistan needed in order to embark on the path of sustainable development and enduring stability.

Working with the Afghan Finance Ministry, this group of officers used military campaign planning tools to formulate a viable framework for investment in Afghanistan and proceeded with the rebuilding of the country, its infrastructure, and its institutions. After much success and cooperation this group left Afghanistan in 2004. The following year, Canada responded to a request from Hamid Karzai, the President of the Islamic Republic of Afghanistan, to provide another group of planners similar to the one that had assisted his government in 2003-2004, and in turn the Canadian government requested that DND, DFAIT, and CIDA provide volunteers for a second deployable team.

The question President Karzai had asked in the spring of 2005 triggered Gen. Hillier, now the Chief of Defence Staff (CDS), to deploy the SAT-A. Colonel M.D. Capstick, an artillery officer working in the National Defence Headquarters (NDHQ) at the time, received an order in mid-June 2005, which directed him to lead the deployment of the SAT-A to the capital of Afghanistan in support of the GIRA. Following that direction, Colonel Capstick met directly with the CDS. During that meeting, Gen Hillier explained to Colonel Capstick, that he was to form, deploy and command a team of a dozen people and go to Afghanistan to “help president Karzai build a democratic and stable government.”² To fulfill this ambitious mission, he was to deploy at the end of the summer for one year. As this initial direction was being given, links with DFAIT and the CIDA were being pursued in order to make this an integrated multi-agency initiative. That being said, this initiative on the CDS’ part led to some criticism as to the way in which this team was launched.

A sense of improvisation plagued this mounting phase of the mission. Nonetheless, Colonel Capstick immediately set about forming the team and preparing for a reconnaissance trip to Afghanistan in order to plan the deployment. He was able to select a group of military officers and civil servants that brought military planning skills, scientific research experience and development work background to the team. The original SAT was made up of fifteen members. Twelve were military, two were civilian public servants of DND and one was a co-operant from CIDA. The military members were a mix of land, sea and air, as well as regular and reserves. One of the public servants was an operational research scientist, whereas the other was a strategic planner from the central staff.

While putting the team together in Ottawa, there was growing concern that the DND was duplicating efforts of other governmental agencies. Initially intended as an integrated ‘whole of government’ team, Colonel Capstick faced some challenges in securing representation from CIDA and aligning efforts with DFAIT. Mounting such a team for the first time proved to be a significant test that required flexibility and patience, given the intricacies of departmental and intra-governmental politics. Ultimately, the ability of DND to field elements on short notice enabled the team to be assembled and eventually deploy as directed.

In mid-summer 2005, Colonel Capstick completed his reconnaissance of Kabul and was able to establish first contact with the head of mission (HoM) and the head of aid (HoA) for Canada, Christopher Alexander and Dr. Nipa Banerjee respectively. His team was finally assembled in July and started deploying on 22 August 2005. The initial focus of the SAT commander was to ascertain the specific areas where his group of planners could be most beneficial to the Government of Afghanistan. Greatly facilitated by the reputation and interventions of the HoM and HoA, it became clear that the SAT team could be useful in the conception of the Interim—Afghanistan National Development Strategy and eventually the actual Afghanistan National Development Strategy (I-ANDS and ANDS). With the support of the Canadian Ambassador and the HoA, Col Capstick quickly developed a working relationship with Dr. Ishaq Naderi, Senior Economic Advisor to the President and ultimately responsible for the production of the ANDS.³ The ANDS is the overarching document that serves as the country's Poverty Reduction Strategy Paper (PRSP) and the initial step in the coordinated reconstruction of the state.⁴ This document and the process for its production were of crucial importance in the ratification of the Afghanistan Compact in 2006. The Compact was the commitment made by the international community (IC) for a long-term solution to the crisis in Afghanistan.



Figure 1: This model comes from, *The Center for Domestic and International Health Security*, Seth G. Jones et al, *Securing Health, "Lessons from Nation-Building Missions"* (Santa Monica: RAND Corporation, 2006), xvii, figure RAND MG321-S.1.

In parallel to the work that was needed with the production of the ANDS, the SAT found the need to support public administration reform (PAR). As a key enabler of the ANDS, PAR faced a significant capability gap challenge and was in urgent need of support. Therefore, the CIDA co-operant in the SAT immediately headed a number of capacity-building programs in the Independent Administrative Reform and Civil Service Commission (IARCSC) which was responsible for PAR at the national level.

The team faced a number of challenges. Some parts of the IC representatives in Kabul were suspicious as to what a group of military planners could bring to the nation-building effort. Some benign rivalries with other national agencies were also felt at the mid-manager level. Thirdly, there was always the concern that someone else was already doing the same work. With the high number of technical advisors (TAs), international agencies and personnel from ISAF and the US HQ (Combined Forces

Command—Afghanistan, CFC-A) in Kabul, it was common to meet someone working on exactly the same issues as the SAT. Nonetheless, the initial work done by the team, “made the clear demonstration of the potential of military staff ‘skills transfer’ to the civil sector in a post-conflict society that has had little time to develop viable public institutions and a culture of good governance.”⁵

The HoM at the time, Christopher Alexander, recalled this initial period and remarked that the success of SAT rested on Canada’s integration of all of its elements of power. By the time SAT arrived in Kabul, Canada had showed its resolve by deploying an important military contingent, assuming command of the Multinational Brigade in Kabul (KMNB) and the ISAF mission as a whole in 2003. It had re-opened its embassy, energized its development program through CIDA and contributed to nation building efforts with assistance from the RCMP and other governmental agencies. When the group of strategic planners from the SAT arrived in 2005, all the key elements of Canada’s whole of government approach were in place in Kabul. The sheer desire to communicate with each other in order to help the legitimate government of Afghanistan made the integration of this new capability possible.⁶ Also important in this early stage was the credibility the team had because it deployed under the request of the President of the Government of Afghanistan. This endorsement opened a number of doors in the Afghan government and was instrumental in ensuring middle and top-level manager support.

Recognizing that the extremely difficult task of state building rests at the heart of the Afghanistan challenge, the SAT team was immediately put to the task of supporting the construction and reconstruction of the governance institutions capable of providing the citizens with the physical and economic security they required.⁷

During this initial phase of the operation, the bi-lateral nature of the mission constantly needed to be emphasized. The team did not fall under the command and control architecture of either NATO (ISAF) or the US (CFC-A). As the mission statement said, it answered to the HoM, the CDS, the Afghanistan President’s office and the different Afghanistan ministries with which it was involved.

As the first year went by, the mission matured and the work done with the ANDS and the IARCSC led to further expansion into the President’s office, other PAR initiatives, the Ministry of Rural Rehabilitation and Development and the Civil Service Gender Equity Policy.⁸ It also served as a key enabler in the alignment of provincial reconstruction team (PRT) activity at the operational level and the ANDS objectives at the strategic level. The SAT-A was able to operationalize the strategic objectives in order to facilitate the campaign design of each of the PRT commanders.

As the SAT-A progressed and completed its first rotation in the end of the summer 2006, it also expanded the scope of its work and went on to support the Ministry of Justice, the Ministry of National Communications, the Ministry of Education, the Ministry of Transportation and Civil Aviation, the Ministry of the Interior and the Ministry of Finance.⁹ These efforts in capacity and capability building were all being done in light of the desired effects to move Canada’s intervention towards the strategic end-state articulated by the CDS as: “The development of an organic Government of Afghanistan (GOA) strategic planning capability that enables them to make effective use of their resources.”¹⁰

Impact of SAT-A

What did the Afghan people get out of this mission? What did the Canadian public get out of this operation? One partial and debatable answer can be found in journalist Christie Blatchford’s assessment, “The smallest and arguably most influential group of

Canadians [SAT-A] working in Afghanistan was born about a year ago in an informal meeting in the Chief of Defence Staff Rick Hillier's car."¹¹ Blatchford spent a significant amount of time with Canadian soldiers in Southern Afghanistan as an embedded journalist. While focusing on the tactical and operational side of the mission in Kandahar, she was able to witness and report on some of the achievements of SAT-A during the spring of 2006. Notwithstanding this praise, the team generated some discomfort with regards to duplication of effort, appropriateness of the military's involvement in state building, and this apparent new role DND was playing in giving advice on governance issues. Prior to discussing the inclusion of SAT in future operations, an analysis of its impact is necessary, starting with some of the opinions of key Afghan officials who worked closely with the SAT-A.

Wahid Waissi was the Senior Process Manager for the ANDS. Under his supervision, the ANDS Working Group had to produce the final version of the ANDS and develop the basis for the Afghanistan Compact that was signed at the London Conference in January 2006. This monumental task benefited from SAT-A involvement as of September 2005. From that point on, a group of four Canadian planners were embedded in the ANDS Working Group. They concentrated their efforts on capacity transfer and mentoring the production of the capstone documents. They also worked on effective communications strategies for the Office of the Senior Economic Advisor to the President of Afghanistan. The Senior Economic Advisor was ultimately responsible for the Compact and the ANDS.

In Waissi's opinion, the ANDS Working Group benefited from SAT's structured advice. It helped focus their work. Even if SAT members were not development specialists, their capacity to envision strategies, align plans with objectives and manage effectively, contributed to the overall performance of his working group.¹² In other words, the ability of the SAT to work in terms of ways-ends-means and to work as enablers had a significant impact on the preparation for the London Conference. With no subject matter experts in the field of development on the team helping in the development of the ANDS, the SAT planners had to concentrate their contribution on the integration of processes and alignment of strategies. The approach taken was therefore drastically different than what the ANDS Working Group was accustomed to seeing from highly paid technical advisors. By the mere willingness of the Canadian team members to participate in the work and not dictate what Afghanistan needed, the SAT established some credibility and increased the abilities of the working group as a whole.

In March 2006, Professor Ishaq Naderi, Senior Economic Advisor to the President and the supervisor of Wahid Waissi, was quoted praising the work of SAT-A. "... The team has done invaluable work, particularly in organizing the country's economic development plan, which was recently approved at the London Conference on Afghanistan's future."¹³ He added, "We are counting on their contribution. As a member of this government I want to express my appreciation for this help. It will not be forgotten."¹⁴

Near the halfway mark of the first rotation of SAT, an opportunity to help the President's office offered itself. By that point the contribution of SAT to the ANDS and IARCSC was well established and the perception that the team had some key abilities was recognized in the capital. SAT was asked in early 2006 to take a look at the organisation and structure of the Office of the President. The Office of the President is a crucial part of the center of government in Afghanistan, and was undergoing significant change.

Ershad Ahmadi, Deputy Chief of Presidential Programs, admitted that SAT helped energize the path to change and gave momentum to the implementation of some badly needed reforms in the Office of the President.¹⁵ The team's particular ability to talk in terms of strategy, vision and mission were of particular use in the restructure of Afghanistan's executive branch. When time came to work in the Office of the President, SAT's experiences in the ANDS Working Group and the IARCSC were of particular use in lending some coherence to the changes required in the Office of the President. The team's ability to work with the government in pursuing Afghanistan's goals put them in sharp contrast to some of the expert advice TAs were giving. It became clear during the first rotation that Kabul was replete with well-intentioned advisors, who were usually very highly paid. This advice was sometimes given from a position of unequal partnership. SAT, on the other hand, had adopted a sense of reciprocity and suggestion versus an attitude of experts giving solutions to novices. This attitude was important to the success of the team and their ability to get some of the recommendations for change accepted. "TA's come to Afghanistan for two months, three months, six months, produce a report and then leave. That does not make a lasting impact."¹⁶ SAT's presence and long-term commitment made for a completely different dynamic. It inspired confidence in the dedication of Canada's contribution and facilitated the establishment of the trust that was needed in order to embark on such important state building tasks.

The Chairman of the IARCSC, Dr. A. Mushahed, supported the use of military planners in an advisory role for purely civilian governance issues. In his view, "... concentration on security operations is not the only way to defeat the terrorists. Service delivery of the government, when it is efficient, is another way."¹⁷ Military campaigns and the personnel waging them need to be as concerned with security as they are with the strengthening of the country in which they are deployed. Military skills enabled the SAT to do that. Col Capstick, who had experienced stability and peacekeeping operations as a commander in Cyprus and Bosnia, reinforced this idea in an interview he gave on the 27th of March 2006. "Planning Afghanistan's national economic development strategy or civil service is not a heck of a lot different than planning General Fraser's campaign in terms of the skills needed and the steps."¹⁸ While military planners are not expected to know the answer to a governance problem, they can act as enablers in the weak national institutions of the host nation. By facilitating the developments of strategies, ensuring capacity transfer and the adherence to rigorous processes, the skills brought to bear by military planners can play a role in creating the conditions for success.

One of the directors of the IARCSC, Homayoun Seddiq, observed that one of the key qualities of the members of the SAT was their willingness to adapt to HN constraints and work within that environment. The fact that the team was not being directly paid by the IARCSC also made a significant difference. Without the monetary connotation, the support given by team members took a whole different nature. The sense that SAT was not working to any other agenda than the one of supporting PAR and Afghanistan's objectives also facilitated the labour. As far as using military personnel in tackling civil service problems, he did not see an issue. There were enough development and governance experts willing to give you 'how to' advice, but what the SAT brought was the ability to use critical thinking, set up strategies, but more importantly pass on that knowledge to the young public servants they were working with.¹⁹ The work done by the SAT was in part possible because the team had no funds to manage and distribute to the host nation. It was also different than all other technical advice in as much as it was a bi-lateral agreement between Afghanistan and Canada without any need for payment. Lastly, Canada bears little or no negative historical links with Afghanistan.

Towards mid-2006, and more significantly in the later portion of that year, the SAT became heavily involved in the improvement of strategies in the Ministry of Rural

Rehabilitation and Development (MRRD). They were specifically concerned with transferring the skills needed to plan strategically. The MRRD oversaw the National Solidarity Program (NSP), one of the most important poverty reduction initiatives in the country. The NSP received \$13M from Canada in 2006, which brought CIDA's contribution to Afghanistan to \$109.5M.²⁰ This contribution made Afghanistan Canada's largest recipient of aid.

Seen from an American perspective, the team also made a contribution in building governance, legitimizing the government and ultimately countering the insurgents in the eyes of the people. Colonel Fred Solis (US) was the Team Chief for Governance in the Civil Military Affairs Division (CJ-9) of the American HQ CFC-A. He was in Kabul when the team arrived and was instrumental in the expansion of the work into the IARCSC. In his view, the team was effective because of the way it was embedded. By working alongside their Afghan counterparts, emphasizing capacity transfer and indirect mentoring, the team had a strategic effect.²¹ By building up good governance, the team was working towards achieving the end-state of a legitimate and functioning nation.

However there was one constant danger with such work; the possibility of becoming involved in the internal politics of the organisation you are assisting. In a recent piece aired by the CBC on the SAT team, in March 2007, the journalist raised the point that the Canadian military's involvement at such a political level had caused some suspicions amongst other intervening countries and agencies.²² This suspicion was quickly quelled by clarifications from Afghanistan's government officials as to the usefulness and pertinence of such a Canadian team. Still, the relationships that are built when conducting mentorship or capacity transfer can be easily politicized, and therein lies some of the more pertinent criticism of the SAT. How does it avoid being identified with the administration or ruling body of the host nation? In its first year, while being involved in the IARCSC, the team came to be closely linked to some of the key personnel in the structure. This, in turn, resulted in the team being dragged into internal bickering and factional rivalries. Ultimately, such tensions were partly responsible for the SAT reducing its involvement in the IARCSC and expanding their work with the MRRD.

This research suggests that the team increased Canada's influence in the Afghan capital. While it was unable to make a profound difference outside of Kabul, the team contributed to the development of some key capabilities in the government. It raised Canada's visibility in the Government of Afghanistan, helped shape the intelligence picture of the conflict and participated in elevating the status of Canada in the region. Furthermore, it can objectively be stated that capacity transfer took place, processes and strategy development were facilitated, and lastly some critical steps and documents required on the road towards stability were influenced by SAT's work. Despite the fact that it generated some criticism from other contributing nations, and that it brought to the forefront some inter-governmental intricacies, SAT contributed to the nation building efforts in the host nation.

Strategic Advisory Teams: A New Capability in Nation Building for the Government of Canada

If the international community fails to secure and rebuild the country, Afghanistan will slide back down the path towards failed status. The constant possibility of Afghanistan reverting to a neo-Taliban fundamentalist regime remains grave. This would threaten regional stability and Canada's own national interests.²³ Therefore, Canada has been actively involved in the efforts to support the Government of Afghanistan as it stabilizes and rebuilds Afghanistan. For this to be successful, Canada's strategy in Afghanistan, and in any other fragile state, needs to "... build trust, engage in development and reconstruction, and ensure the rule of law. ..." ²⁴ This demands that

Canada adopt an integrated counter-insurgency strategy that focuses on innovative local interactions.

The SAT-A, together with the PRTs and the Operational Mentor and Liaison Teams (OMLTs), are all elements of this innovative interaction with the locals. Such teams might not have been envisioned in the 1990s. Today, these new capabilities are helping to strengthen Afghan capacity to deliver quality governance, both centrally and locally. The SAT-A is working in conjunction with the Government of Afghanistan to develop the human capacity critical to achieving the objectives of the ANDS and moving towards a stable and secure Afghanistan.²⁵ (See figure 1. for a model in nation building)

Inclusion of a Strategic Advisory Team Capability in Future Operations

Canada's Ambassador to Afghanistan from 2003 to 2005 remarked that a capability such as SAT would be duplicable in future interventions if the following conditions exist: a host nation that is in desperate need of capacity building; Canada making a significant contribution in that country; Canada having no negative historical ties with the host nation and lastly, strong links with the legitimate government of that country. Furthermore, this type of intervention could be possible only if the host nation requested Canada's contribution in this fashion and the involvement had an important development piece.²⁶

The most useful set of criteria for replicating this capability were gleaned from the interviews conducted with Dr. Elizabeth Speed, the Canadian DND scientist working in SAT-A at the time, , and Colonel Andre Corbould, the Deputy Commander Civil Military Affairs Division CJ9 (US HQ, CFC-A). They both made the case that there has to be a willingness to reform on the part of the host nation, there has to be a clear lack of capability, a legitimate government that Canada is trying to help, high level support that generates mid-level buy-in, and lastly, key stake holders in the Government of Canada must be willing to integrate inter-departmental efforts.²⁷

Without a request from the host nation for Canada to be involved at this level of nation building, a SAT is a non-starter. But one more condition, in addition to the five mentioned above, needs to exist for this type of intervention to succeed. There has to be a minimum level of stability in the area of operation for this type of work to take place. While it has been argued that nation building needs to take place in a quasi-simultaneous manner as all other stability operations, an advisory team cannot operate in chaos or in a condition of all-out war. Without a certain level of stability, no capacity building efforts would take root. Canada's intervention would be in vain.

Critics might see the concept of SAT as nothing more than an anomaly that was only possible in Afghanistan because of the personal relationship between President Karzai and Gen Hillier, an anomaly that was only possible because of Canada's political landscape at the time. But even if the case can be made that the political realities of 2005—a minority Liberal government, a strong CDS, the US ongoing Global War on Terror and a host of other factors—will never be aligned again, the logic behind a strategic planning team that is dedicated to transferring capability to a weak state cannot be dismissed. Even if the political conditions are never the same again, the Government of Canada now has a new capability with which it can intervene.

There is therefore an urgent need for the clarification of lead agencies in these types of interventions, as well as the appointment of a single Government of Canada integrating authority in the country of operation. Depending on the level of instability and Canada's involvement in the host nation, that responsibility could be held by the Canadian Ambassador to that country, a politician, an appointed senior civil

administrator, or a senior military commander. This person should in turn be made to answer to Ottawa, through a central mechanism that reports to the Privy Council or a National Security Council-type group, in order for the government to exercise a real whole of government approach. Accordingly, General Rupert Smith proposed that: "The directing set of hands may be one man or a few, but they must be of one mind and have the authority to act to achieve the desired result."²⁸ Without a lead agency, a single authority in theatre, and a central reporting mechanism, the promise of an effective whole of government intervention in fragile states will remain only a promise.

If the literature on the history of counter-insurgency is to be believed, the need for such an approach is not new. Therefore, significant effort from every department will be required for this shift to occur, a shift that has to address some of the deep cultural and institutional differences between each department. General Smith recognized this challenge.

Presently our institutions are structured like stovepipes . . . We need to have the ability to bring them together, at least at the theatre level and probably lower, so that their actions are directed by one set of hands and their actions are coherent. This applies to all ministries and military staffs: to persist with institutional thought patterns . . . is folly.²⁹

For the, CF this has to start with some changes to the way troop contribution to missions is planned. Senior planning staffs in the Strategic Joint Staff and the Canadian Expeditionary Forces Command have to consider the value that a team of strategic advisors can add to an operation. At the moment, these senior planning staffs, with the inputs from the Army, Navy and Air Force, devise force structures that respond to political and strategic guidance. By including different elements of Canada's government and working directly at improving the capacity of the host nation to govern itself, a strategic advisory team has the potential to reap huge rewards for a small investment.

Conclusion

The genesis of SAT-A, and the analysis of its immediate results shows the positive impact such a team can have. In the future, a SAT-like team could be deployed in conjunction with other Government of Canada activities and make a critical contribution to our success in intervening in weak states that require Canada's assistance. The Canadian Forces, with a strategic advisory team, have the ways and the means to participate in nation building in order to accomplish the government's ends. In the future, a small, adaptable and professional group of planners from DFAIT, DND, CIDA and other relevant agencies, working together in moving a host country towards good governance, will help Canada and the Canadian Forces achieve success.

About the Author...

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Endnotes

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TO PROVIDE FOCUS: INTELLIGENCE AND COUNTER-INSURGENCY

Lieutenant-Colonel Daniel Villeneuve, CD

Know the enemy, know yourself, and know what kind of war you are prosecuting.

Cassidy—Feeding Bread to the Luddites¹

In any military combat operation, finding the enemy is always a daunting task. Even in high intensity warfare, where the adversary is well-defined and deploys large formations into a theatre of operations, the task remains challenging. In the context of insurgency or asymmetric warfare, the challenge reaches a new level, as the adversary is anything but well-defined, ranging from organized crime, to armed groups and militia, to terrorist cells. The adversary is as likely to be wearing a uniform, and openly carrying weapons as to be blending with the local population. Due to the fluid nature of the threat, the task of an intelligence operator in this context is far more complex, it must first be determined who the adversary is, before being able to find him.

Since 2001, Canada has been actively involved in the Global War against Terrorism (GWOT). The most tangible Canadian contribution to that war has been the deployment of a large military contingent of troops in Afghanistan, which for the last three years has been operating in the southern province of Kandahar. The rationale behind Canada's participation in Afghanistan is simple: "The events of September 11, 2001, led to the growing recognition that the safety of world citizenry is in jeopardy as long as the suffering of people in countries such as Afghanistan creates conditions conducive to terrorists."² For all intent and purpose, Canada is now fully engaged in a counter-insurgency operation against the resurgence of the Taliban in the region.

Canada's military operation in Afghanistan is having a significant impact on how the Canadian Forces operate, are equipped, train for deployment and acquire new equipment. The mission is stretching the sustaining capabilities of Canada's armed forces to the limit and is definitively leaving a deep impression not only on the military personnel, but on all Canadian citizens as well.

Within military circles, however, the mission is referred to as a *model*, but not *the model* as a driving force for the future development of the Canadian Forces. By doing this, the military leadership wants to avoid tailoring the future of the Canadian Forces to the requirements of Afghanistan alone. Nevertheless, in a recently published document called *Land Operations 2021*, the Army recognized that for the foreseeable future, the most likely operating environment into which the Canadian Forces may be called to face will be characterized by "adaptive dispersed operations³," similar to the counter-insurgency operation currently being experienced in Afghanistan. *Land Operations 2021* also recognizes that within this environment, the type of threat one is likely to face will be fluid and asymmetric. "The likelihood of large force on force exchanges will be eclipsed by irregular warfare conducted by highly adaptive, technologically enabled adversaries; media-savvy foes intent less on defeating armed forces than eroding an adversary's will to fight."⁴ What does it mean then for military intelligence to operate successfully within this complex operating framework of counter-insurgency?

This article will focus on military intelligence and counter-insurgency. It will highlight the vital role intelligence needs to play if a military force expects to be successful in such

an asymmetric warfare context. By discussing and analyzing the intelligence dimension of counter-insurgency operations, it will argue that due to the fluid nature of the threat in counter-insurgency, the focus and the processes required by military intelligence are significantly different from conventional, high-intensity, warfare. This article will examine the topic in two parts. Part 1 will define counter-insurgency and its main characteristics, and part 2 will identify the key elements that are essential for military intelligence to operate successfully in such an environment.

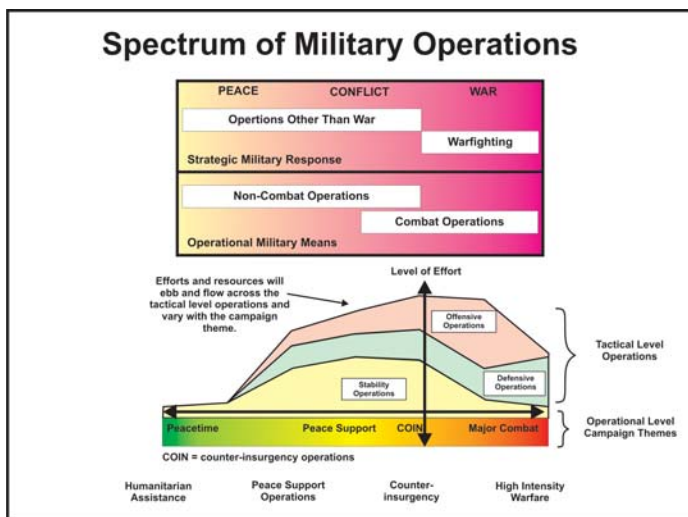
Understanding Counter-insurgency

The insurgent wins if he does not lose.

Cohen et al—Principles, Imperatives and Paradoxes of COIN⁵

Counter-insurgency is defined as “those military, paramilitary, political, economic, psychological, and civic actions taken by a government to defeat insurgency.”⁶ An insurgency is an “organized movement aimed at the overthrow of a constituted government through use of subversion and armed conflict.”⁷ Insurgency and counter-insurgency are often associated with asymmetric warfare. But this association might be misleading, as asymmetric warfare is a name for many things. Asymmetric warfare includes both insurgency and counter-insurgency, but also terrorism, guerrilla warfare, revolutionary warfare, irregular warfare and 4th Generation Warfare, to name only a few. If the concept of counter-insurgency is nothing new, the expression asymmetric warfare is relatively recent. “Explicit mention of asymmetry first appeared in (US) Joint Doctrine in 1995. The concept, though, was used in a very simplistic and limited sense.”⁸ It was not before 1999, that asymmetric warfare started to be used widely and it gained widespread use following the terrorist attack of 9 September 2001. If counter-insurgency is a concept used to categorize a situation with relatively specific criteria, asymmetric warfare is a term used to describe anything that does not fall under conventional warfare between two nation states.

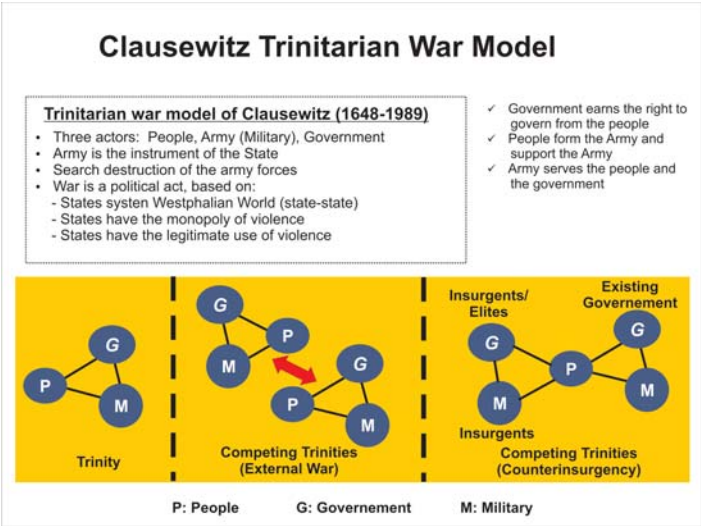
In current Canadian army doctrine, the spectrum of military operations is depicted horizontally ranging from humanitarian assistance at one end to high intensity warfare at the other, and vertically from tactical to operational to strategic (See Figure 1). Counter-insurgency falls somewhere in the middle—in the gray zone between combat and non-combat operations, between war and operations other than war.



Source: Department of National Defence, Land Operations 2021, Adaptive Dispersed Operations, (Ottawa: DND, 2007), 12

Figure 1: Spectrum of Military Operations

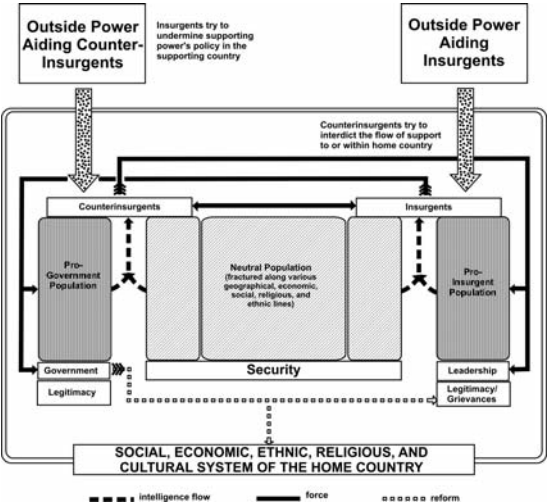
The central element of any insurgency and counter-insurgency revolves around gaining support of the local population, where “each side aims to get the people to accept its governance or authority as legitimate.”⁹ To illustrate this concept, the use of the Clausewitz Trinitarian model of government, people and military (army) provides a simple model as depicted in Figure 2. For Clausewitz, all wars are political; the difference being that revolution (insurgency) is internal whereas conventional wars are external. As counter-insurgency is internal warfare, Clausewitz sees the center of gravity being the same for both opponents: the people.



Source: Dr J. P. de B. Tallon, "Revolution and Insurgency: A Theoretical Perspective" (lecture, Military Intelligence in Asymmetrical Warfare Training, Montreuil, QC, November 26, 2006)

Figure 2: Clausewitz Trinitarian War Model

In a recent issue of *Military Review*, John Lynn, a PhD professor with the University of Illinois, presented a refined model that depicts the various elements involved in an insurgency and counter-insurgency, which once again clearly depicts the central importance of local population. Lynn's model is illustrated in Figure 3.



Source: John A. Lynn, "Patterns of Insurgency & Counterinsurgency," *Military Review* 87, no. 4 (July-August 2005): 23.

Figure 3: Lynn—Basic Pattern of Insurgency & Counterinsurgency

For Lynn, it is clear that an insurgency's existence "implies a base of popular support that actively aids or at least tolerates the insurgents."¹⁰ In addition to those committed to the insurgency, there is also a part of the population that is supportive of the government. The vast majority, however, is essentially neutral. The challenge therefore for either the insurgents or the government forces is to gain and maintain the support from that neutral population. In this regard, for Lynn, the task of the government is more difficult.

The government must demonstrate that it can fight the insurgents effectively while also protecting the population. Insurgents only have to demonstrate they can best protect a population or, far easier, inflict enough mayhem and destruction to demonstrate that the existing authorities cannot. Insurgents can exert leverage by convincing a population that peace will return only if the insurgents gain what they demand.¹¹

To further build on the central importance of a population, there are three key characteristics of a counter-insurgency that must be highlighted to better understand the role of intelligence. First, to be successful, the use of military force is only one of the elements required to fight an insurgency. A successful counter-insurgency campaign cannot be won by using only military force. This is the key lesson learned by the British Army, from its vast amount of experience at fighting insurgency.

The overriding experience gained was that military forces alone could not provide an effective counter to an insurgency. Insurgency usually stemmed from political, economic and social grievances which could only be successfully countered by a fully integrated and coordinated strategy which involved the local population.¹²

This is the same lesson the Americans learned from their recent operations in Afghanistan and Iraq. "Military victory in asymmetric warfare can be virtually meaningless without successful nation building at the political, economic, and security levels."¹³ The employment of military force is important; however, military force must be employed in coordination with political, diplomatic, economic and social initiatives. In all efforts, political objectives must retain the primacy, as "all actions, kinetic or non-kinetic, must be planned and executed with consideration of their contribution toward strengthening the host government's legitimacy."¹⁴ In addition, it is also imperative that all elements must work in unison with coordinated efforts if one expects to obtain a synergy of effects.

A second characteristic is a threat that is very fluid. Typically confronted with a balance of force that is to their disadvantage, insurgents will often avoid the conventional military domain to focus on an area and tactics that can provide them parity with their opponents. For Steven Metz, in a recently published document *Rethinking Insurgency*, the enduring essence of an insurgency remains "protracted, asymmetric violence; political, legal and ethical ambiguity; and the use of complex terrain, psychological warfare, and political mobilization."¹⁵ Within this complex environment, Metz sees the aim of insurgents as an effort to alter the power balance in their favour, by seeking to "postpone decisive action, avoid defeat, sustain themselves, and expand their support."¹⁶

Although each insurgency varies greatly, there are still significant differences between the nature of the threat represented by insurgents and a conventional adversary, as indicated in Table 1.

Conventional	Asymmetric
Main Threat overt with uniformed military	Covert, with no clear identifying uniform
Highly centralized and disciplined organization	Decentralized and relatively undisciplined. Shifting alliances and splinter groups
Clear territorial base with slow and limited shift from one area to another	No clear territorial base. Capable of rapid shift from one place to another
Sharp distinction between internal and external threat	Blurred distinction between internal and external threat
Close link between the size of an opponent and the extent of the threat posed	Due to technological advances, small opponent may create vast damage
Opponents tend to grow incrementally	Must consider "potential imaginary threat"
Threat deliberately created by continuation of policy by other means	Threat is often a by-product of other activities (Drug smuggling...)

Table 1: The Changing Nature of the Threat

Source: Martin van Creveld, Twenty-four Thesis on Intelligence, http://www.oss.net/dynamaster/file_archive/040319/2bf1035cde4b2c3ec1fde62d097fbb52/OSS2002%2d02%2d26.pdf; Internet; accessed 14 March 2007.

In addition, it is also important to understand that typically insurgents operate under different conditions than counter-insurgents, as indicated in Table 2.

Component	Insurgent	Counter-insurgent
Resource asymmetry	Limited resources/power	Preponderance of resources/power
Objective = population	Solicit government oppression	Show that insurgency is destabilizing
Political nature of war	Wage war for minds of population	Wage war for same, and to keep legitimacy
Gradual transition to war	Use time to develop cause	Always in reactive mode
Protracted nature of war	Disperse; use limited violence widely	Maintain vigilance; sustain will
Cost	High return for investment	Sustained operations carry high political/economic burden
Role of ideology	Sole asset at beginning is cause or idea	Defeat root of cause or idea

Table 2: Differences between Insurgents & Counter-insurgents

Source: Robert Tones, "Relearning Counterinsurgency Warfare," *Parameter* 34, no 1 (Spring 2004): 20. This table is based on David Galula's book *Counterinsurgency Warfare: Theory and Practice*, written in 1964.

A third characteristic is the paradox that “the more force you use, the least effective you are.”¹⁷ The use of violence in counter-insurgency is omnipresent. However, the application of force must be carefully controlled. This is the message that is mentioned by David Kilcullen in his article, *Twenty-eight Articles on Counterinsurgency*. “Injudicious use of firepower creates blood feuds, homeless people and societal disruption that fuels and perpetuates the insurgency.”¹⁸ In his article, John Lynn distinguishes between “quantitative and qualitative violence.”¹⁹ Quantitative violence, as the name implies, refers to how many persons are killed and is indiscriminate. Qualitative violence on the other hand refers to who is killed and is discriminate in its application. As expressed by Lynn, the more surgical the use of violence, the better.

The use of violence leaves a deadly residue. Those who are harmed or whose family and friends have been victimized do not embrace the perpetrators of violence but harbour hatred and seek retribution against them. Killing large numbers of insurgents might not weaken the enemy but simply gain him new adherents.²⁰

Counter-insurgency operations are nothing new. Military forces have been involved with them for decades. Although they are not some kind of mysterious adventure, they operate, however, under different rules and characteristics than conventional military operations, as indicated by Colonel Callwell, in his book, *Small Wars: A Tactical Handbook for Imperial Soldiers, written in 1896*. ...“The conditions of small wars are so diversified, the enemy’s *mode of fighting is often so peculiar*, and the theatres of operations present such singular features, that irregular warfare must generally be carried out on a method totally different [from conventional wars]”²¹ Military forces play a crucial role in fighting an insurgency, but they are only one of the elements required for gaining the support of the local population, alongside political, economic, and diplomatic efforts. Confronted with an insurgency that is typically very fluid, the application of force must also be carefully controlled and applied with surgical precision. For the application of force to remain minimal, it is necessary first to find the enemy. The importance of intelligence then becomes crucial.

To be Rational: The Importance of Intelligence in Counter-insurgency

*Right now, I have more than enough combat power.
What I need to know is where to apply it.*

MGen Dempsey—Commanding General 1st Armored Division²²

Conceptually, the importance of intelligence in fighting in a counter-insurgency operation rests on a simple concept. As indicated by Major-General Dempsey, the Commanding General of the US 1st Armored Division in Iraq in 2003, typically, the government forces or the coalition have more than enough combat power over the insurgents. In other words, if confronted one on one in a tactical fight, the insurgents are considerably disadvantaged. The issue then is to determine where to apply this combat power, as the insurgents will avoid any decisive engagement unless they are certain of victory. It is the role of military intelligence to provide that information.

There are many definitions of intelligence, all of which carry the same basic concepts: collection and analysis of information; focused on threat; to support a commander or a governmental entity. The latest Canadian Forces field manual on intelligence, published in 1999 and updated in 2001, defines military intelligence as:

The product resulting from the processing of information concerning foreign nations, hostile or potentially hostile forces or elements, or areas of actual or potential operations. The term is also applied to the activity which results in the product and the organizations engaged in such activity.²³

Another definition of intelligence is “the systematic, planned and objective-oriented (non random) collection, analysis and dissemination of information based on open or denied sources.”²⁴ From these definitions, military intelligence can be summarized as an organization, a product and a process.²⁵ To get intelligence, the product, there is a need to have a systematic approach to do it, which is the process. The personnel and the structure dedicated to achieve this constitute the organization.

Regardless of the type of military operation, the basic nature of military intelligence remains the same: find what information is required on the threat one is facing, collect that information, and analyse and disseminate it to those who require it. What varies, however, depending on the kind of war being fought, is the type of information military intelligence needs to acquire, the techniques to collect that information and the tools to analyze it.

From Large Formations

In a conventional scenario, military intelligence focuses on a larger view of the enemy with minimal impact from individuals. In this context, intelligence is interested in where the enemy forces are and what capabilities they have in terms of equipment and strength. Cold War intelligence doctrine was heavily influenced by the American AirLand Battle doctrine, which required “rapid intelligence analysis to identify quickly the enemy main effort as far away as possible to give US Army maneuver units time to shift laterally from across the front in mass.”²⁶ The current intelligence doctrine and practices of today still reflect this Cold War mentality.

The current intelligence doctrine is focused on fighting a conventional adversary and is based on four assumptions.²⁷ The first is that the process needs to focus on the terrain and the enemy only. The second is that the adversary is an organized force conducting combat operations. The third is that an extensive intelligence database on that adversary already exists. The last assumption is that any analysis, supported by the use of templates, would predict the enemy’s potential courses of action. This is based on a top-down approach, which was “originally designed to identify large enemy organizations from [their] parts, and the enemy intentions from a study of stable doctrine, long-term unit positioning, common equipment capability, and terrain limitations.”²⁸ By focusing first on analyzing and identifying the details of a situation, it was then expected that the big picture would quickly emerge.

To Individuals

In a counter-insurgency scenario, the focus changes from large enemy formations to individuals. The threat is typically composed of small groups, mixed with and difficult to distinguish from the local population. The intelligence focus, therefore, revolves around providing an understanding of the operational environment in order to facilitate the identification of the factors driving the insurgency and to provide information on those conditions and ways to alleviate them.²⁹ In addition, intelligence must aim at finding: who are the key players; what are their connections (alliances, organizations, associates) and what do they want to do?³⁰ To be efficient, therefore, intelligence processes and doctrine need to be adjusted to the specific nature of counter-insurgency operations. In other words, based on American, British, Canadian and Australian doctrine on counter-insurgency, as well as the recent lessons learned from Afghanistan and Iraq, what are the intelligence characteristics in counter-insurgency?

Intelligence Characteristics

The first characteristic is that intelligence in counter-insurgency is about people. In counter-insurgency, trying to understand a situation is impossible without analyzing the society and the culture where the operation takes place. Military forces need to know not only the insurgents, but the local populace and the host-nation government as well. As indicated in the latest American field manual on counter-insurgency, "Commanders and planners require insight into cultures, perceptions, values, beliefs, interests and decision making processes of individuals and groups. These requirements are the basis for collection and analytical efforts."³¹

In an environment where the focus is on people, "national technical collection means and open-source intelligence cannot substitute for human intelligence (HUMINT)."³² HUMINT is defined as "a category of intelligence derived from information collected and provided by human sources."³³ HUMINT has its own limits, however, when dealing with individuals; HUMINT "is one of the best types of intelligence for satisfying the commanders' requirements of determining an adversary's will and intent."³⁴ Establishing an effective HUMINT capability is no easy task.³⁵ HUMINT requires trained individuals. In addition, operating in a foreign culture requires the support of linguists and cultural advisors. Therefore, it takes time for HUMINT to develop sources. HUMINT also requires an acceptance of a higher level of risk as the various teams need to integrate and operate within the local population, often in isolated or exposed conditions. Finally, there should be no illusion that HUMINT can always succeed where national means failed.³⁶

It is obvious that a military force cannot rely on HUMINT capability alone to fulfill all its intelligence needs. Technical collection capabilities, such as signal intelligence (SIGINT)³⁷ and imagery intelligence (IMINT)³⁸ still have a significant role to play in counter-insurgency. Insurgents need to communicate among themselves to operate efficiently, and as long as technical means are used to do this, there will be vulnerabilities that can be exploited. Imagery platforms, such as satellite and unmanned aerial vehicles (UAV), also provide significant support in surveillance capability, particularly with real-time imagery feed. Open-source intelligence (OSINT)³⁹ will also continue to provide valuable information. When properly employed, "OSINT products can reduce the demands on classified intelligence collection resources by limiting requests for information only to those questions that cannot be answered by open sources."⁴⁰ The challenge with OSINT, however, is to determine what is relevant and what is not from the large amount of information available and to find a sufficient number of linguists to exploit the information.

In summary, three things must be kept in mind with any intelligence collection effort.⁴¹ First, collection alone is not intelligence: analysis must be performed successfully to put it into context and make sense of it. Second, even when adequate, accurate and timely intelligence is produced and disseminated, a decision must be made. In other words intelligence by itself accomplishes nothing, unless a commander can act on the information provided. Finally, collection is best when it is multi-source; some combination from more than one collection asset provides the best opportunity to support superior analysis.

A second characteristic is the requirement for operations and intelligence to feed on each other. Intelligence and operations are closely related and must maintain a dynamic relationship. This is what Major-General Dempsey observed in October 2003 from his experience in Iraq, when he said, "fundamentally, here in Baghdad we do two things:

We're either fighting for intelligence or we're fighting based on that intelligence."⁴² In their article on *Organizing Intelligence for Counterinsurgency*, Teamey and Sweet summarized this symbiotic relationship as "effective intelligence drives effective operations, producing more intelligence."⁴³ The caveat of this relationship is a requirement that every operation being conducted needs to have an intelligence dimension attached to it.⁴⁴ This at times may seem odd. This is particularly true for a soldier in the field, as it may appear, sometimes, that he is spending more efforts gathering information than in actually combating the insurgents.⁴⁵ Nevertheless, there is no alternative to this approach. For an operation to have any chance of success there is a need to base it on the best intelligence available.

A third element is the development of a bottom-up, decentralized approach. Counter-insurgency by its nature is composed of dispersed operations. Because insurgent elements vary in time and space, the situation in one unit's area of responsibility will be different from its adjacent unit. There is a requirement, therefore, for each unit to develop its own intelligence picture based on its integral and attached collection assets, resulting in an intelligence flow that is more bottom-up than top down⁴⁶. There are three components to this element.

In an asymmetric environment, every soldier becomes a collector of intelligence when he interacts with the local population. As everyone can contribute to the intelligence effort, the American Army has developed the concept "every soldier is a sensor". This concept is based on the premise that "The individual soldier is the most capable, sophisticated collector of intelligence in today's Army."⁴⁷ The intent is to train soldiers and leaders to see intelligence collection as everyone's responsibility. This will result in junior leaders directing and optimizing the collection of information by patrols, and soldiers understanding their vital role as collectors. This concept represents a major shift from conventional intelligence collection methods. Major Michael Patton, the operations officer of the 4th Battalion, 27th Field Artillery Regiment, a unit of the US 1st Armored Division operating in Baghdad, expressed it well when he made the following comment based on his experience with intelligence in Iraq in 2003: "Everyone is an intelligence officer—that's sort of our theme....If you're talking about a paradigm shift, this is it: You have to see everyone you come in contact with as having intelligence value."⁴⁸

Due to the dispersed nature of most counter-insurgency operations, intelligence gathering efforts must take place at all echelons. As a result, intelligence collection assets are typically pushed down at the tactical level, sometimes as low as company level. Based on the recent Canadian Forces experience in Afghanistan, a trend in counter-insurgency is to see the intelligence capability normally associated with an infantry battalion, pushed down to company level, brigade capability pushed down to battalion and so on. Another trend is to see intelligence specialists, rarely seen below brigade level during the Cold War period, operating at battalion and even company level. Finally, a last trend is for national strategic collection assets capability to be pushed forward into a theatre of operations.⁴⁹ According to the American publication *Field Manual 3-24*, two techniques can be used. "Either attaching a basic intelligence analytical capability down to battalion or company level [dispersed approach], or forming a company information management capability from assigned personnel [consolidated approach]."⁵⁰

Although collection assets are pushed down at the tactical level and each unit develops its own intelligence assessment of its area of operations, there is still a

requirement for a synchronized approach to the overall intelligence effort. Synchronization demands that all levels of the military structure work closely not only with each other, but also with other government agencies, host nation organizations, other allies and potentially non-governmental organizations. Synchronization also demands that all information collected and collated be shared in order to enhance fusion capability, which is to amalgamate reports of various sources into a single assessment.⁵¹ In a counter-insurgency campaign there will be a plethora of small, apparently insignificant and unconnected data. Only effective collation and cross-referencing will enable analysts to assess the significance of individual pieces and make best use of them. The use of a common database will therefore increase significantly the fusion of all available information.

A fourth element is the need to adjust the intelligence system and tools to meet the demand of counter-insurgency. To be effective and relevant, the tools and techniques used by intelligence personnel must be adjusted to the environment of counter-insurgency. The changes are significant, as indicted by a recently published article on *Intelligence Collection and Analysis*: “The practice of intelligence has evolved from a military science in conventional operations to a military art in [counter-insurgency].”⁵² In essence, the focus given to each element of the intelligence cycle—planning, collation, analysis, and dissemination—is different.⁵³ Table 3 provides a comparison of various intelligence systems and tools, between conventional and counter-insurgency operations.

Conventional Threat		Counter-insurgency
Template Formations	Understanding the Adversary	Understand Intent
Intelligence Preparation of the Battlefield	Planning Tools	Intelligence Preparation of the Environment
Stand-off Collection	Collection	Close Collection
Reconnaissance		Surveillance
Sensor-shooter Link		Every Soldier is a Sensor
Order of Battle & Template	Analysis	Pattern & Link Analysis
Deliver Fires (kinetic)	Effects	Create Effects (kinetic & non kinetic)
Deep Attacks		Close Attacks
Battle Damage Assessment	Measures of Effectiveness	Sensitive Site Exploitation

Table 3: Intelligence Systems & Tools Design

Source: John DeFreitas, “Preparing for Emerging Threat While Supporting Active Operations” (Briefing given at the *Intelligence Warfighter Seminar*, Fort Huachuca U.S., 12 December 2006).

A method to better understand the complexity of using various intelligence tools between conventional and counter-insurgency operations, is to examine the use of the

intelligence estimate process. The basic construct of any military estimate process rests on the principle that when faced with complex situations, “humans traditionally try to reduce them into smaller segments . . . , [which] are more easily analyzed and understood. Through understanding the nature of its parts, the problem can be reassembled and understood as a whole.”⁵⁴ The underlying assumption behind this concept is that the final understanding of a situation equals the sum of each of its parts.

The current intelligence process being used by Canada, along with its allies of Australia, Great Britain, and the United States, is called intelligence preparation of the battlefield (IPB). IPB was developed in the United States in the aftermath of the Vietnam War as an intelligence tool to provide commanders not only with information on the enemy’s capabilities, but also on its intention. It was designed to expedite the conduct of the intelligence estimate, by using a very systematic process, in order to develop graphic outputs that are easier to assimilate. IPB is a product of the Cold War and as such was designed to meet the specific requirements of that period. It was introduced as the official US Army intelligence estimate in the mid-1980s and was gradually adopted during the 1990s by the other services of the United States Armed Forces, as well as the members of the America, Britain, Canada, and Australia (ABCA) Coalition and North Atlantic Treaty Organization (NATO).

IPB is defined as a “continuous and systematic process of analyzing the adversary with existing weather and terrain conditions within a specific geographic environment within the guidelines and tempo of the operational planning process.”⁵⁵ It is designed to support staff estimates and military decision making. The IPB process is divided into four distinct steps as follows:⁵⁶

- ◆ Define the battlespace environment;
- ◆ Describe the battlespace effects;
- ◆ Evaluate the threat; and
- ◆ Determine the threat courses of action.

In very simple terms, the first three steps of IPB are designed to gather specific information about the area of operations and the opposing force. This information is then combined during the fourth step to determine enemy courses of action (COA). To distinguish between the two approaches, the process when used in a counter-insurgency setting is referred to as intelligence preparation of the environment (IPE). Table 4 provides a comparison of the application of IPB/IPE between conventional and counter-insurgency operations, while Table 5 amplifies the differences in understanding and analyzing the type of adversary one could be facing.

Conventional Operations		Counter-insurgency
Physical Terrain	Step 1 Battlespace Environment	Human Factors: Demographics, Culture, Tribes, Clans, Classes, Ethnicity, Key individuals/Groups/ Families
Politics not primarily considered	Step 2 Battlespace Effects	Politics are central and integral for every action
Linear		Asymmetric (computer, media-IO, population)
Effects of Physical Terrain and Weather		Effects of infrastructure, government services, jobs and media
Order of Battle	Step 3 Threat Evaluation	Networks (cellular structure)
Doctrinal Templates		Enemy Tactics, Techniques, Procedures
Military Focus (uniformed combatants, identifiable threat with large signature)		Irregular warfare threat requires distinguishing between insurgents, active/tacit supporters and general population
Event Templates (movement times/doctrine)	Step 4 Threat Courses of Action	Pattern, link analysis, social networking (objectives/goals)
Centralized C2		Decentralized cellular operations

Table 4: Shifting IPB/IPE Construct

Source: Dam Zeytoonian et al, "COIN Operations and Intelligence Collection and Analysis," Military Review 88, no 5 (September-October 2006): 31.

Conventional Order of Battle Factors	Insurgency Characteristics
Composition	Insurgent Objectives
Disposition	Insurgent Motivations
Strength	Popular Support or Tolerance
Tactics and Operations	Support Activities, Capabilities, and Vulnerabilities
Training	Information Activities, Capabilities, and Vulnerabilities
Logistics	Political Activities, Capabilities, and Vulnerabilities
Operational Effectiveness	Violent Activities, Capabilities, and Vulnerabilities
Electronic Technical Data	Organization
Personalities	Key Leaders and Personalities
Miscellaneous Data	
Other Factors	

Table 5: Insurgents Characteristics and Order of Battle Factors

Source: United States, Department of the Army, *Field Manual 3-24 Counterinsurgency* (Washington D.C.: U.S. Government Printing Office, December 15, 2006): 3-13.

The challenges for intelligence specialists in counter-insurgency are significantly more complex and demanding than conventional warfare. In his book *Intelligence in War*, John Keegan wrote, when mentioning the transformation facing the intelligence services post 9-11, that:

[Intelligence specialists] have already learned to regret the emergence of new intelligence targets that lack any concrete form: aggressive belief systems not subject to central authority, shifting alliances of dangerous malcontents, stateless migrants disloyal to any country of settlement. It is from those backgrounds that the agents of anti-Western terrorism are recruited.⁵⁷

Operating in a counter-insurgency context demands that intelligence must be more focused, with a higher degree of precision required. In addition, intelligence specialists must cover a large spectrum of factors, ranging from military to human, from political to economic. As each insurgency is different, there cannot be a one size fits all approach. Due to a continuously shifting operating environment and adversary, success demands that the intelligence capability remain flexible in order to adapt to the specific needs of each situation.

Military intelligence allows a force to operate with focus and purpose. The alternative is for the force to operate blind, in an advance to contact mode, which results in indiscriminate use of force. As indicated by Eliot Cohen in his article, *Principles, Imperatives, and Paradoxes of Counterinsurgency*, "without good intelligence, a counter-insurgent is like a blind boxer wasting energy flailing at an unseen opponent. With good intelligence, a counter-insurgent is like a surgeon cutting out the cancers while keeping the vital organs intact."⁵⁸

Conclusion—So What?

Studying the past, has a way of introducing humility—a first stage toward gaining detachment—because it suggests the continuity of the problems we confront, and the unoriginality of most of our solutions for them. It is a good way of putting things in perspective, of stepping back to take in a wider view.

John Lewis Gaddis⁵⁹

Insurgency is not a new phenomenon. Arguably, it can be said insurgency is as old as organized warfare itself. There are many root causes for an insurgency, but typically, a classic insurgency begins with a perception of oppression, due to political, societal and/or economic grievances.

Although military and strategic theories continually evolve, one constant regarding insurgency and counter-insurgency is that they are essentially about the battle to win and hold popular support, in the theatre of operations and at home. Traditionally, insurgents have a head start in a campaign, while the government must first discern a threat, and then formulate an appropriate response, within the rule of law. There are numerous factors and principles that make or break a successful counter-insurgency campaign. However, to paraphrase from the writing of Kitson, if one agrees that the problem of defeating an insurgency consists very largely of finding him, it is easy to recognize the importance of intelligence. Without accurate, actionable intelligence, the military and security forces conduct random, ineffective offensive operations, which tend to produce very little positive and much negative reaction amongst the population involved.

Military intelligence provides the commander at every level with the necessary information about the adversary to conduct successful operations. Confronted by an adversary that is very fluid and difficult to identify, the intelligence process needs to be adjusted to the specific demands of each situation and to remain flexible. The focus is no longer on monitoring large military formations or strategic equipment, but on individuals, operating in a loose network.

Military intelligence in counter-insurgency must focus on people, which requires a close intelligence operation relationship. The intelligence picture must be built from a bottom-up approach, due to the ever changing nature of the insurgents in time and space. In addition, successful intelligence operations require a wide range of knowledge that extends well outside the traditional spectrum of information monitored during high intensity warfare of enemy and terrain.

For the foreseeable future, the most likely environment under which western military forces would be asked to operate under will be marked by high volatility and uncertainty, confronted by an insurgency type adversary. Under these circumstances, to remain relevant and effective, military intelligence must be ready to face such an asymmetric adversary and forget about its outdated Cold War doctrine and process. A failure to do so will cost lives.

About the author...

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OPENING THE NORTH: TECHNOLOGY AND TRAINING AT THE FORT CHURCHILL JOINT SERVICES EXPERIMENTAL TESTING STATION, 1946-64

Dr. Andrew Iarocci

With Russian submarines planting flags beneath the polar ice cap and American pressure to declare the Northwest Passage an international waterway, twenty-first century Canadians are justifiably apprehensive about their northern territories.¹ Over a ten-day period in August 2007, the Canadian Forces (CF) conducted Nanook 07, a sovereignty operation in the Hudson Strait. Prime Minister Stephen Harper has recently announced plans to expand the Canadian Rangers, part-time reservists who patrol remote corners of the North Country. A docking facility is to be established at Nanisivik, on the eastern entrance of the Northwest Passage. And not least significant, a CF Arctic Training Centre is planned for Cambridge Bay, Nunavut.² How far these initiatives will actually progress at a time when Canada's hard pressed ground troops are fighting a protracted counterinsurgency campaign in southern Afghanistan remains to be seen.

Historical precedent in the North Country suggests that, notwithstanding bold political rhetoric, Canadians have avoided permanent military commitments in a part of the country that few will ever inhabit or even visit. This article considers the experience at Fort Churchill, where the Canadian Army operated a Joint Services Experimental Testing Station (JSES) between 1946 and 1964. Ever challenged by limited infrastructure and a harsh environment, the JSES witnessed a productive, and often sobering, series of trials, experiments, and training exercises throughout its eighteen-year tenure. Yet just as the JSES attained peak efficiency as an international testing centre for cold weather equipment and a training ground for northern operations, the Canadian Army withdrew from Churchill, surrendering responsibility for its facilities to several other federal departments. In 1964 the conventional defence of the North Country was no longer the strategic priority that it had been in 1946. And in the wave of austerity measures that swept the Department of National Defence (DND) during 1963-64, there was little political hope for an outlying station in a scantily populated region.

Founding the Joint Services Experimental Testing Station

Sixty years ago the North Country represented an emerging vulnerability for Canada, as it does again in 2007. The Soviet Union, an erstwhile partner in the struggle against the Axis powers, appeared to vitally threaten western democracy during the early post-Second World War years. Soviet territory was dangerously adjacent to Canada's arctic landscape, a vast region that was as ill defined in Canadian minds as it was undefended.³ Even before the first Soviet atomic detonations or Igor Gouzenko's revelations of espionage at the heart of Canadian government, defence policy makers considered the north to be a possible invasion route or avenue of aerial attack against North American cities.⁴

Only a few years earlier, initial military forays into the North Country received low priority from Canadian military authorities. Before the outbreak of war in 1939, the United States expressed interest in a highway route to Alaska through British Columbia and the Yukon. Canada demurred, feeling that the road would undermine national sovereignty, while proving of little military use, since in theory, war materiel from across North America could reach the excellent port facilities at Prince Rupert, British Columbia by railway and then carry on to Alaskan destinations by sea in the event of an emergency. Only after the sweeping Japanese offensives of 1941-42 demonstrated a palpable threat against Pacific shipping lanes did Canadians reconsider the highway. In February 1942, Ottawa accepted a construction proposal from the Permanent Joint Board on Defence (PJBD), on the condition that the Americans build and pay for the highway, which would revert to Canadian control after the war. The United States Army Corps of Engineers completed the 1,400-mile stretch between Fort St. John, British Columbia and Delta Junction, Alaska by November 1943. Although the highway was an impressive feat of construction, the Japanese threat in the Eastern Pacific had receded by the time it opened. No more than about 54 tons of war material was delivered to the Alaska Defense Command by highway motor transport, an infinitesimally small amount in the grand scheme of Second World War logistics.⁵

If the effort to conquer distance with the Alaska Highway seemed wasted by war's end, the new strategic environment after 1945 compelled Canada's leaders and soldiers to reconsider the place of the Arctic and Sub-Arctic regions in defence policy. Northern air bases and radar stations were obvious priorities, but there would also be a role for ground troops in the event of a Soviet air or waterborne incursion. Yet before any such role could be fully assessed, Canada's soldiers needed to pinpoint their existing capabilities and deficiencies in northern environments. Although the Canadian and American forces boasted extensive operational experience in a broad range of geographical areas by late 1945-46, virtually none of the fighting had occurred in northern climates, excepting the brief Aleutian campaign. As the war drew to a close in late 1944, military planners shifted their attention toward the combined northern challenges of distance, terrain and weather. During the first two months of 1945, the Canadian Army and Royal Canadian Air Force (RCAF) staged Exercise Eskimo in northern Saskatchewan, with participants from the American and British forces. As stated in the exercise report, "The day is past when our Armed Forces can afford to suspend operations for the winter months. Space is power only when we can move and fight effectively in that space during all seasons of the year." The report noted further that some eighty-three percent of Canadian territory was classed as Arctic or Sub-Arctic, while over half the land area in North America, Europe and Asia was subject to winter conditions similar to the Canadian north. In other words, time invested in northern training was time well spent. Because of this, the essential purpose of Eskimo was to measure the impact of sub-arctic winter conditions on the mobility and fighting efficiency of a combined-arms striking force of about 2,000 all ranks.⁶

While the basic principles of warfare remained the same in the Arctic as anywhere else in the world, Eskimo revealed an array of challenges that were unique to cold weather operations. Troops with little winter experience expended as many as ten hours per day on subsistence activities alone. Featureless terrain and deep snow lengthened the time required to complete any tactical or operational tasks. Weather conditions played havoc with the normal trajectories of indirect fire weapons. Transport by air or ground was equally complicated. Conventional wheeled vehicles could not travel beyond well prepared road surfaces. Even the more versatile tracked vehicles in the Canadian Army inventory required excessive maintenance just to get running in temperatures reaching -40 degrees Celsius.⁷

Following Eskimo, the Canadian Army staged Musk Ox, a non-tactical exercise designed to study ground-air cooperation, oversnow mobility and logistics on the barrens to the north and west of Churchill between February and May 1946. The extended movement from Churchill to Edmonton revealed that airborne re-supply via parachutes, gliders and transport aircraft was feasible. The Army, however, still lacked a fully serviceable amphibious oversnow vehicle, as well as adequate extreme weather clothing.⁸ Even at the time it seemed ironic that an observer from the Soviet Army was permitted access to the staging area at Churchill, a fact that John Diefenbaker decried from the opposition benches while the exercise was still in progress.⁹

The Canadian Army, and its larger American counterpart needed a permanent venue for extreme cold weather trials and training if the deficiencies underscored during Eskimo and Musk Ox were to be corrected.¹⁰ In 1946, the General Staff Committee on Winter Warfare Research (CWWR) considered Churchill as a potential station for trails and exercises under "prolonged and rigorous" conditions.¹¹ The objective was straightforward: to determine which existing and prototype items would be serviceable under arctic conditions, and to discover what new equipment needed to be developed. Canadian and American personnel from all three services, as well as civilian scientists, were to cooperate in small teams. Cooperation with American test teams, under the provisions of the PJBD, was supposed to limit duplication of effort, while creating a repository of shared knowledge.¹² The DND granted final approval for the establishment of the JSES at Churchill in October 1946.¹³ Within just a few years, the new station was to witness a heavy volume of training exercises and trials of every conceivable item, from snow vehicles to spoons to toilets.¹⁴

Churchill's significance as a Cold War military installation marked a new chapter in its long history. The natural harbour at the mouth of the Churchill River was accidentally discovered in 1619 by Jens Munck, a Danish explorer in search of a northwest passage.¹⁵ About 1731, construction of the Prince of Wales Fort began, on the bank of the Churchill River. Despite brutal weather during the long winter months, swarms of insects in summer, and generally harsh living conditions all year long, Hudson's Bay Company employees at Churchill eagerly renewed their contracts, thanks to dependable wages and opportunities for promotion elsewhere.¹⁶ With the gradual decline of the fur trade, Churchill fell into obscurity until the early twentieth century, when the Prairie Provinces began to see the port as a grain outlet to European markets. The first grain shipments began with the completion of the railway and terminal port at Churchill in the early 1930s.

The Second World War brought new strategic purpose to Churchill. In 1941 the United States War Department proposed to use the old trading post as a way station for lend-lease aircraft making the journey from American factories to Britain, part of a larger transit system known as the Crimson Route. With the arrival of American construction troops in the summer of 1942, the local population of Churchill increased dramatically from 150 to more than 1,100. Although the Crimson Route was never actually used during the war, a small number of GIs remained on site to maintain the base and airfield facilities. The Royal Canadian Navy (RCN) also operated a radio station nearby. After the war, administration of Fort Churchill reverted to the Canadian Department of Transport, before the Canadian Army arrived to establish the JSES in 1946.¹⁷

As the CWWR discovered in 1946, Churchill was ideal for arctic trials and training. Most significant was its geographic location at an ecotone, a transitional zone between two ecological systems: the arctic barrens to the north and boreal forest to the south. As such, the terrain around Churchill broadly represented the character of arctic lands across the north. In contrast with more southerly testing stations, Churchill remained very cold throughout the winter, a feature permitting extended testing operations.¹⁸



This aerial photograph shows that layout of Fort Churchill in 1952. The excellently constructed airfield runs along the southern boundary of the facility.

Winter travel around Churchill was traditionally limited to dog teams and a few tractors. In summer, no one had previously attempted to negotiate the landscape with anything other than canoes. During the warmer months the melting snow revealed a twelve-inch layer of muskeg comprising peat-like top soil covered with moss. The shallow water table was exposed in grassy marshland, which was interspersed with floating bogs. Small sloughs ranging in depth from six to thirty inches dotted the landscape. In many cases it was difficult to tell where the land began and the water ended, while seemingly firm ground could very easily swallow a vehicle up to its belly. There were many lakes in the area, but these were rarely deeper than about eight feet. The ground was firmest, but also roughest, in the spruce forests. But if the terrain was unfriendly to vehicles during the summer months, at least the weather did not pose a problem. During the late 1940s, the average temperature from June through August ranged from 9° to 28° C, ideal for driving and maintenance.¹⁹ Notwithstanding its remote location, Churchill offered reliable rail and sea communications. In 1947 the Hudson Bay Railway (CNR) provided bi-weekly service, while a Canadian government ship visited the port once a year, with the maritime navigation season lasting from mid June through mid October. Enough buildings were left over from the days of the Crimson Route to immediately house 600 to 800 personnel, although these would soon need to be improved or rebuilt.

The seacoast facilitated cooperation with the RCN, while the Joint School of Air, at Carberry, Manitoba and the RCAF Station at Edmonton were also in convenient proximity.²⁰

The JSES headquarters at Fort Churchill was an Army responsibility. As the first JSES commander, Lieutenant-Colonel D.C. Cameron was responsible for administration, accommodation, army training, army trials and maintenance. Airfields, hangars and air traffic control fell directly under RCAF control.²¹ While the individual testing detachments in camp (Army, RCN, RCAF, Director General of Defence Research [DGDR], and US Army) were nominally subordinate to the camp commander, each agency operated with a relative degree of independence.²² Although numbers fluctuated over the years, the camp's original contingent comprised 560 all ranks, of whom more than half were Canadian Army personnel. A significant proportion of these soldiers—about fifty percent—were specialized technicians and tradesmen.²³

Evidence suggests that the Army and RCAF were much more enthusiastic about the JSES than their naval counterparts. In December 1946, the Naval Staff foresaw few immediate testing applications at Fort Churchill. Naval aircraft were already undergoing arctic testing at the RCAF Namao Experimental Station in Alberta. Much of the Navy's communications and electrical equipment, moreover, could only usefully be tested at sea. Although the RCN expressed some desire for gunnery tests at extreme low temperatures, the Naval Staff felt that manpower shortages precluded any work at the JSES. Beyond this, the naval commanders could not predict what sorts of tests might be undertaken in the future, as these would 'depend largely on what we are asked to do by United Kingdom (UK) authorities and on what work is undertaken by the USA.'²⁴ American naval commanders reflected the disinterest of their Canadian counterparts. The US Navy was already pursuing its own arctic sea trials, and saw little use for a land-based test facility. Because of this, the RCN intended to limit its role at Churchill to communications, ionospheric research and Loran (a long range navigation system known as Project Beetle).²⁵

Federal politicians in Ottawa may have been secretly relieved that the US Navy would not be sending a contingent to Fort Churchill. In June 1947, the American Sixth Army, based at San Francisco, proposed a joint training exercise in the Georgia Straits, to involve the 2nd Engineer Special Brigade, the 2nd Infantry Division and any available Canadian elements. Although the RCN was interested in the prospect, Brooke Claxton, Canada's Minister of National Defence, feared that the Canadian public would react negatively to a show of American military might in a highly populated area. This concern, coupled with the fact that the Canadian Army could provide little more than a token contribution, led the Mackenzie-King government to deny the request.²⁶ Thus, the fewer American forces at Churchill the better.

Although American ground troops would be stationed at Fort Churchill, the situation there was less sensitive than in Canada's more heavily populated southern regions. An American presence at the northern outpost during the war years caused no apparent difficulties with the tiny local population. And with the site so far from any population centre, it was unlikely that a renewed American contingent would elicit any sovereignty concerns from Canadians, so long as Canadian soldiers on the base outnumbered their GI counterparts. Nevertheless, the Mackenzie-King government was quick to downplay supposedly misleading media reports of a large-scale joint Canadian-American defence installation in the Canadian Arctic, as well as rumours that an all-weather highway was to be constructed from the American border all the way up through Manitoba to Churchill.²⁷ The joint aspect of the JSES was better left unpublicized.

The Situation on the Ground

For first time visitors to the North Country, Churchill was a land of contrasts, an interface between primitive and sophisticated lifestyles. J.W. "Wally" Bargholz, a Royal Canadian Electrical and Mechanical Engineering (RCME) craftsman, was posted to the JSES in September 1949. As a keen amateur photographer, Bargholz carefully observed his new surroundings, interpreting the landscape as a place of extremes: long dry winters and short damp summers; modern machines (snowmobiles) and ancient animal transport (dog teams); a bustling, sprawling military facility, and the eighteenth-century ruins of Prince of Wales Fort; the primitive Eskimo and the scientifically equipped soldier.²⁸



A novelty crest from the Fort Churchill years features an igloo on the arctic landscape.

W.E. Storey Collection

The revitalization of Fort Churchill meant that new boundaries were drawn, both physically and psychologically. Soldiers posted to the JSES clearly distinguished Churchill from the outside world to the south. Yet there were also boundaries to mark within the Churchill community itself. Under the Official Secrets Act, the camp and military test areas were designated as prohibited places. Although it was not feasible to fence in all of these newly restricted zones, signs were to be posted as a warning to unauthorized persons. Any civilians to be employed at the station were first investigated by the RCMP, although one has to imagine that with Churchill's tiny population, any Soviet interlopers would have been pretty obvious. All

civilians working in the camp area were issued special identity cards.²⁹ Modern administration had arrived.

Most of the locals of mixed First Nations and European ethnicity working in and around Churchill on a seasonal basis soon became quite familiar to the soldiers from the south. Much more mysterious to the newcomers were the Inuit (then referred to universally as Eskimos), hailing from more remote north-western lands. These were the "desperate people" of whom Farley Mowat wrote in his 1959 study of dispossession in the District of Keewatin, Northwest Territories.³⁰ Notwithstanding the patriarchal government policy decried by Mowat, ordinary Canadian soldiers on the ground seem to have developed a healthy respect for their indigenous neighbours. Wally Bargholz once counted himself lucky to photograph an "Eskimo" repairing his sled at the RCMP barracks; it was a rare scene, as the nearest hunting grounds were than 200 miles to the north. Bargholz considered the "Eskimos an intelligent race with strong mechanical abilities."³¹ Likewise, Captain A. Pennie, an artillery officer from the 68th Medium Battery, realized that he and his fellows had a lot to learn about arctic survival from the indigenous people. When a competent military instructor could not be found to train soldiers in snow shelter construction, Pennie suggested that "a demonstration of igloo building by Eskimos would be ideal."³²

Although the Churchill landscape was very thinly populated, military activities interrupted local routines. When the Army surveyed new firing ranges, staff officers

suggested that compensation be offered to locals with registered trap lines in the affected zones.³³ The Province of Manitoba agreed, pointing out that the transfer of lands to the DND would deprive several trappers of their subsistence living.³⁴ It was a delicate matter, since one of the trappers, 49-year-old Henry Johnson, a father of seven, had already inadvertently been caught by machine gun fire, narrowly avoiding injury as he attempted to collect his traps. After some length of negotiation with the trappers and Lieutenant-Colonel Cameron, a mediator from the Manitoba provincial government arranged to compensate the trappers financially for lost territory and buildings, at the expense of the DND. Simeon Spence, a mixed-race man from York Factory, and father of six, received \$2,350. On the recommendation of a local RCMP officer, Spence's compensation was to be paid out in \$50 monthly instalments; clearly he was not trusted to dispense the money responsibly all at once. Johnson, after his brush with death, received a lump sum of \$5,500—no questions asked.³⁵

Soldiering in the Arctic

Down the trail of the five man tent
Where nobody dares to go,
We'll follow the 'Boom' for miles without stop,
Down the trail till five men flop.

There's medics here and Service Corps too,
And everyone feeling blue,
They can't break our hearts but they're badly bent,
Down the trail of the five man tent.

The Sigs are tired and the Arty's beat,
The Royals can hardly lift their feet,
But while we've strength we'll sing this lament,
Along the trail of the five man tent.

We ain't had a beer for many a day,
And dames are a thing of the past,
The only thing we hear out here,
Is the North wind's horrible blast.

For some go down to the sea in ships,
Others fly high in the sky,
But we'll walk the trail of the five man tent,
Till the day we die,
For VRI.³⁶

These are the lyrics of the *Pole Star Blues*, sung by soldiers of The Royal Canadian Regiment to the tune of the *Trail of Aching Hearts* during a Churchill exercise in 1952. *Pole Star Blues* laments the hardship and monotony of everyday military life in North Country. Defending this vast territory was not simply a matter of designing and testing the right types of vehicles and kit. Canadian soldiers needed the training and confidence to operate effectively and safely in arctic and sub-arctic regions.

Contemporary perceptions of the average Soviet soldier's capabilities reinforced a sense of urgency in North American minds. According to a 1952 *Canadian Army Journal* article by a former Wehrmacht officer, the Russian peasant, "on the technical basis of a knife and axe," could build wagons, houses or sleds. Russians, suggested the German veteran, possessed a "natural insight" permitting them to travel over all types of remote terrain. Moreover, Soviet soldiers were said to be highly adaptable to any sort of climate, even when equipped with minimal special kit.³⁷ The Canadians, it seemed, had a long way to go if they were to repel such formidable adversaries in the inhospitable North Country.

While there was no dearth of combat veterans in upper echelons of the postwar Canadian Army, finding men with experience of northern climates was not so simple. In 1946, officers from the Directorate of Military Training (DMT) scoured nominal roles from past winter warfare exercises, trying to determine if any of the participants remained on active service. When this approach yielded less than satisfactory results, a survey was circulated among active personnel, inquiring who had trained with the Lovat Scouts at Jasper (1943-44) or participated in such exercises as Eskimo or Musk Ox.³⁸ Names of suitable candidates began to trickle in. Major E.F. Hersey had served as the Senior Signal Officer for Musk Ox, but had also spent time in the North Country before 1939. Sergeant T.E. Penton was a combat veteran of the elite First Special Service Force (FSSF), a joint American-Canadian light infantry brigade with some specialized training in mountain and winter warfare. Lieutenant Charles Grenier, of the Royal 22nd Regiment, had completed wartime courses in bush and mountain warfare.³⁹ But even if these men indeed possessed the right sort of credentials, they were too few in number.⁴⁰

On the other hand, there were plenty of prospective students to fill arctic warfare and survival courses. In addition to routine winter warfare training for Canadian soldiers, transient military and civilian test team members required crash instruction if they were to operate safely at the JSES. As Major W.J. Neill, in command of the Research Wing at the Royal Canadian School of Infantry, underscored in February 1947, the JSES would be liable to charges of negligence if an untrained test team member were to stray off and fall victim to the harsh elements. For this reason, Neill recommended that

All personnel visiting Churchill for anything over a few days take the indoctrination course which is arranged and carried through by Training Wing...it ensures that each individual will have the knowledge to give him a chance of survival should he be lost in a blizzard or otherwise be forced to fend for himself for a short time cut off from base camp.⁴¹

How effective was such training? In March 1947, Captain Pennie (68th Medium Battery) described the results of a winter indoctrination course for his artillery test team. As might be expected, the weather at that time of year was extreme, with an average temperature of -31° C. The men spent a total of seventy-five hours outdoors during the ten-day course, covering such topics as cooking, snow block cutting, sanitation and medicine. Pennie's team members agreed that two weeks was simply not enough time to learn all of the required survival skills; one month seemed more appropriate for a realistic basic course. Making matters worse for Pennie's team, some of the instructors presented conflicting techniques for the same skills, sowing much confusion among the students, who "learned little more than misery..." Discipline had also been difficult, with officers and men sharing the same classes, tents and igloos. After a hard day's march across frozen lakes in sub-zero temperatures, the troops needed time away from their leaders to relax. This was impossible with shared accommodation.⁴²

Men posted to Fort Churchill during the early years soon discovered that they were improperly equipped for arctic living, let alone military operations. Project Beetle, which began in 1947, involved the construction of a long-range navigation system (Loran) across northern Canada. The initial effort required an airlift of 400 tons of building supplies and technical equipment from Fort Churchill to Cambridge Bay, Northwest Territories (now Nunavut). Royal Canadian Air Force mechanics and support personnel working on the ground at Churchill shivered in their parkas, blinded by snow.

Their shoe-pacs were warm enough, but lacked ventilation, causing the feet to sweat and then freeze. The standard issue wool-lined mittens were not warm enough, and in any event, were too bulky for making delicate adjustments and repairs to aircraft and other mechanical components. Face-masks, mukluks, silk-lined mittens, snow glasses and generously cut parkas were essential if men were to function with even a modicum

of efficiency in the arctic.⁴³ Yet it was difficult to design a single style of outerwear for all jobs. Major A.G. Sangster, an RCME officer, noted that mechanics required specially designed arctic clothing if they were to work efficiently and safely in the north, as a 'mechanic at work requires insulation in different places than the average northern traveller. He is active mainly with his hands, arms and shoulders with the result that his upper clothing is too heavy.'⁴⁴ If the cold was not bad enough for mechanics working with their backs to the wind, snow invariably drifted around them, covering tools and parts, and engine compartments.



SHOO FLY II Exercise Report, 1951 Military History Research Centre Canadian War Museum

This map, showing Fort Churchill's location on the western shores of Hudson's Bay, was used as a cover illustration on after-action reports for exercises at Fort Churchill during the early 1950s.

The experience of 32-year-old Flight Officer D.W. McQuaig, a lone RCAF pilot participating in a 48-hour test of aircraft emergency equipment, shelters, and clothing underscored the stresses and challenges of everyday existence in the arctic, if only for short periods. It was 22 January 1954 and the temperature was -34° C. The test began in the afternoon, under the premise that the pilot had ejected from his plane and was awaiting rescue. After using his emergency equipment to build a primitive snow cave, McQuaig ensconced himself in a sleeping bag for the night:

I lay there with a candle burning until 2000 hrs with my mind wandering from imagining I was in a coffin, my wife and family, wishing I had made the cave larger, and numerous thoughts...I put out the candle and tried to go to sleep...as I rolled from one side to the other, I noticed cold spots at the small of my back, my knees and my feet...My feet required almost continuous movement to keep them from freezing.

The following day, the freezing pilot attempted to hunt ptarmigan with a small collapsible rifle, but found no prey; "walking back against the wind, my face became very cold, my nose ran continually and hoar frost formed on my collar, moustache, eyebrows, and several times my eyelashes stuck together."⁴⁵ By the afternoon of the second day, McQuaig found it difficult to concentrate, was perpetually cold and decided that he could not spend another night in the snow cave without suffering frostbite or pneumonia. After returning to base that afternoon, the stoic pilot discovered that all of the toes on his left foot were frozen.

Beyond parkas and sleeping bags, and other emergency survival gear, there was an endless variety of specialized and conventional kit to be tested at Churchill. It is instructive to consider a selection of miscellaneous items, drawn from carefully compiled test reports.⁴⁶ Since an army marches on its stomach, the basic spoon warrants attention. Even this simple piece of technology required adaptation for cold weather applications. Spoons made from nylon plastic—a relatively novel material in the late 1940s—were superior to stainless steel not only because of their light weight (1/2 ounce), but also because metal cutlery fused with fingers and tongues at extreme low temperatures. Despite the advantages of plastic, early prototype spoons required some modification to prevent the edges from irritating the corners of the mouth while eating. Nylon was also the preferred material for the string vest, an essential woven undergarment designed to facilitate ventilation between clothing and the skin. Not only was the nylon version of the vest more comfortable than other variants made from natural fibres, it was also machine made and could be cheaply mass-produced, a key consideration at a time when materials used for military uniforms were in a state of transition from natural to synthetic composition. The latest materials and chemical treatments, however, were not always best for northern climates. The Canadian-manufactured five-man flame resistant arctic tent, an absolute staple item for northern operations and the inspiration for Pole Star Blues, offers a case in point. Unlike the spoon or string vest, the tent functioned as a system comprising several components: fabric, liner, poles, pegs, stoves and flame resistant chemical treatment. While the shape and dimensions of the tent were largely satisfactory, the anti-flame treatment caused serious problems. At low temperatures, the chemical caused the fabric to freeze and stiffen, making it very difficult to pack and unpack the tent. Moreover, the treatment increased the weight of the tent by more than thirty percent, an unacceptable margin for arctic operations, which required every piece of kit to be soldier portable.

Items of kit such as the spoon, vest or tent kit were neither engineered nor employed in a vacuum; the features of one item shaped the designs of others. For example, the general employment of five-man tents in the field meant that packing rations in ten-man cases was highly impractical. While the five-man tent/ten-man ration disparity would be insignificant in temperate climates, the implications for arctic operations were of some consequence. No soldier wanted to spend unnecessary extra minutes outside of his heated shelter splitting up the ten-man cases between two five-man tents, which were often spaced relatively far apart for tactical reasons.⁴⁷ In the Arctic, definitions of time and distance were unique.

Arctic Distances

Deep snow, extreme cold, and featureless, yet rugged, terrain conspired to warp spatial relationships for Canadian soldiers in the North Country. What might normally be considered a modest distance for motorized travel in temperate climates usually turned into a major expedition at Churchill. Early explorers of Hudson's Bay recognized the challenges of northern travel long before the advent of the internal combustion engine and the JSES. In November 1769 Samuel Hearne, an agent of the Hudson's Bay

Company, set out from Prince of Wales Fort in search of copper deposits and a northwest passage to the Pacific Ocean. The relatively mild weather made for difficult going, since according to Hearne, "the colder the weather is, the easier the sledges slide over the snow."⁴⁸ After crossing the Seal River, Hearne's guide reported that the main woods could be reached in four or five days. Yet after ten days journey, the expedition had not reached any woods. Along the way, the rough route and deep snow exacted a heavy toll on the sledges, which could not be easily repaired for lack of tree branches.⁴⁹ Such challenges had to be accepted as part of daily life on Hearne's four-year trek.

The experience of three Canadian soldiers on the same ground 180 years later shows that some things had not changed in the North Country. In late January 1951 preparations were in the works for an exercise some distance beyond the JSES camp area. Word reached headquarters that a D7 Caterpillar bulldozer had broken down about 70 miles north of the station. Three RCME mechanics, Lance-Corporal M.E. Stoney and Craftsmen J.R. Stevenson and R.F. Hudson, set out to recover the tractor at 1630 hours on 29 January. Their equipment consisted of a D7 dozer, a Penguin Mk II tracked snowmobile and a 40-ton trailer. The Penguin had an enclosed cab, but the D7 was open-topped, so it was necessary to rotate drivers on an hourly basis. After only a few miles, the wheeled trailer bogged down in deep snow, and the tongue soon broke loose. The only option was to use the D7 to bulldoze a clear path, while improvising a towing cable for the trailer. In the meantime, the team radioed back to camp for a new tongue assembly. A relief crew of three men—Captain J.M. Hewson and two lance corporals—set out in another Penguin, but Hewson was unable to locate Stoney's group, despite the fact that they were in constant radio contact. After Stoney used a flare pistol to indicate his position, Hewson finally found him at midnight. By 0130 hours in the morning, Stoney was back on the move. Progress was steady until 1130 hours, when the trail simply disappeared. After doubling back, the team came upon a trapper, who told Stoney of an alternative route. An intensive search located no such trail. Finally, the wayward recovery team met up with another military convoy, which led them to a navigable path. Stoney, Stevenson and Hudson took turns driving their two vehicles continuously until 0600 hours on the morning of 31 January, when they rested before setting out again at 1000 hours, only to discover a serious transmission fluid leak on the D7. The trio waited for 48 hours for an engineer team to arrive and repair Stoney's D7. By 1000 hours on 2 February, Stoney's crew was running again, arriving at the recovery site at 2330 hours that evening. After a night's rest, the men loaded up the immobilized D7 on the 40-ton trailer. On their way back to Churchill, they also recovered a disabled Bombardier snowmobile. After a further series of mishaps, including a runaway trailer on a steep hill, the team finally reached Churchill by 1700 hours on 5 February. It took a full week to make the 140-mile round trip.⁵⁰ Stoney, Stevenson and Hudson's journey was nothing out of ordinary.⁵¹ The week-long ordeal simply underscored the need for extensive testing and training if Canadian soldiers were to survive in the Arctic, let alone defend it from Soviet invasion.

Vehicle Development

In the early days of the JSES, both the American and Canadian forces assembled long lists of weapons and equipment for testing.⁵² During the summer of 1946, even before the JSES had been formally approved, the Canadian Directorate of Vehicle Development (DVD) carried out a summer testing program at Churchill, to determine the feasibility of operating wheeled and tracked vehicles in the north.⁵³ As veterans of the fighting in Italy or Northwest Europe, infantry test team members were concerned that northern operational requirements might force them to negotiate ground that was otherwise impassable, as had been true of the fighting in the Scheldt estuary during the autumn of 1944. They needed a durable vehicle that could go everywhere.

Test vehicles were divided into five test categories: wheeled, heavy tracked, medium tracked, light tracked and trailers. The wheeled vehicle category included one Chevrolet Canadian Military Pattern (CMP) 3-ton 4x4, one General Motors CMP 3-ton 6x6, two Willys 1/4-ton 4x4 jeeps, one Ford 1/4-ton 4x4 amphibious car (seep), one General Motors 2 1/2-ton 6x6 amphibious truck (DUKW), as well as some 15-cwt trailers. These designs were all veterans of the Second World War, most notably the jeeps, which had performed a broad range of chores in every theatre of operations. Despite the jeep's popular reputation for stamina and manoeuvrability, it could operate only on the firmest ground in the North Country. In fact, all vehicles in the wheeled category lacked adequate flotation properties for operation on soft ground.



SHOO FLY II Exercises Report, 1951 Military History Research Centre Canadian War Museum

Canadian infantrymen pack up their kit before moving out of camp for Exercise SHOO FLY II, summer 1951. The goal was to determine the feasibility of using parachute drops to supply a non-mechanized force operating over northern terrain. The soldiers have discarded their web equipment in favour of Second World War-vintage American pattern mountain rucksacks. The man in the foreground is fitting a 1937 pattern water bottle to his rucksack.

The heaviest tracked vehicles tested that summer were the American M24 Chaffee tank, the Canadian Grizzly tank, and the D8 Caterpillar tractor. In its stock configuration, the Chaffee sank up to eighteen inches and bellied out after travelling a few yards. Improvised track-shoe extenders consisting of conventional lengths of two-inch angle iron fastened onto each shoe gave the tank a higher degree of flotation and a considerable performance improvement. Sinking was reduced to ten inches, and the vehicle was able to drive over a mile with no difficulty. The track extenders, however, were nothing more than a stop-gap—several broke off completely, while most others were bent, and would have become unserviceable rather quickly if the tank were actually driving under operational conditions. The D8 Caterpillar, with bulldozer, was ineffective in its standard configuration. It appears that the Grizzly was used primarily as a recovery vehicle for the other tests, being too heavy for soft ground beyond the blazed trails.

The medium-weight tracked vehicles—two Willys-Overland Mk II tracked jeeps and a Windsor carrier, proved somewhat more useful than either the wheeled or heavy tracked machines. The Mk II negotiated a range of terrain conditions, so long as it was carefully steered and not overloaded with personnel or kit. It was capable of amphibious runs, but freeboard was limited to six inches at most. By adding empty oil drums for extra flotation, the freeboard increased to a safer 16 inches. The Windsor carrier was not amphibious, and could wade only in very shallow water. It also exerted too much ground pressure.



SHOO FLY II Exercise Report, 1951 Military History Research Centre Canadian War Museum

Heavily laden Canadian troops march out of Fort Churchill over a gravel road to participate in Exercise SHOO FLY II, summer 1951.

The lightest class of tracked vehicle also boasted the best overall performance. This category included three Mk III snowmobiles, one Muskrat, one Mudcat and one Studebaker M29C Weasel. The snowmobiles boasted many positive features: good work on soft ground, suitable wading characteristics and rugged construction. An incidental bonus was the discovery that air drawn into the engine passed directly over whoever was lucky enough to ride in the passenger's seat, driving away insects, the "tormenting devils on wings" that plagued the test area during summer.⁵⁴ On the other hand, the snowmobile had little capacity for cargo or troops, while drivers complained of ergonomic problems. The Muskrat was able to manage better loads, but was simply not robust enough for operations in rocky or forested terrain. The Mudcat was slightly tougher, but its freeboard was too low for rough water crossing. Compared with the Muskrat and Mudcat, the Weasel, a veteran of the Second World War, boasted good engine performance, but suffered from a weak suspension system and insufficient ground clearance. While the light tracked vehicles were the best performers in the Churchill ecotone, none of them was really ideal.

There were no insects to contend with during winter vehicle trials, but the combined challenges of extreme cold, deep snow and poor visibility made life much more difficult than in summer. During the winter of 1947-48 a selection of vehicles, including the Penguin Mk II snowmobile, several wartime CMP trucks and a Mack 10-ton 6x4 truck, were operated under the worst arctic conditions. Of these, only the tracked Penguin was

at all practical.⁵⁵ Nevertheless, the test officers discovered other obstacles that were independent of vehicle design or type. Refuelling out in the open from portable containers during heavy snowfall was a particular nuisance, as any snow entering the vehicle's filler neck would contaminate the fuel, leading to mechanical malfunction. Among operators there was also a generally poor understanding of correct arctic maintenance procedures. While the technique of diluting gasoline with methyl hydrate facilitated cold weather operation, drivers tended to add too much, unaware that excessive dilution was counterproductive. Even the best arctic vehicle designs required carefully educated operators.⁵⁶

The early vehicle trials at Fort Churchill led to the rejection of many existing pieces of equipment for northern service, but also fostered the development of serviceable items. An example from the early 1950s is the 2-ton Northland light cargo sled, a ski-mounted platform towed behind a snowmobile or tractor. While the Army had relied upon existing commercial sleds during its initial post-war forays into the North Country, these had ultimately proved unstable or too rough for transporting delicate technical equipment. The Northland, with its coil spring suspension and excellent steering system, was both manoeuvrable and stable.⁵⁷ This reliable sled was later fitted with a heated troop compartment for sheltered transport in forward areas.⁵⁸ The apparent simplicity of the sled and the shelter was deceiving, for even relatively minor design features could make or break a piece of equipment for arctic applications. There was no substitute for careful engineering and thoughtful design at the drawing board.

Alternative Mobility

The 1946 Churchill Project demonstrated that most vehicles in the Canadian Army inventory, be they of British, Canadian or American pattern, were of limited use for northern operations. In the late summer of 1951 the Army staged Exercise Shoo Fly II to investigate the feasibility of supplying a non-mechanized force by air drop. According to the scenario, Churchill was to function as a landing area from which operations were to be conducted on foot up to a range of forty miles. A single Canadian infantry platoon was to engage a small waterborne enemy recce team and subsequent parachute landing. In the final phase, the friendly and enemy platoons joined forces to launch a reinforced raid against Fort Churchill. (Such miracles were possible in peacetime exercises.)

From the outset, Colonel D.F. Forbes, in command of the JSES, recognized that a force operating in the Northern Country could not easily carry the full panoply of support weapons—Brens, PIATs and two-inch mortars—upon which infantrymen had depended in the Second World War. While these weapons were light enough on their own, they demanded a prohibitive quantity of ammunition. On the other hand, Forbes anticipated rather conveniently that any infantry actions in the North Country “will be settled quickly and the normal requirement for a reserve of ammunition on re-organization is not a factor.”⁵⁹ The reality was that no one could be sure how northern operations would play out in the event.

The exercise demonstrated that summer movements were feasible, with the understanding that troops must be willing to accept “conditions of hard living...” Lightly equipped troops could manage a minimum of ten-miles per day, for a maximum of three days. At this point, additional rations needed to be delivered by air. The Norseman float planes supporting the exercise were unable to fulfill this role because most of the lakes in the area were too shallow and rocky for safe landings. Moreover, even if the aircraft could find an appropriate landing area, it was often very difficult to locate the khaki-clad ground troops, who blended in very well with the brownish summer landscape. Rapid casualty evacuation would be quite impractical under such circumstances.⁶⁰

Two types of radio sets, the No. 58 and No. 62, were employed for Shoo Fly II. Weighing 18 pounds, less batteries, the No. 58 sender-receiver was designed for use below the battalion level, and could be carried entirely by one man in backpack arrangement. Even under the best of circumstances, however, this set's range was limited to five miles.⁶¹ Although the No. 62 sender-receiver was designed for vehicle or animal portability, it also was possible to man-pack the set in three loads. Maximum range was ten to twenty miles under ideal conditions.⁶² Neither of the two wireless sets permitted direct communication with base camp at ranges of more than thirty miles, about the maximum distance a platoon could march before running out of food. Fortunately, the No. 58 sets were capable of effective communication with aircraft. Pilots could then relay messages back to headquarters using their own radios. The No. 62 sets gave mixed performances, but there was no escaping the reality that a 50-pound radio load was too much for a signaller to carry across difficult terrain, in addition to his own weapon and kit.⁶³ Ideally, the infantry needed a man-portable set with a range in excess of 50 miles.⁶⁴

Shoo Fly II incorporated a psychological component. Soldiers who had never spent any time in the far north feared the unfamiliar. According to post-exercise reports, experiences such as Shoo Fly helped to transform the average soldier's attitude toward the north from fear to respect. Ironically, JSES exercise planners found themselves running out of space as the station's infrastructure expanded. It soon became necessary to venture ever further from the base area if true wilderness conditions were to be simulated, since the lights and activities in Churchill were easily visible for distances of twenty miles across the flat terrain. Regular vehicle traffic within this radius, moreover, was leaving a significant environmental footprint. In the vehicle testing areas, mud tracks were beginning to assume the appearance of ordinary roads.⁶⁵

Following close on the heels of Shoo Fly II was the Pole Star series of exercises during the winter of 1951-52. In common with Shoo Fly II, all tactical movement in Pole Star was on foot, with vehicles providing simulated re-supply from the air. Averaging about seventeen days, each of the three Pole Star exercises was longer than previous winter manoeuvres, a factor that aggravated the supply situation. In each phase a reinforced Mobile Striking Force (MSF) infantry company group was tasked to capture or destroy an enemy lodgement.⁶⁶ In contrast with conventional operations in temperate climates, where supplies were immediately available from motorized transport columns, each soldier in Pole Star carried at least three days worth of food, fuel, and shelter, in addition to the usual combat equipment and weapons.⁶⁷

Pole Star showed that ground operations should begin from an airhead at least five or ten miles from the objective—out of range of enemy weapons. Unfortunately, even this relatively short distance was too far to carry heavy support weapons, such as the 4.2-inch mortar. These would have to be dropped at previously arranged fire positions before the main attack was delivered against the objective. Tactical surprise would be best achieved at night, as effective camouflage and concealment were difficult to achieve by day in the open arctic terrain. High standards of leadership were essential, particularly at junior levels. What might normally seem a small inconvenience in southern climates could provoke great dissatisfaction among tired soldiers after hours of marching on the wind-blasted barrens:

6 December 1951:

Temperature was about 0 degrees Fahrenheit (-18 degrees Celsius), wind of 10-15 mph from the northwest. Snowshoes were worn but the rough surface slowed down movement. Navigation was not good, there were frequent dogs

legs and curves in spite of the perfectly flat terrain. The troops can easily identify this unnecessary distance and there is considerable complaining.⁶⁸

Samuel Hearne, the seventeenth-century veteran of a four-year north western trek, would have recognized this challenge, as members of his expedition slipped away when the going got tough.⁶⁹ Yet even the best disciplined modern soldiers reached their limits of endurance quickly under the harsh conditions. In one instance, a section pulling a sled with a 3-inch mortar had to turn back to camp after covering just 300 yards. The men could go no further in the soft snow. At another, point, the company's medium machine gun section fell behind by 1,000 yards. When the other troops stopped to wait for the stragglers, all of the men grew cold and unhappy. In all, it took nine hours, twenty minutes to cover less than seven miles.⁷⁰ In temperate climates it probably would not have been difficult for experienced company officers to locate an enemy objective that was only five to ten miles away, but maintaining direction and finding the enemy in the featureless arctic terrain was another matter entirely. At some points during the exercise, umpires intervened to steer lost platoons toward their targets:

7 December 1951:

Patrol of one platoon is sent off under umpire guidance in the direction of the enemy position. The umpire direction is necessary at this time because the enemy trail has again been lost and the patrol commander did not have any idea in which direction to look.⁷¹

After all of this searching, the enemy position was eventually found to be abandoned.

The extreme elements and hardships of arctic living inflicted a number of casualties. During Pole Star III ninety-four men reported sick, of whom nine were sent to the Fort Churchill Military Hospital. Afflictions included bronchitis, gastro-enteritis, intestinal colic, fume conjunctivitis (probably from camp stove fumes in tents) and frostbite. Ironically, one man suffered from heat exhaustion on Pole Star III, despite a chilly temperature of -5° C. The man had been overdressed for the cold, and was carrying a fifty-pound rucksack and rifle (about ten pounds). The climate posed greater dangers than Soviet troops.⁷²

Reorientation

By the mid-1950s, Fort Churchill had witnessed a long list of equipment trials, training exercises and combinations thereof. The time had come to determine the future of the JSES. It was an expensive facility that absorbed more than \$20 million in construction costs alone between 1946 and 1956 (about \$190 million in 2007 dollars).⁷³ Despite heavy investment, the combined needs of the Canadian and American test teams and support elements often exceeded available storage and workshop space. In winter, for example, garages were jammed to capacity with vehicles on a nightly basis to prevent damage from freezing and ease engine ignition the following morning. Each morning, garage floors were covered with a slushy mixture of water, oil and other automotive fluids—a general safety hazard. When engines were started, they had to be allowed a few minutes to warm up before driving outside. This requirement, in turn, filled buildings with carbon monoxide fumes.⁷⁴

One potential alternative to expensive garage building projects was a new winterization kit that facilitated engine starting in sub-zero temperatures. Even if the kits were effective, however, they did not fully solve the winter storage problem. Vehicles parked outside over night were invariably covered in snow by the next morning, which took hours to clear away. During three-quarters of the year, the weather prohibited night

time maintenance on vehicles parked outdoors. And finally, even if the winterization kits helped get engines running, there was still the matter of frozen transmission, differential, and wheel bearing lubricants.⁷⁵ The storage problems continued throughout the 1950s, with never enough building space available. In 1959 a fifty-vehicle parking lot equipped with individual block-heater plugs was proposed, but as with the winterization kits, this did not alleviate overnight storage problems.⁷⁶

Vehicles took up lots of shelter, but so did personnel. Liveable permanent quarters, especially for married men, were in chronically short supply. According to a 1955 naval memorandum,

...the lot of the married man in the CS Branch, RCN, is an unhappy one. If he is drafted to Churchill, as he probably will be at least three times for two-year periods during his service career, he has the prospect of waiting one year before having his family join him. Alternatively, he may rent a "shack" in Churchill Township—a miserable excuse for a house, with no plumbing. Such places are firetraps, as witness the loss of one RCN man's wife in 1952. Or, he may be fortunate enough to move in with one of the families living in Permanent Married Quarters—as some eleven families are now doing.⁷⁷

The costs involved in expanding and improving base accommodations to generally acceptable levels were prohibitive. It was not simply a matter of building the married quarters themselves. An increase in the number of civilian dependants at the station translated into greater demand for educational and recreational facilities, which required additional staff members, which called for additional housing, and so the cycle would continue. The DND did not wish to finance the civic infrastructure for a proto-community in the far north when the longer term requirement for the JSES was anything but certain.⁷⁸ As late as 1962, two years before the station shut down, it was clear that housing and related infrastructure needed to be updated and expanded. As of March of that year, in excess of 500 new homes were required, a building plan worth \$10 million (\$70 million in 2007 dollars). Little urgency seems to have been attached to the project at the time, probably because the future of the JSES was increasingly uncertain.⁷⁹

As early as March 1954, Minister of National Defence Brooke Claxton asked General Charles Foulkes, Chairman of the Chiefs of Staff, if a personnel reduction might be warranted.⁸⁰ Foulkes suggested that "we should not employ at outlying stations like Churchill one more individual than is absolutely necessary," but volunteered no concrete recommendation before completing further study.⁸¹ In response to a request from the Chiefs of Staff, the three military services, along with the Defence Research Northern Laboratories (DRNL), a branch of the Defence Research Board (DRB), prepared summaries of completed tests, signals traffic routed through Fort Churchill, and requirements for future activities at the station.⁸² The Army continued to justify its activities at Churchill based on the station's situation on the boundary between the boreal forest and arctic barrens. While cold weather trials could also be undertaken at Shilo, Wainwright or Petawawa, the extreme cold and snowy conditions required for extended arctic tests and training exercises were prevalent for longer periods at Churchill. Likewise, the Churchill summers featured each of the extremes necessary for comprehensive testing: soft ground, high water table, and insect interference. Moreover, the Army report argued that the presence of American test teams on the Churchill site saved much duplication of effort that would result if the Canadians were to disperse their tests to other bases across the country. Beyond winter indoctrination training and trials, the Army also planned to use Fort Churchill as an advanced base for MSF operations in the event of war or other national emergency. During 1952-54, more than 2,200 army personnel participated in training and user trials at Churchill, while in excess of 200 were involved in more specialized engineering tests.⁸³ User trials ranged from small items

such as arctic trigger mechanisms and rubber boots to recoilless weapons and the 2-ton Northland cargo sled. Engineering tests were completed for anti-tank mines, the Centurion Mk III tank, and the 3/4 ton Northland Beaver utility carrier. Future tests planned for 1955 included prefabricated buildings, tank armament, 10-ton trucks, mortars and rockets, among many other items.⁸⁴

As with the Army report, DRNL revealed a series of planned and completed research projects assessing the impact of arctic service on soldiers and the serviceability of equipment.⁸⁵ In particular, DRNL studies investigated the relationship between weather-induced stress and soldiers' operational efficiency, the development of optimal arctic indoctrination programs, and the ergonomic characteristics of cold weather apparel. In addition to clothing and footwear, a wide variety of shelter and mess equipment was also tested. A series of projects from 1952-53 explored the possibility that First Nations soldiers might be better suited to northern operations than men of European ethnicity.⁸⁶ While the results have not been located, this race-based testing suggests that the Army was at pains to find men who were naturally suited to military service in such an unforgiving climate.



SHOO FLY II Exercise Report, 1951 Military History Research Centre Canadian War Museum

Canadian infantry cross a water obstacle on the barrens outside of Fort Churchill during Exercise SHOO FLY II, summer 1951. The soldier stepping down into the streambed wears special 'jungle' boots. The other soldiers carry a mixture of American and Canadian kit, mostly left over from the Second World War years. Every northern exercise presented an opportunity to test different combinations of field kit.

In the wake of the Chiefs of Staff report on Fort Churchill, the Directorate of Weapon Development (DWD) completed a second study on the station's future, arguing that in addition to its value as a trials and training establishment, the JSES featured one of the finest airfields in the Arctic with the result that air travel has become the fastest and most convenient method of moving men and materials over most of the North. Moreover, Churchill offered useful staging facilities for other northern initiatives, such as the continental air defence systems and resource exploitation. The 1956 DWD report concluded that the "national importance" for Churchill was "increasing rather than decreasing."⁸⁷ Mainstream Canadian media articles agreed. A November 1954 *Maclean's* issue on the North reported that parsimonious Canadians were neglecting

their Arctic in every respect, including its defence. A piece by *Maclean's* Ottawa editor Blair Fraser urged that more operational troops be sent to Churchill.⁸⁸

Thanks to the Chiefs of Staff and DWD reports, the survival of the JSES was secure, but only for the short run. After the demise of the MSF concept, for example, the importance attached to Fort Churchill as a forward operating base diminished by 1960.⁸⁹ From then until the Army's withdrawal from the site in 1964, exercises were generally limited to company-sized groups. According to Colonel Strome Galloway, the last of ten JSES commanders, the northern barrens were no place for armies, corps, brigades or even battalions. Whether or not real life hostilities in the Canadian Arctic would have seen the deployment of major Soviet formations will never be known, but the reality was that by the early 1960s the Canadian Army simply could not spare the troops or expense to deploy large numbers of troops in such a remote location.⁹⁰

The Diefenbaker years witnessed a substantial decline in the defence budget without any reduction in force strength or commitments.⁹¹ In the context of the Cuban Missile Crisis, George "Bud" Drury, a Liberal member sitting in the opposition benches, and a former brigadier-general, argued that the Soviet Union posed little serious conventional threat against Canadian territory.⁹² If this was the case, then it seemed pointless to station scarce ground troops at northern bases, or expend further resources on the development of conventional arms and equipment for specialized cold weather applications. After the 1963 change in government, a nervous Robert Simpson, Conservative Member of Parliament for Churchill, raised concerns in the House about "very disturbing rumours...to the effect that all or practically all military personnel will be withdrawn from Churchill during the first half of 1964."⁹³ Paul Hellyer, the new Minister of National Defence, avoided the issue for several weeks, even as the papers reported on Fort Churchill's impending closure. On 5 December 1963, when Hellyer presented the annual defence estimates before the Committee of Supply, he finally confirmed that all Army troops were to be withdrawn from Fort Churchill in early 1964. The demise of the JSES was but one aspect of Hellyer's broader effort to "judiciously prune" the defence budget.⁹⁴ Douglas Harkness, Hellyer's Conservative predecessor, speculated that the shutdown spelled the end of cold weather training and research, a "very short-sighted policy" in his opinion.⁹⁵ Lucien Cardin, Hellyer's associate Minister of National Defence, dismissed Harkness's concerns, suggesting that Churchill could still be used as an operational staging or training base should the need arise, even without the administrative structure of JSES. The reality was that without the small JSES staff, there would be no one to maintain the onsite infrastructure, vehicles and equipment necessary for trials or even small scale exercises. Yet there was a limit to what Canadians were willing to invest in northern defence. In April 1964, responsibility for Fort Churchill was officially transferred from DND to the Departments of Transport, Public Works, Northern Affairs, and National Resources.⁹⁶

Conclusions

The contents of CF cold weather training manuals underscore the myriad lessons of training and trials conducted at Fort Churchill between 1946 and 1964. Extreme weather altered the properties of weapons and ammunition. Although several variants of oversnow vehicles had been fielded since the 1950s, there was no escaping the limits that low temperatures and deep snow imposed on mechanical mobility. The ability to evacuate casualties would be highly uncertain in the event of northern combat operations; economy of force was paramount. As Hudson's Bay explorer Samuel Hearne discovered 200 years earlier, even simple tasks would take longer in the North Country. Distance was measured more accurately in time rather than space. Training manuals such as *Arctic and Sub-Arctic Operations* and *A Soldier's Guide to the Cold*

acknowledged the practical skills possessed by First Nations northern people. Men like Craftsman Bargholz and Captain Pennie noted these attributes years earlier when they first arrived at Fort Churchill.⁹⁷

Although the lessons of nearly twenty years of experience at Churchill were embedded in training and doctrine literature by the 1970s, it also appears that institutional memory could be short. A 1971 article in *Canadian Armed Forces Review* spoke of the “grim reality” of an expanding role for the CF in the north. While the piece acknowledged that Canadian soldiers were well equipped for arctic operations, it also suggested that “there is a lot that needs to be done,” citing a litany of shortfalls in specialized equipment.⁹⁸ Soviet intrusion was no longer the only threat. As Middle Eastern oil supplies tightened during the early 1970s, several nations turned their attention toward the resource rich Canadian Arctic, as is again true today.⁹⁹ Perhaps it had been premature to withdraw the Army from Fort Churchill in 1964 after all.

About the Author...

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ARMY BIOGRAPHY

FRANK R. MACMACKIN, MM—BRAVE YOUNG WARRIOR

Mr. Mike Bechthold

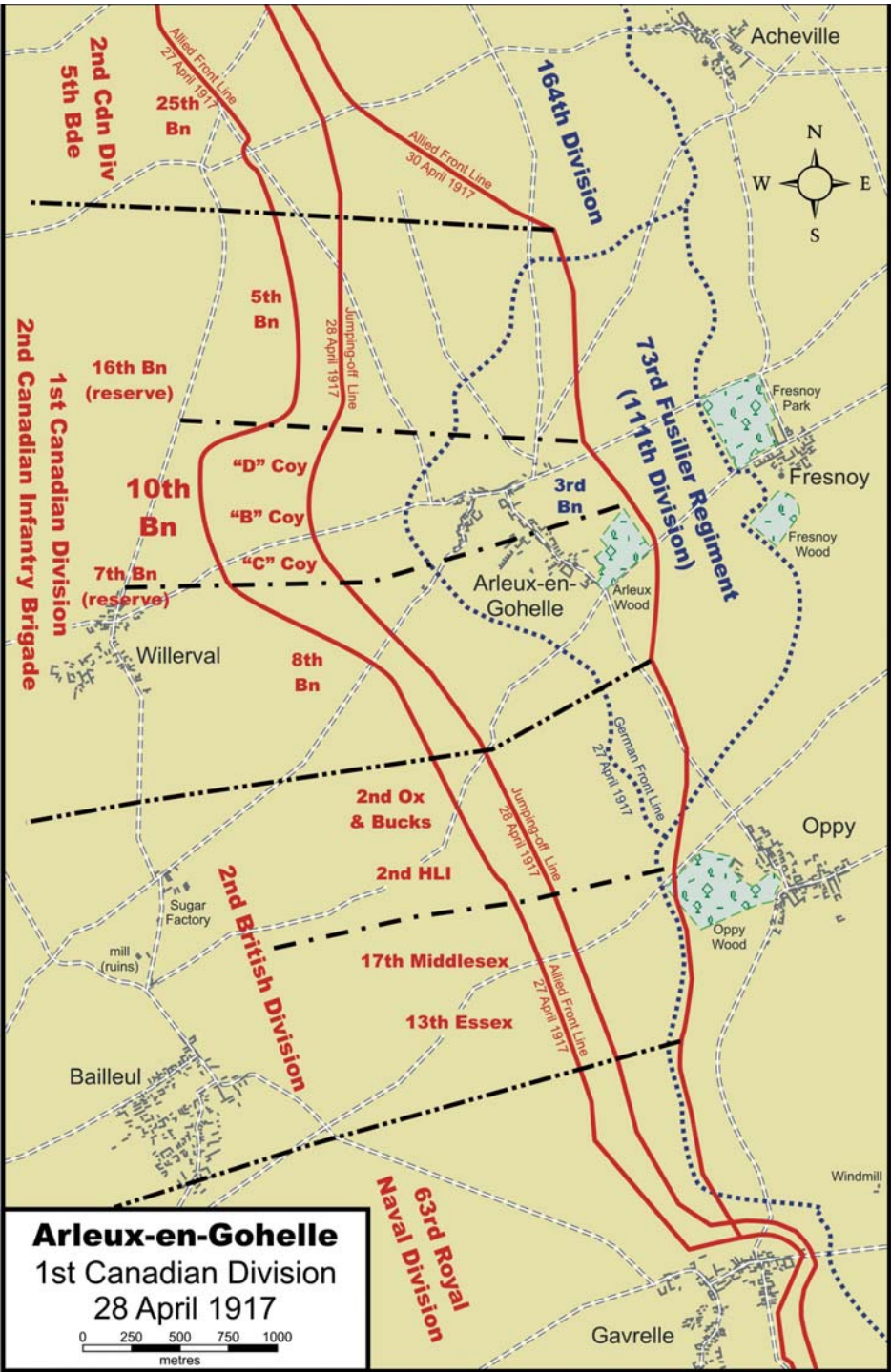
The plight of child soldiers is a major international issue. Underage boys are routinely drafted or kidnapped to serve in rebel armies and this unconscionable practice is condemned around the world. However, in the not-too-distant past, young Canadian boys lied about their age so they could volunteer to fight in the Great War. Due to the nature of the issue, hard numbers are difficult to find, but narratives of the Canadian experience are filled with tales of boys who inflated their age so they could join the army. The formation of a Young Soldiers' Battalion in England was required to hold all the underage boys who were prohibited from serving at the front until they turned 19, but many boys slipped through the system, including one who became a decorated combat veteran before his 16th birthday.

Frank R. MacMackin was born on 17 July 1901 in Turtle Creek, Albert County, New Brunswick. Farming in rural New Brunswick was not easy at the best of times and Frank's family struggled under added challenges. Both his parents, Murray and Florence, were deaf mutes, and Frank had to learn to speak from his grandparents. He had two older siblings, Grant, born in 1896 and Jennie, born in 1898. Death rocked the MacMackin clan in 1913 when Grant died at the age of 17. Three years later Frank's mother passed away on 10 March 1916. It is surely not a coincidence that Frank ran away to join the army less than a month later. Family lore says that Frank was convinced to enlist by two older pals who were also joining the army. Travelling to Moncton in early April 1916, Frank enlisted in the 145th Overseas Battalion. Though only 14 years old, Frank was a large lad (5 feet, 11½ inches tall) who had no trouble convincing the authorities that he was born in 1897 (adding four years to his age). However, it was clear that military authorities did not try very hard to verify Frank's assertions on his attestation paper. Though he lied about his age, Frank used his correct name and address and listed his father as his next of kin. Any cursory check would have quickly caught the lie, but many battalions were more interested in enlisting as many bodies as possible by this point in the war.



PA 1137

Canadian soldiers escort German prisoners, captured at Arleux, being used as stretcher-bearers.



Following an initial training period in Canada, Frank left Halifax aboard the SS *Tuscania* on 25 September 1916, arriving in Liverpool on 6 October. A medical board declared him “fit for duty” on 26 October and further noted in his record that he “looks 19.” A month later Frank had been despatched to France to join the 10th Battalion. The “Fighting Tenth,” an Alberta unit, earned an enviable war record, taking part in every major Canadian battle of the First World War. Frank was part of a draft of 142 reinforcements who joined the unit in early December, thus missing the carnage of the Somme. Early 1917 was a period of relative quiet for the Canadian Corps as they prepared for the assault on Vimy Ridge. The experience of the 10th Battalion was typical, as it divided its time between training and work parties, interspersed with brief periods holding the front lines. On 22 February, Frank was evacuated to hospital for just over a week for an unknown illness. He returned in time for the final preparations for Vimy, but missed the fighting as he was left out of battle.



PA 1329

German prisoners captured at Arleux being searched, 28 April 1917.

Frank finally received his introduction to battle after Vimy on 28 April, when the 1st Canadian Division was ordered to capture the village of Arleux-en-Gohelle as part of a larger British offensive. The 10th Battalion, along with three other Canadian battalions, was given the task of capturing the Arleux Loop, a well-defended spur in advance of the main German position, the Oppy-Méricourt Line. The infantry assault was to lead off at 0425 hours following a heavy artillery pounding of the German lines. The tactics used so successfully at Vimy were to be repeated at Arleux. Success in the initial assault was contingent on one main factor—the degree to which the German wire had been cut by the preparatory artillery barrage. For the 10th Battalion, “B” and “C” Companies found the wire cut and faced no significant delays in reaching their final objectives. The story of

Frank MacMackin's "D" Company was very different. The wire was virtually intact in their sector and the delay in passing through it resulted in heavy casualties as the men were exposed to prolonged rifle and machine gun fire from the German line. An early casualty was the commander of "D" Company, Captain Wilfred Romeril. Lieutenant Frances Costello took over the company and leading by example, he organized attacks on two machine guns that were holding up the advance and succeeded in getting his men through the wire.



PA 1189

Canadian artillery observers direct fire during the capture of Arleux, 28 April 1917. The featureless terrain of no-man's-land is clearly illustrated in this photo that overlooks the 10th Battalion battlefield. The village of Arleux is visible in the haze at the top of the photo.

Costello was aided in his efforts by the extraordinary courage of Private Frank MacMackin. A 10th Battalion report commended Frank for helping his company through the wire, where "he showed the greatest coolness and initiative. When his Company ran into uncut wire, and were held up by two machine guns, his No.1 of the Lewis Gun having been killed, he engaged the enemy gun with his Lewis Gun, and when it jammed, he used a rifle, and succeeded in keeping the enemy gunners' heads down, while they were outflanked and killed." The actions of Frank and others allowed the 10th Battalion to push the Germans out of Arleux and hold it against German counterattacks. At some point during the battle Frank was wounded, but he refused to be evacuated and did not seek medical attention until after the conclusion of the battle. Frank MacMackin was awarded the Military Medal for his actions that day. He was also promoted to lance corporal in recognition of the initiative and leadership he had shown in his first battle. Not bad for a teen from Turtle Creek, New Brunswick, two-and-a-half months short of his 16th birthday.

The next action for Frank and the 10th Battalion would be at Hill 70 north of Lens in mid-August. This battle would be Frank's last. At some point on 15 August, Frank was hit by German fire, receiving gunshot wounds to his right forearm and left calf. He survived the battle and was evacuated to England to recuperate. He had recovered from his wounds by mid-December, but at some point in England his true age was discovered. At 16 years of age Frank would not be returned to the 10th Battalion even though he was a decorated combat veteran. After spending time posted to the Alberta Regimental Depot at Bramshott, he was sent back to Canada in mid-May 1918 and spent the rest of the war employed as clerk in Fredericton, NB. He continued to perform admirably as he

was promoted to corporal and then sergeant before he was discharged on 31 October 1918 for being underage. It is an interesting commentary on Frank's physical immaturity to note that during his time in the army he grew two inches in height. Following the war MacMackin moved to the United States where he worked as a salesman in upstate New York until his retirement in the mid-1960s. He returned to Canada before his death in April 1977.

Frank MacMackin had lied about his age so that he could enlist at the tender age of 14. His reasons for enlisting can only be surmised—was it a dare from his buddies; a need to escape the pain of his mother's death; or to fight for a cause in which he believed? Maybe it was all those reasons. Within a year of enlistment he found himself in the front lines where he served with distinction, fighting in two of the Canadian Corps' main battles of 1917. Wounded in both actions, he was promoted and awarded the Military Medal in recognition of his efforts. Canadian officials did the right thing when his age was discovered, and Frank continued to serve with distinction on home front. Frank was not alone in serving his country as a minor, but his maturity and professionalism at a young age, where his performance in the cauldron of battle was noteworthy, most certainly sets him apart from the norm.

A Note on Sources

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NOTE TO FILE—THE RESERVE FORCES FOREIGN SERVICE AGREEMENT

Lieutenant Tim Winegard, 1st Hussars attached to the British Territorial Army

On 17 May 2005, a document entitled, *Memorandum of Understanding between the Department of National Defence of Canada and the Ministry of Defence of the United Kingdom of Great Britain and Northern Ireland Concerning the Reserve Forces Foreign Service Arrangement (MOU)*¹ was released by the two governments noted. This policy, which is to remain viable for ten years, adheres to the accord, dated 19 June 1951, promulgated by the parties of the North Atlantic Treaty Organization (NATO) regarding the status of their forces and applies to Canadian Forces Reserve Force members while on military duty with the United Kingdom of Great Britain and Northern Ireland and British Reserve Force members while on duty with the Canadian Forces.

In short, this *MOU* describes the procedures that will govern implementation of the *Reserve Forces Foreign Service Arrangement (RFFSA)*. The policy provides the international legal opportunity whereby members of Reserve Forces of both Canada and the United Kingdom of Great Britain and Northern Ireland can train with the military forces of the other country when temporarily residing in that country (while retaining citizenship of the sending service). According to the Commander, Canadian Defence Liaison Staff London, my wife and I are the first Canadian Forces Reservists to attach to a British Territorial Army (TA) unit under this *modus operandi*.



Photo courtesy of author

Author training with 7 Rifles in Macedonia, June 2007.

I am an officer with the 1st Hussars Regiment of London/Sarnia, Ontario, while my wife, Taleitha, is an Officer with the Queen's Own Rifles of Canada, Toronto. After completion of a Master of Arts in War Studies at the Royal Military College of Canada in June 2006, I accepted position as a Doctoral student at the University of Oxford, UK in

Military History under Professor Hew Strachan—a three to four-year course of study. Having received approval from our respective regiments to attach to a British TA unit, we submitted the appropriate documentation, which was then processed through our respective brigade headquarters (31 and 32), Land Forces Central Area Headquarters (LFCAHQ) and finally National Defence Headquarters (NDHQ). Concurrently, we secured permission from the Commanding Officer (CO), Lieutenant-Colonel Damian Griffin of 7 Rifles (formerly the Royal Rifles Volunteers, Royal Green Jackets) to attach to A Company, 7 Rifles, an infantry unit based in Oxford. We officially began our attachment with this unit in January 2007.

While the rules and regulations of our attachment are outlined in the *Memorandum of Understanding (MOU)*, May 2005, they are too lengthy and, in relation, too arbitrary, to provide extensive detail in this forum. What will be outlined in this article are the similarities and differences between the organization, function, training and operational capabilities of the Reserve Forces/TA of both Canada and the United Kingdom.

Background

Although yeomanry were mounted and formed from gentleman farmers and tenants for hundreds of years, in 1907 British Parliament passed legislation which saw the consolidation of the yeomanry and volunteers into the Territorial Force. The first units were stood up on 1 April 1908, and this date is accepted as the birth of what is known today as the Territorial Army. As will be described, until recently the role of the Territorial Force was primarily home defence, with minor secondary roles of relieving Regular colonial garrisons and providing a reservoir of manpower in the event of a major European war. Even during the First World War, stringent restrictions still existed in the Territorial Force constitution whereby members had the ability to volunteer for service abroad or to remain in a home defence station.²

Similarly, the original Canadian Militia was comprised of groups of citizens organized into security forces to protect their communities from outside hostilities. In 1673, Count Frontenac, then the French Governor of Canada, formalized the notion whereby all adult men drilled monthly. The British kept and expanded this practice following the conquest of Canada during the Seven Years War (1756-1763). In 1855, the *Militia Act* was passed in Canada, officially creating an Army Militia (Air and Naval Reserves were not established until the 1920s).³ The Militia was designed for home defence, to quell riots and strikes and to enforce law in the period before the creation of regular or effective police organizations.⁴ The Militia and its functions evolved throughout the 20th century and is known today as the Army Reserve.

Organization

As of January 2006, the British Army was comprised of 107,730 Regular Force and 38,460 Territorial Army soldiers.⁵ Although figures for the strength of Canada's Army vary, the most recent Canadian Defence publications list manpower at roughly 33,000 Regular and 18,000 Primary Reserves.⁶ The TA is comprised of 63 units (14 infantry battalions, 4 armoured regiments and 7 artillery regiments), while the Canadian Army Reserve numbers 228 regiments (54 infantry regiments, 17 armour regiments and 24 artillery regiments).⁷ Although a table would logically seem helpful in comparing an overall order of battle (ORBAT), the numbers are misleading. In Canada, a single army reserve regiment can have manpower of anywhere from 50-200 soldiers on strength, each usually commanded by a Lieutenant-Colonel. The TA, however, has fewer but much larger units. For example, 7 Rifles Battalion has a strength of approximately 500 soldiers, as do most TA infantry battalions. These are commanded by a Lieutenant-Colonel as well. TA battalions or regiments are more closely aligned to a Regular unit than those in Canada.

United Kingdom Army	Pay Rate	Pay Rate	Canadian Army
Private	85.06	79.94	Private
Lance-Corporal	102.88	116.70	Corporal
Corporal	132.07	130.68	Master Corporal
Sergeant	150.86	134.06	Sergeant
Colour (Staff) Sergeant	166.14	149.34	Warrant Officer
Warrant Officer 2	180.27	164.82	Master Warrant Officer
Warrant Officer 1	193.04	182.96	Chief Warrant Officer
Officer Cadet	77.89	87.72	Officer Cadet
Second Lieutenant	123.08	96.52	Second Lieutenant
Lieutenant	147.93	122.84	Lieutenant
Captain	189.57	153.48	Captain
Major	238.75	207.52	Major
Lieutenant-Colonel	335.09	240.56	Lieutenant-Colonel

Rank Structure and Daily Pay Rates (\$ CAD)^a

There are 12 Regular British Divisions or “Regiments.”⁷⁸ Most comprise three to five Regular battalions and one or more TA battalions. The Light Division—The Rifles (the largest regiment in the UK) is made up of 5 Regular battalions (1-5) and two TA battalions (6-7). Although Canadian Reserve regiments are paired with regular units—1st Hussars with the Royal Canadian Dragoons in Petawawa or 4 Royal Canadian Regiment with the three sister Regular battalions of the RCR—the working relationship is more pronounced within the British Army. However, both forces expound the total force concept and have recently restructured accordingly. In Canada the slogan reads, “One Army, One Team, One Vision,” while the UK boasts a similar philosophy: “One Army: Regular and Territorial.” In keeping with this policy, the attachment of Regular soldiers to oversee and advise on training and operations occurs within units of both the Canadian Army Reserves and the Territorial Army.

Training

For both Canada and the United Kingdom, serving in the Army Reserves and the TA is on a voluntary basis and it is understood most members have civilian employment, family and other commitments placing constraints on availability to parade. Currently, Canadian Forces Army Reservists are required to train a minimum of 37 days per year and can be ordered to train for 15 consecutive days per year included in a total of 60 annual days. TA soldiers are required to parade for 27 days annually including 15 consecutive days. For the TA, meeting this minimum requirement qualifies them for an annual tax-free bounty which varies based on unit and rank but can have value as high as \$3,200Cdn per annum. There is no such incentive for Canadian Reservists. Currently, neither country offers a pension scheme for their part-time soldiers. (Editor’s

Note: Since 1 March 2007, Canada offers a pension for both part-time and full-time reserve members.)

However, the recruitment and training scheme for both forces is very similar. To join either, the applicant must be 17 years of age (with parental/guardian consent) or older. However, unlike Canada which requires grade 10 education, the UK has no minimum academic standard aside from officers, who are expected to have attained or are in the process of attaining post-secondary education, usually a university degree.¹⁰ This applies to applicant officers in Canada as well. Without delving into a lengthy comparison of qualifying courses, the Canadian Army Reserve training course program is, with minor discrepancies, mirrored in the TA, as is unit training.



Photo courtesy of author

Ex. MACEDONIA FLASH—Under NATO's "Partnership for Peace" Program 7 Rifles trained with elements of the Macedonian Army, June 2007.

Weekly parade nights (3 hours in Canada and 2 hours in the UK) and one exercise weekend per month are the norm. However, as is the case with both forces, supplementary weekends and further training opportunities are available or are inserted into the monthly training schedule. In addition, each training year is finalized with a two-week (or one-week) camp. As a Canadian Reservist, I have participated in these week- or two-week long military concentrations in Petawawa, Wainwright and in the United States. For TA regiments, the two-week camp can take place within the UK, but they have also been exported to Lithuania, Ukraine, Cyprus, and most recently, to Macedonia, where I participated as 2IC of a Rifle Company. In these instances joint training with the forces of the host nation is paramount to the exercise and is usually coordinated under the NATO "Partnership for Peace" Program which is designed to bring potential members into the NATO fold.

Operational Capabilities

Until recently, the TA was regarded as the "reserve of last resort." TA soldiers were used only in cases of emergency, most notably in cases of war. TA soldiers were not the

Regular Army's first call-up preference. This was bestowed upon Regular Reservists; those who have a legal mobilization obligation for up to six years by virtue of their former service in the Regular Army. However, since 9/11 and the United Kingdom's subsequent large force commitments to Operation HERRICK (Afghanistan, 2001—) and Operation TELIC (Iraq, 2003—) TA soldiers have become the "reserve of first choice," according to the British Army. For example, 420 retired Regular Reservists were mobilized for the March 2003 invasion of Iraq. In comparison, 6,900 TA soldiers were mobilized for the same operation and roughly 1,500 are deployed annually to these two theatres. The number of mobilized Regular Reservists averages 90 soldiers per annum. The British Army also states that 40% of Regular Army recruits come from the TA or Army Cadets.

In recent years, mobilization of TA soldiers has followed the Composite Reserve Infantry Company (CRIC) model, as it is known in Canada. 7 Rifles, for example, have contributed a CRIC to four different rotations for Iraq and Afghanistan. Mobilization for operations is similar to that in the Canadian Army Reserves; it is strictly voluntary. Given this, unlike the American National Guard, neither Canada nor the UK offers their part-time soldiers job protection or security. However, both forces have programs—Canadian Forces Liaison Council (CFLC) and Supporting Britain's Reservists and Employers (SaBRE)—which provide information, council and support to soldiers and their civilian employers. (Editor's note: At time of publishing, Ontario, Manitoba, Saskatchewan, Prince Edward Island, Nova Scotia and New Brunswick either have laws protecting reservists or legislation in the works (most workers in Canada are covered by provincial or territorial labour laws). On 8 January 2008 the Canadian Federal Labour Minister announced that his government would be enacting legislation which will allow reservists in federally regulated sectors to take leave without pay and would prevent employers from discriminating against them.)

Obligated mobilization of both TA and Reserve soldiers can occur, although this has not yet happened, and is written into the defence acts of both countries. In the past, the Canadian Militia could be called into active service under tenets of the *War Measures Act* (1914) introduced by Prime Minister Robert Borden to meet the necessities of the First World War. In 1988, the *Emergencies Act* replaced the *War Measures Act*, yet the regulations for Reservists remained unchanged. At no time, including the two world wars, has Canada forcefully mobilized its Militia or Reserve forces.¹¹ Likewise, the UK has never mobilized the TA save for volunteers. However, the 1996 *Reserve Forces Act* provides the impetus whereby, "under extremely serious situations" TA soldiers can be liable for active service.

Conclusion

Obviously, the forces of both countries adhere to NATO standards, which is clearly evident in the training I have conducted with my British counterparts thus far. The Canadian Army Reserves and the British Territorial Army are similar in most aspects. Given that reservists from both countries are being operationally mobilized in greater numbers, the benefits of the MOU and attachment program are self-evident. In closing, my wife and I would like to take this opportunity to thank all of those, in both forces, who helped make this attachment possible.

Endnotes

1. Department of National Defence, *Memorandum of Understanding Between the Department of National Defence of Canada and the Ministry of Defence of the United Kingdom of Great Britain and Northern Ireland Concerning the Reserve Forces Foreign Service Arrangement*, DND ID Number 2000052201, 17 May 2005.

2. Lieutenant-Colonel Mike Scott, *The Royal Rifle Volunteers: On Operations* (Reading, Berkshire: RRV, 2005), pp. 12-14. However, 80-90% of Territorial Force soldiers chose to serve abroad during the First World War. The Territorial Force was

renamed the Territorial Army in 1921.

3. Colonel G.W.L. Nicholson, *Canadian Expeditionary Force 1914-1919* (Ottawa: Queen's Printer, 1962), pp. 5-10.

4. Desmond Morton, "Bayonets in the Streets: The Canadian Experience of Aid to the Civil Power 1867-1990," *Canadian Defence Quarterly* 20(5), (April 1991): pp. 30.

5. See: www.army.mod.uk. British Army Website for all relevant information.

6. See: www.forces.gc.ca Canadian Forces Website; www.canadianally.com An electronic newsletter maintained by the Canadian Embassy in Washington, DC, designed specifically for an American audience.

7. The remaining units are made up of Service and Support regiments.

8. Excluding a Brigade of Gurkhas (1 and 2 Bn, The Royal Gurkha Rifles).

9. Pay per day based on current rates for both forces at basic level per rank (Canadian dollars). Exchange rate as of 13 July 2007 (1GBP = 2.13702CAD).

10. Ministry of Defence, *The Territorial Army Soldier: Recruitment Guide*, November 2006; Ministry of Defence, *The Territorial Army Officer: Guide*, September 2004.

11. The 29 August 1917 Military Service Act which introduced conscription in Canada cannot be viewed as such an instance, as it applied to most males of military age nationwide, including the Militia and was not designed or implemented for the Militia alone.



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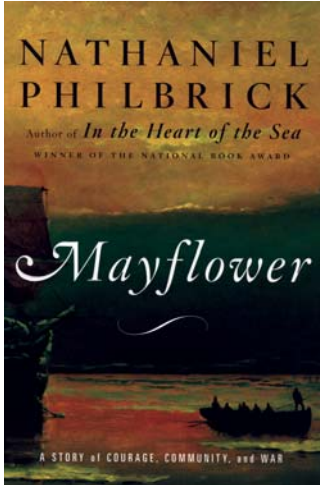


— BOOK REVIEWS —

MAYFLOWER: A STORY OF COURAGE, COMMUNITY, AND WAR

PHILBRICK, Nathaniel. New York, Penguin, 2006, 461 pages. \$39.00 CAN

Reviewed by Mr. Robert L. Boyer



Today, American Thanksgiving is mostly associated with travelling, sometimes over long distances, with a family gathering of some sort, with all the tribulations that entails, and then with a huge meal. One could argue it is also associated with two NFL football games on Thursday, and with the official start of the holiday shopping season on “Black Friday”. If we were to look at the actual historical roots of the holiday, we do not get much further than images of buckle-shoes and hat-wearing Pilgrims sitting with benevolent natives around a well appointed dinner table. In all, the blood spilled and the hardships suffered by the early colonists/Pilgrims and the indigenous natives are conspicuously absent in the modern narrative of Thanksgiving.

Popular American historian Nathaniel Philbrick leaves the rose-coloured glasses of nostalgia and historical half-truths behind and tackles the early days of the Plymouth colony in a fair and even-handed fashion. The book is divided in four chronological parts, titled “Discovery”, “Accommodation”, “Community”, and “War” taking the reader from about 1608 to 1677. Each section chronicles the evolving (and sometimes de-evolving) relationship between the Pilgrims and the natives. In the early days, there existed a quasi-symbiotic link between the two (the settlers needing help to simply not starve; the natives developing a taste for goods and weapons). This changed as the new settlers learned to survive and thrive without native assistance. Philbrick illustrates vividly the slow but inexorable change in the balance of power as more and more settlers arrived in New England (most of them not being Pilgrims) and organized new colonies. Finally, greed and the everlasting need for land break the bonds between the two communities and lead to the devastating King Philip’s War (1675-77).

One can draw an interesting parallel to modern day concerns through events related in the book. Security was always a great concern for the Pilgrims. Although they had formed alliances with some of the local tribes, many more were openly hostile to their presence on the coast. Helped by intelligence provided by the Pokanokets (the tribe of Massasoit and his son Philip) and convinced that their actual survival was at stake, the Pilgrims launched in 1623 a pre-emptive strike on the Massachusetts tribe at a place called Wessagussett, under the command of Miles Standish. Utilizing guile and deception, the Pilgrims entered the native camp under false pretences and struck in “an expectedly violent and vindictive” way. This attack was so successful Philbrick concludes “Standish’s raid had irreparably damaged the human ecology of the region”, that it disrupted the balance of power between the native communities and would have unforeseen consequences in the way war, alliances and trade would be conducted in the future.

As for the sources used by the author, *Mayflower* is primarily based on the written accounts of the first Pilgrims, especially *Of Plymouth Plantation* by William Bradford, the first governor of the colony; *Mourt’s Relation*, a collective work by some of the prominent

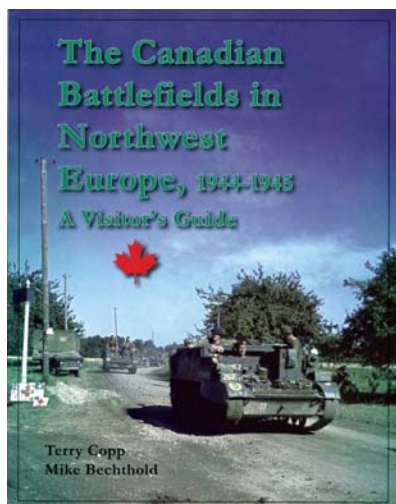
Pilgrims; and *Entertaining Passages Relating to Philip's War* by Benjamin Church, a second generation Pilgrim and soldier. There are endnotes/commentaries on sources used (50 pages), and a bibliography (28 pages) where we find extensive use of primary, periodicals and scholarly material. There are several maps, well chosen photographs and illustrations to supplement the text.

Nathaniel Philbrick has written an interesting and informative book. On the book's dust jacket the author admits that he, like most Americans, thought he knew about the Pilgrims and Plymouth Rock, but came to realize that he knew very little. With this book, Philbrick provides a clear picture of the events surrounding the founding of the colony. From a Canadian perspective, I found this book a thoroughly enjoyable read and recommended it for any bookshelf, especially if you have an affinity for early North American colonial history.

THE CANADIAN BATTLEFIELDS IN NORTHWEST EUROPE, 1944-1945: A VISITOR'S GUIDE

COPP, Terry, BECHTOLD, Mike. Laurier Centre for Military Strategic and Disarmament Studies, 2005, 160 pages. \$28.00 CAN

Reviewed by Mr. Neil Chuka



Terry Copp and Mike Bechthold, both of Wilfred Laurier University, have produced another excellent battlefield tour guidebook to complement their 2004 volume on the Normandy battlefields. This volume, updated and revised from Copp's guidebooks produced in the mid-1990s, includes previously unseen colour photos and original maps from the campaign that liberated the channel ports and the Netherlands, concluding with the thrust into Germany itself. This well thought out and designed book will help to provide context and detail for those visiting the battlefields upon which the Canadian Army fought from September 1944 to the end of the war.

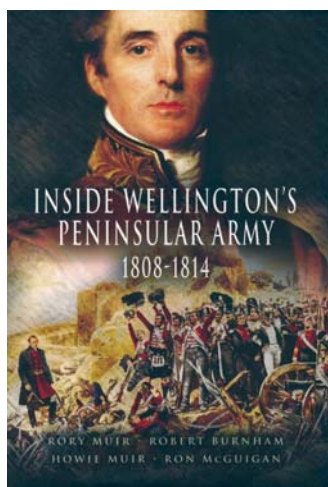
One of the problems facing visitors to battlefields of the past is, simply put, things change. Buildings, roads, bridges, even terrain features will often appear completely different 60 years after the fact. Moreover, visitors, who may only venture as far as museums, memorials, and cemeteries, can get a truncated perspective, without ever getting the opportunity to truly appreciate either the bigger picture or conditions at the tactical level at the time of the battle. One of the best features of this tour guide is the maps, photos, and text that help to explain these changes so the visitor can properly orient to the modern landscape and develop a mental image of the way things were. Reconciling the current landscape with pictures of the past is one of the most fascinating experiences of a battlefield tour and this book helps accomplish this necessary task.

It is difficult to find fault with this tour guide. Not only does it contain the attributes described above, it also gives modern road and accommodation information, as well as some of the lessons learned of the authors' many previous tour experiences. This book is highly recommended and will prove an invaluable guide for anyone visiting the 1944-1945 Canadian battlefields.

INSIDE WELLINGTON'S PENINSULAR ARMY, 1808—1814

MUIR, Rory, BURNHAM, Robert, MUIR, Howie, MCGUIGAN, Ron. Barnsley UK, Pen & Sword Military, 2006, 328 pages. \$62.95 CAN

Reviewed by Major John R. Grodzinski, CD



Inside Wellington's Peninsular Army was inspired by Sir Charles Oman's *Wellington's Army, 1809—1814*, which first appeared in 1913. Oman drew upon the encyclopaedic knowledge he gained of British campaigns against the French in the Iberian Peninsula fought between 1808 and 1814 while preparing the seven volumes of his *A History of the Peninsular War*, in preparing *Wellington's Army*, which provides an important overview of the organization, operational methods, daily life, and administration of this army led by Arthur Wellesley, better known as the first Duke of Wellington. Building on Oman's foundation, four diverse historians with particular interest in the Peninsula banded together to produce a groundbreaking book.

Inside Wellington's Peninsular Army is a marvellous publication. Physically, it is a weighty tome, suggesting it must contain a lot of information. It does. This book is a

gem, giving close examination of those aspects of Wellington's army that made it successful, including leadership, command relationships, tactical formations, intelligence, engineering operations and manpower. Rory Muir is an Australian scholar and author of several books on the Napoleonic Wars, including *Britain and the Defeat of Napoleon* and *Tactics and the Experience of Battle in the Age of Napoleon*; Robert Burnham is a retired U.S. Army officer and editor-in-chief of the largest Napoleonic history site on the Internet (www.napoleon-series.org). Both he and Howie Muir, a retired American foreign service officer, have written extensively on the British army in the Peninsular War. Ron McGuigan, a Canadian, is an authority on the British Army in the nineteenth century and has written *Into Battle: British Orders of Battle for the Crimean War*.

Rory Muir, who is currently preparing a new biography of Wellington, provides the opening shot in a concise overview of British involvement in the Peninsular War and the importance of Wellington's generalship. Ron McGuigan considers how several diverse forces, some already in Portugal and other slated for operations elsewhere came to be united under Wellington. His second chapter examines Wellington's generals, either serving on the staff or leading the permanent infantry and cavalry divisions, from their creation by Wellington in June 1809 to the end of the war in April 1814. Robert Burnham writes three chapters, the first a unique overview of "observing officers," who operated ahead of the main army, gathering intelligence. His second chapter examines the management of army manpower worldwide—a volunteer force provided distinct challenges in meeting all demands effectively—and how it was maintained in the Peninsula, where most units were substantially and continually undermanned.

The Peninsular theatre was noteworthy for the number of great rivers cutting through it and bridging operations, conducted for logistical purposes and for Wellington's shaping of the battlespace, are the topic of Burnham's third instalment. Howie Muir offers a detailed examination of "battle-array," the system by which close order armies were drawn up for battle, which later yielded to the dispersed warfare of the latter

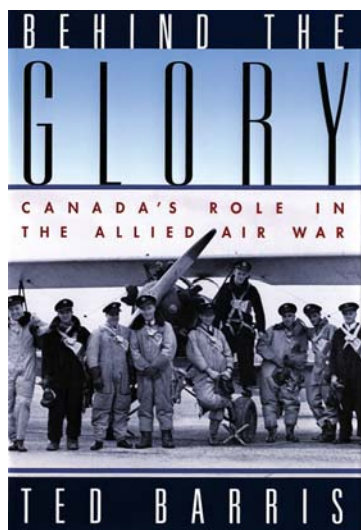
nineteenth and twentieth centuries. A customary means of deployment allowed officers to manipulate formed bodies of troops on the battlefield and the troops to understand and implement directions coherently. Fascinating stuff! Concluding the book is a bibliographical appendix of British memoirs of the Napoleonic Wars, compiled by Robert Burnham. A world war dominated a generation between 1793 and 1815 and it is not surprising that a significant number of memoirs appeared afterwards, written not only by former officers, but soldiers as well. Each essay makes excellent use of the primary and secondary literature and notes are provided at the end of each chapter. The select bibliography offers a useful guide to the literature on the peninsular theatre.

While many books are marketed as being seminal, few actually are. *Inside Wellington's Peninsular Army* is an important work. While some readers might find it too esoteric or meticulous, it does explain how several key underlying factors allowed a relatively small army facing a much larger opponent to achieve such success in a complex environment employing something akin to our wordy "non-contiguous dispersed operational framework." The campaigns conducted in the Iberian Peninsula make a marvellous study, involving not only the set piece battles and sieges we are familiar with, but many other elements that are somewhat akin to the modern operational concepts that were fused into several campaign plans, achieving desired outcomes.

BEHIND THE GLORY: CANADA'S ROLE IN THE ALLIED AIR WAR

BARRIS, Ted. Toronto, Thomas Allen Publishers, 2005, 355 pages. \$34.95 CAN

Reviewed by Colonel Robert S. Williams, MSM, CD



Since the end of the Second World War, there has existed a link among the many former Commonwealth aircrew who trained in Canada under the British Commonwealth Air Training Plan (BCATP). The many now vacant air strips across the country stand mute testimony to these young men who learned their particular skill, be it navigation or gunnery or piloting a single or multi-engined aircraft here on our soil.

Barris' book provides a timely reflection on this overlooked chapter of the Second World War. The title of the book perhaps best sums up how the instructor pilots might be regarded as behind the scenes figures. For many of the trainees, the lessons their instructors taught them saved their lives, despite the so-called mass production of desperately needed aircrew. For many of the early pilots who joined to fight the enemy in aerial combat, their war service was entirely in Canada, their skills too valuable to send them off to fight. For some who finally did get overseas, they were regarded as rookies whose flying hours were viewed derisively and as not equating to real or wartime flying.

This book is a must for those curious as to how the BCATP was set up and for those interested in reading the first hand stories of the many unsung heroes of the war. These heroes provided the necessary training for those who were to fight in the aerial battles, fly the transport missions, deliver paratroopers, fly the coastal patrols or take part in the

bombing raids in a variety of theatres. The personal stories included show both the trainees' respect for the skills that their instructors imparted to them as well as the bitterness of the many instructors who—by not getting overseas—were often not seen as having served their country at all. For many it has taken years to get over their bitterness and disappointment, while some perhaps never have.

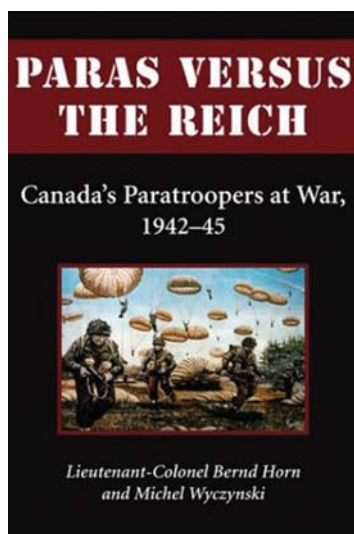
The final chapters deals with issues such as the somewhat ironic fate that befell the many instructors. With over 1000 flying hours, they were unable to get jobs flying owing to the priority given to returning veterans, many with far fewer hours than and trained by the same instructors. The seemingly age-old bitterness dealing with lack of “gongs” for service rendered in other than combat operations proves that some things simply do not change, particularly when it comes to the very emotional subject of honours and awards.

Barris' book offers excellent insight into the problems in training sufficient aircrew to meet the demands of attrition encountered by the allies during the Allied Air War. “Behind the Glory” provides an excellent balance of background material, personal anecdotes and fascinating statistics. The included maps provide future avenues for research for the idle tourist or the genealogist seeking to find the base or airstrip where their relative trained many years ago. This excellent book is highly recommended to the reader interested in the background behind how the RCAF was able to so quickly expand from 1939 to become one of the largest air forces in the world by 1945.

PARAS VERSUS THE REICH—CANADA'S PARATROOPERS AT WAR, 1942-45

HORN, Bernd, WYCZYNSKI, Michel. Toronto, Dundurn Press, 2003, 351 Pages.
\$29.99 CAN

Reviewed by Captain David Wray



The team of LCol Horn and Mr Wyczynski is well known to any reader of Canadian Airborne history. This well-researched and very readable book recounts the details of the development of a Canadian Airborne capability in the Second World War and tells the story of the 1st Canadian Parachute Battalion (1 Cdn Para Bn). It is supported by over 80 pages of endnotes as well as maps and a number of plates from artists such as the renowned Ted Zuber.

The book's first chapters detail the development of parachute capabilities globally from the 1800s through the inter-war years. It discusses advances made by the Soviet Union, Germany and Italy and the initial disinterest of Allied military forces in parachute operations. Background and the efforts of Col E.L.M. Burns, considered by some the father of Canadian Airborne Forces, are concisely described. The changing political climate and changes to the

importance attached to airborne forces by the Canadian higher command are interesting reading. The public appeal of paratroops and their portrayal as “super soldiers” are

contrasted with the lowering of selection criteria for paratroops as recruitment requirements were difficult to meet.

The development of airborne forces in the United Kingdom is surprisingly detailed, especially when describing delays and progression of paratroop training. Information of a similar level of detail regarding the development of airborne force training in the United States would have been interesting reading as a comparison. Chapters regarding parachute training by members of 1 Cdn Para Bn in the US and UK contain comments and quotations from personnel who underwent training in both countries. Information regarding Battle Drill and other training conducted in Canada prior to deployment overseas provides an opportunity to compare present day pre-deployment activities and training with what has gone before. Training as part of the 6th Airborne Division (6 AB Div) is impressively detailed and follows the progression of 1 Cdn Para Bn from individual through to collective training with the 6 AB Div.

There are common elements that improve the readability of the chapters that describe the operations of the 1 Cdn Para Bn. All battles are described in outstanding detail and augmented by narratives and comments from members of 1 Cdn Para Bn who were involved in the battles. Maps contained in the appendices aid in understanding the battles. The descriptions of battles are highly readable and engaging. They resemble a well-written novel more than a detailed combat history (although the copious end-notes make it readily apparent that the material has been thoroughly and meticulously researched). All chapters that discuss 1 Cdn Para Bn operations outline the strategic situation of Axis and Allied forces, enemy preparations, development of Allied battle plans, Battle Procedure and pre-deployment preparations of 1 Cdn Para Bn as well as descriptions of combat operations. The descriptions of the harsh conditions of the Ardennes and encounters with Soviet troops are only two examples of the impressive details of the battle histories. One point of interest was how rapidly 1 Cdn Para Bn was able to apply the "lessons-learned" process and quickly assimilate new tactics and procedures into unit operations and training.

This book is highly recommended reading for anyone with an interest in Canadian Airborne history or Second World War combat. The first-person narratives and comments from members of 1 Cdn Para Bn help readers understand the thoughts and provide a glimpse into the conditions these soldiers endured. While a highly readable book for anyone, the highly detailed index and meticulous endnotes enable readers with a deeper interest in history to conduct their own research to learn more about the subjects discussed in this work. While a large amount of material has been written about US and British airborne units and operations during the Second World War, there are fewer works that focus on the unique Canadian experience. This work provides information regarding development of Canadian Airborne Forces and combat operations of 1 Cdn Para Bn during the Second World War in one concise volume. It is a valuable addition to any collection of works pertaining to Canadian combat during World War II.

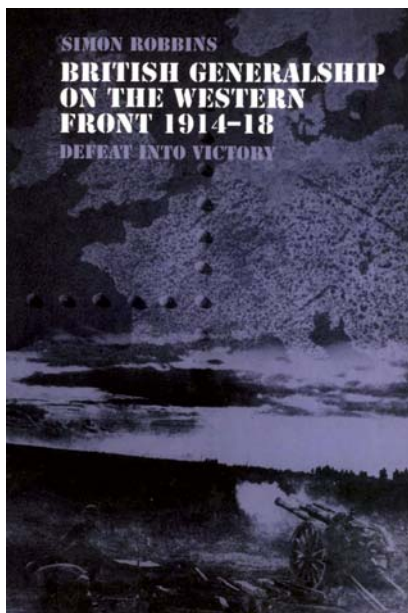
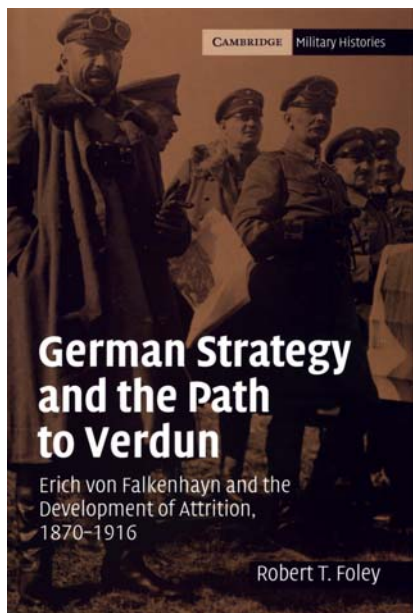
GERMAN STRATEGY AND THE PATH TO VERDUN: ERICH VON FALKENHAYN AND THE DEVELOPMENT OF ATTRITION, 1870-1916

FOLEY, Robert T. Cambridge, Cambridge University Press, 2005, 301 pages.
\$39.95 CAN

BRITISH GENERALSHIP ON THE WESTERN FRONT, 1914-1918: DEFEAT INTO VICTORY

ROBBINS, Simon. UK, Routledge, 2005, 258 pages. \$39.00 CAN

Reviewed by Major Andrew B. Godefroy CD, PhD



Popular history and public perception have not been kind to the senior leadership of the First World War. Too often British generals are presented as bumbling, mistake-prone, callous Victorians who were grossly negligent with the lives of their soldiers, while German commanders are caricatured as stiff, aristocratic, and without a common sense for honour. These characterizations were reinforced over decades by an endless stream of literature that lamented not only the futility of the Great War, but also the crimes of the senior officers who willingly and carelessly sent men to their deaths. It was a damning assessment, and one that still presents unique challenges for those attempting to write more accurate accounts of generalship on the western front today. Today, with access to considerably more historical evidence than their predecessors, historians are beginning to revisit the subject in increasing numbers.

Simon Robbins has approached the British side in his book, *British Generalship on the Western Front, 1914-1918: Defeat into Victory*. As the title suggests, this comprehensive social history argues that despite initial tactical losses, British commanders learned from their mistakes and this learning curve eventually brought them to victory on the western front. He supports this argument by deconstructing the social fabric of the British general officer corps and examining it against the expectations

and demands of higher command. It is interesting to note how much of an impact the size and scope of operations on the western front had on the rather modest British Army of 1914. The need to suddenly create corps and armies caused the dispersion of England's tiny reserve of trained staff officers and diluted their pool of operational commanders. Combat operations in the fall of 1914 subsequently killed most of this small capability. Unlike the Germans who had a large standing land staff, the British Army had to scramble to create their own staff cadre while at the same time attempting to stop the hemorrhaging of losses due to combat. It was a serious challenge, but one that was eventually overcome.

Robbins also spends considerable time giving the reader a solid grounding in the machinations of British high command. Much is learned about the trials and tribulations facing commanders, that they innovated both at the tactical and operational level, and that personalities were a large part of the command culture. This last point is by no means revealing, except that Robbins often shows both sides of the coin in the complex relationships that existed and what their subsequent second and third order effects were. Finally, Robbins does not seek to exonerate the British high command but instead remains focused on dispassionately describing what it was. This is one of the books' greatest strengths.

The reader learns much from Robbins about what the British high command was and what it wasn't. For one thing, he brings greater understanding to why British commanders initially fought as they did on the western front. The majority of the 'regular' force had considerable operational experience in fighting small wars and insurgencies, and had seldom commanded units larger than perhaps a brigade or two. On the western front, however, they were suddenly required to fight divisions and corps in large conventional set piece battles and many mistakes were made as commanders learned to fight at this level. It is an interesting observation often overlooked by our modern immediate expectation oriented society, and a point that needs further consideration by future scholarship in this field.

If nothing else, *British Generalship on the Western Front, 1914-1918: Defeat into Victory* is a valuable reference for students and scholars of the First World War. Robbins, a historian working in the Department of Documents at the Imperial War Museum, was perfectly situated to take advantage of available primary sources. Almost one half of the book is devoted to data, notes, sources, and the bibliography alone makes the book worth having. Few other published books on the subject to date present such a comprehensive review of the known sources and literature.

Sources also play a substantial role in Robert T. Foley's, *German Strategy and the Path to Verdun: Erich von Falkenhayn and the Development of Attrition, 1870-1916*. A lecturer in the Defence Studies Department, King's College London at the Joint Services Command and Staff College, Foley has made extensive use of previously inaccessible German military archives to write this new analysis of German grand strategy during the first two years of the First World War. His argument is excellently crafted and greatly expands on previous work in this field by authors such as Dennis Showalter, Holger Herwig, and Eric Dorn Brose. More importantly perhaps, he breaks ranks with other historians and manages the Herculean task of examining von Falkenhayn in a new light, giving him perhaps the most fair and balanced assessment yet by historians of the First World War.

Foley begins his examination by deconstructing the necessary titans of the period, critically reassessing Moltke, Schlieffen, and the schools of thought they created within Prussian military culture. He is much less impressed by these men than previous historians, and uses equivocal facts from within his sources to dampen the post-war

picture that propped up these men and their views, while damning Falkenhayn for failure to successfully accomplish the 'Schlieffen Plan.' Still, the main value of Foley's study is his examination of Falkenhayn's two main strategies during the war. First, his attempt to win a short war by destroying France's armies and pushing the British Expeditionary Force back into the sea, and second, his strategy of attrition and its ultimate failure at Verdun.

The book places German grand strategy within excellent context as Foley describes the various personality clashes amongst the German high command. The reader might be a little surprised to learn just how acrimonious the commanders were at times, as well as by how much these intrigues contributed to operational and tactical failure.

Finally, Foley discusses other issues of interest to Canadian military historians. German primary sources reveal, for example, that the German attack at Ypres on 22-24 April 1915 was not planned to break through friendly lines but rather to fix our forces in place while it disguised the transfer of troops east to support Conrad and von Mackensen's forces against the Russians. This in part explains why the Germans at Ypres did not exploit the unexpected gap created by their gas attack, and also why they appeared to lack any reserves to push through it.

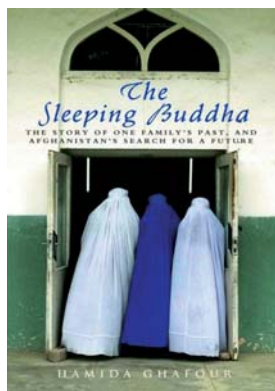
Foley's book is an intimate view of the German grand military strategy during the First World War through to 1916, and when combined with reading Robbins' book on the British high command, one is left with a very informed and detailed knowledge of fighting on the western front. More importantly perhaps, both authors draw on some of the most recent primary source evidence available, making these two volumes very worthy additions to the library shelf.

THE SLEEPING BUDDHA: THE STORY OF AFGHANISTAN THROUGH THE EYES OF ONE FAMILY

GHAFOUR, Hamida. Toronto, McArthur and Company, 2007, 325 pages. \$29.95 CAN

Reviewed by Major (ret'd) Roy Thomas, MSC, CD, MA (RMC)

OUR HIDDEN ALLIES: AFGHAN WOMEN?



Women may provide the solution to the conflict in Afghanistan, or at least to part of it. In the search for support to counter the insurgencies challenging the authority of the Kabul regime, President Hamid Karzai, the Americans, NATO and indeed, the Canadians in Regional Command (RC) (South), might have to look no further than the female population of Afghanistan, particularly those hidden behind the *chadari*. (p.14) (Ed. note: in Afghanistan, a synonym for *burqa*, the complete covering worn by some Muslim women)

Western armies and those committed to reaching the objectives of the operational plan for Afghanistan laid out by the Chief of the Defence Staff (CDS), General Rick Hillier and Howard Coombs in their co-authored article in the *Canadian Military Journal*, Volume 6, No. 3, Autumn, 2005, have an advantage over the Taliban and their ilk. Canadian Forces soldiers that are female can directly contact the females of the Afghan population, whereas so-called Islamic militants can only reach them through the filter of the feuds and feudal politics of male family members (for example, a husband, brother or father). Moreover, as many observers

have documented, females in Afghan society suffered much more under Taliban rule than under any recent previous regime in that country. There is evidence: Christina Lamb in her book, *The Sewing Circles of Heart*, takes her title from a group of women who, under the cover of pretending to sew, followed a course in literature delivered by a male professor under the eyes of the Taliban moral police. Women such as these may represent invaluable allies in obtaining the backing of Afghans for unfamiliar forms of government and centralized control—concepts that the Coalition perceives as the country's desired end state.

To understand women still living in a Pathan tribal society, albeit one disrupted by refugee migrations and new ideologies, is a daunting task for those not conversant in either Dari or Pashtu, or indeed in one of the eight other major minor linguistic groupings in Afghanistan. That is why this book, written by a woman born in Afghanistan but raised in Toronto, serves as a human intelligence (HUMINT) resource. This is despite the fact that the author, *Majrooh-khel* (Editor's note: a term meaning descendent of Majrooh), a Canadian named Hamida Ghafour, never intended her story to be an intelligence source. As Ghafour states, "the battle is in the countryside" (p. 317) so it is perhaps in the pages describing the visit to her grandmother's grave in Spin Korak in Kunar Province that the author provides her most useful information. *Melmastay* (Editor's note: loosely translated as hospitality) explains why a reward totalling millions of dollars will not sway even opponents of bin-Laden to betray him to the Coalition. Ghafour tells of how a Pashtu village sheltered a surviving American SEAL from Taliban pursuers but later it rejected American gifts intended to thank them for their assistance (p. 296). Tribal leaders, Ghafour says (p.299), are caught between insurgents and the Coalition, wondering who will last longer. The author warns that "mistakes make enemies of entire villages." (p.295) Moreover, in Kunar Province Ghafour meets villagers who have no idea of who President Karazi is, but who know her ancestors.

Ghafour's grandmother and great-grandmother are evidence that Afghan women can be forces in society. Her great-grandfather was Pacha Sahib of Tigiri, a Sufi leader of the Qadiri order who was asked to bring the message of Islam to the Nuristan region (p.26). When he died, his widow, Bibi Hawa, took control of the household and her children's education, refusing to re-marry and thus surrendering her lands to another male. Her daughter, Hamida, the grandmother and namesake of the book's author, wrote poetry as a child and again in later years. It was her grave in the Chegal valley that was sought in Spin Korak. In this oral society, only one old man knew for sure where her grandmother rested. By western standards, it is incredible that someone still knew this piece of information.

The Nuristan region that her great-grandfather traversed while preaching is now known as *Dawlatabad*, apparently turned into a *Wahhabi* state with Saudi money. (Editor's note: the term *Wahhabi* is usually taken to denote an ultra-conservative, nationalist interpretation of Islam). "The traditional tribal leaders were killed off." (p.293) Surely, the male relatives of these people would also seem to be further potential allies of the Coalition. Another Taliban opponent, if not a Coalition ally, appears to be leaders such as Haqqani, who apparently keeps the Taliban from moving into his area. "These distinctions of who controls what are tortuously complex and important." (p. 281)

The author's cousin, Shahida Barmal, was a candidate in the Parliamentary elections (p.167) so readers are offered insight not only into tribal lore but also into the adaptation of Afghan society and women to changes in governance being attempted by the international community.

Coincidentally, another Afghan expatriate, born in the country but also taken away at an early age, has also written about returning to Kunar Province. In the book, *Come Back to Afghanistan* (2005), Said Hyder Akbar provides a male perspective on Kunar. (Reviewed in *Vanguard*, May/June 2007). He, like the author being reviewed here, calls

Shamsuddin Majrooh a great uncle.

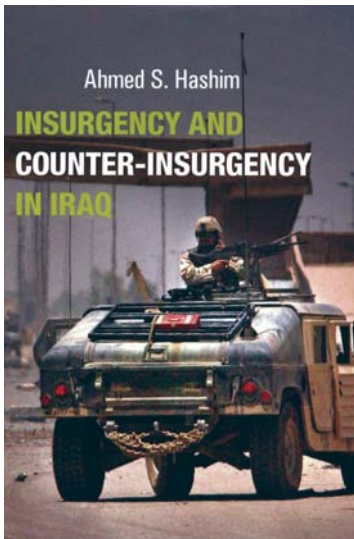
While pleading for help (p.320) to help Afghanistan along the way to joining the world of civilized nations, Ghafour notes that her country "would have to be healed by ordinary people, Afghan or not, doing a million small deeds because they wanted to." (p. 311) Her descriptions of the life her parents enjoyed in Kabul, suggest that in other times, not so long ago, before over thirty years of war, people had a much better life.

For those of us who are male, not a member of a Pathan tribe, and lacking skill in Pashtu, Ghafour's book offers a glimpse into the tribal societies of the type found in Canada's Afghanistan area of operations (AOR). If females in Afghanistan are to be studied as potential supporters of Coalition objectives, then this volume authored by the granddaughter of a female Afghan poet is a good line of departure.

INSURGENCY AND COUNTER-INSURGENCY IN IRAQ

HASHIM, Ahmed S. Ithaca, NY: Cornell University Press, 2006, 482 pages. \$36.95 CAN

Reviewed by Dr Bob Martyn



Ahmed Hashim is grappling with the unenviable task of analyzing and offering interim conclusions regarding an ongoing conflict—a task that he readily admits is a difficult one. Despite the limitations of contradictory or incomplete information and the inflamed passions inherent in such an undertaking, Hashim has nonetheless produced a remarkable text on the Iraqi insurgency. While his observations will doubtless be borne out in time, this work ought to be contemplated seriously, right now, by the war's planners, politicians, and media commentators. Of more direct relevance to the readers of this journal, however, is that many of the tactics that evolve in the crucible of Iraq soon appear in Afghanistan. Also, despite the text specifically addressing Iraq, both campaigns share similar features; the text therefore provides several noteworthy lessons for those willing to take them onboard.

Hashim is a Turkish/Egyptian-American who has served as both an Army Reserve Lieutenant-Colonel and as a civilian advisor, in Iraq. He is a Professor of Strategic Studies at the US Naval War College, who has lectured previously at Harvard and Mississippi State Universities. His studies have earned Dr. Hashim degrees from the University of Warwick (Coventry, England) and the Massachusetts Institute of Technology. He has since garnered a solid reputation for his expertise on security issues concerning the Middle East, and Central and South Asia.

In the current market of quickly dashed off personal histories or works of shallow analysis, *Insurgency and Counter-Insurgency in Iraq* stands out because of its rigorous attention to detail. The book contains almost 900 citations and 21 pages of bibliographic references, in addition to the many interviews that support Hashim's observations and judgements.

Insurgency and Counter-Insurgency in Iraq is organized in a straightforward

manner: the insurgency's evolution; the manner of the insurgency with its contending factions; and the US counter-insurgency campaign to date. The introductory portion of the text provides an overview of the transition from conventional to partisan warfare during the opening moves of Operation Iraqi Freedom. It soon, however, moves on to the more contentious issues surrounding the evolution of what was a predominantly Sunni insurgency into its current form, where no particular group has a monopoly on violence.

Although a critical core exists amongst the insurgents who manage a successful melding of nationalist and religious sentiment within the Iraqi populace, the insurgency is far from being that straightforward. Where some supposed experts, and most of Western society, are content with simple labels—Sunni, Shi'ite, Kurd—Hashim examines approximately twenty distinct groups of insurgents. These groups may be divided into those emphasizing secular nationalist/tribal ambitions, those defined predominantly by their religious predisposition, and those falling in between, integrating nationalist and religious elements. His survey illuminates a wide variety of professional competencies, personnel strengths, and targeting specializations or *modus operandi* present within this insurgency. These factors obviously complicate analysis by interested observers.

At this point in the text Hashim walks us through the various influences affecting the early insurgency. Because the participants span former regime personnel, previously uninvolved civilians, and foreign fighters, their motives naturally vary towards the insurgency's political goals. One must then consider the more amorphous yet equally influential factors of nationalism, pride and honour, revenge, and tribal motives. This complex reality, coupled with insurgent groups' recurring mergers and break-ups, continues to prove a major difficulty for effective intelligence operations.

Actionable intelligence has proven crucial to every successful counterinsurgency campaign, and this book provides clear insights into the intelligence problems facing a coalition that is not battling a united, single ideological movement. While not stated explicitly, it is this disparate nature of the opposition that is making the Iraq insurgency one of modern history's more intractable. This reality must also cast doubt on some of the more simplistic, templated solutions drawn from 20th century Maoist and Marxist insurgencies.

This background tour leads well into the next section exploring the insurgents' way of war. It also highlights a point often lost on several commentators, that while the Ba'thists started the resistance, they have long since been joined by all manner of fighters, many of whom have no linkage with the former regime. In this particularly valuable portion of the text, the author provides a clear outline of the conflict's geographic scope and intensity before moving directly into the most critical aspect of any insurgency—the people.

Hashim reveals a seldom-seen understanding of the popular support and organizational typology of this insurgency, which as noted, might be more correctly pluralized as "insurgencies." The multiple visions of Iraq's future being put forward by the various groups are further exacerbated by the growing antagonism between the factions. Shia fights Shia over the correct, often religiously-informed, way ahead, while few Sunni accept their minority status after several centuries in dominant social positions. As such, the political processes introduced have merely created ethnocratic divisions wherein the Shia dominate the Interior Ministry, the Sunni dominate the military, and unofficial militias flourish.

Hashim presciently noted the beginnings of a low-level civil war and ethnic cleansing, which has expanded dramatically since this book went through the publication process. It is the violence of this internecine fighting that provides the Americans with their greatest dilemma. The coalition is caught in a situation wherein US actions played

a key role in the insurgency's outbreak and perpetuation, yet the only reason the various factions have not fallen upon each other in an "orgy of violence" is the coalition's presence. This is not to say that the coalition is without enemies; foreign troops, even if aiding ones' particular faction, nonetheless remain tainted with the suspicion of being "occupiers."

The only suggested option for withdrawing with any degree of honour is partition. Yet even that option is easier said than done. Given the inability to compromise on any issue, efforts at partitioning territories and economic assets mutually claimed by Shia, Sunni, and Kurd would lead to bloodshed well beyond Iraq's current boundaries as various external supporters were drawn in. The mythical task of Sisyphus seems quite simple in comparison.

Hashim contradicts several of the prevailing assumptions that continue to plague a rational discussion of the conflict. Suicide bombings, for example, are a prominent feature of the war, with more "martyr operations" occurring in one month than during the entire Palestinian *intifada* against Israel. But these are not simply the acts of fervent Islamists. Suicide attacks are now routinely conducted by secular groups for the simple reason that they are one of the few effective weapons available, with the majority of these attacks now being carried out against Iraqis rather than against foreign troops.

In a further highlighting of popular misconceptions, the US has continuously condemned the foreign "terrorists" within the insurgency. Hashim points out that of the initial 8,000 suspected insurgents captured, only 127 held foreign passports. A counterinsurgency strategy that emphasizes killing presumed foreign insurgents merely produces the opposite effect by killing Iraqi citizens and increasing anti-American sentiment. To this end, Hashim cites a retired US Army lieutenant-colonel who noted, "in the end, our soldiers killed, maimed and incarcerated thousands of Arabs, 90 percent of whom were not the enemy. But they are now."

Although the book provides excellent insights into the insurgency unfolding in Iraq, it will provide little comfort to those currently planning and conducting counter-insurgency operations in either Iraq or Afghanistan. Hashim believes the US to be "congenitally incapable" of fighting this type of war, noting particularly that the inability to see shades of grey make it incapable of waging effective counter-insurgency. Their lack of this ability to discern nuance and continuing to misunderstand Iraqi culture, which helped create insurgency and continues to feed it, runs throughout the book.

This indictment of the US military's conventional mindset, and its violation of virtually every established tenet of successful counterinsurgency, can be applied with equal justification to most professional Western militaries. There has been learning progress and some commanders and units perform better than others; Hashim commends the operations of Colonel HR McMaster and the 3rd Armored Cavalry Regiment around Tal Afar in 2005 as a case study. Yet the mention of merely one regiment out of the countless number that have served in Iraq to date suggests a dire discrepancy between accepted counter insurgency (COIN) doctrine versus actual effective ability.

Reliance on armoured vehicles and standoff airpower, for example, maximizes force protection. Yet this kinetic approach has never defeated any insurgency, unless one is willing to go to the extremes of slaughtering all opponents and salting the earth so that nothing can return, as the Romans supposedly did to end the Third Punic War against the Carthaginians. Thus, increases in heavy, mechanized forces have failed to quell the ethnic cleansing throughout Iraq. In both Iraq and Afghanistan, the insurgents want, even need, the coalition to pursue an attritional strategy since such attacks sustain the jihad and justify, in their minds, suicidal counterattacks.

Hashim notes that emphasis on conventional combat operations will always

manage to kill some insurgents and disrupt the organization, but unless soldiers are permitted to dismount and purposefully engage with the civil population to ameliorate the insurgency's root causes, the war will drag on indecisively. Within Afghanistan there are increasing indications that the CF is looking down this same rabbit hole—from introducing Leopard 2s, to calls for replacing combat troops with CF18s, to inadequate aviation and intelligence, surveillance and reconnaissance (ISR) support for otherwise effective Special Operations Forces. While our soldiers' skill sets allow them to produce tactical victories, the verdict remains in the balance on whether implementing an operational campaign within a sound COIN strategic plan is going quite so well.

Despite the complexity of the subject, the book is not a difficult read. The author explains the various issues in great detail, often through examples and references to others' texts, hence the thorough citations and bibliography. Hashim wants to leave no reader behind though, and so his style of periodic repetition and recapping may become tedious; if one is familiar with the literature, there can be a tendency to skip ahead.

So, while *Insurgency and Counter-Insurgency in Iraq* is not an upbeat assessment of the conflict to date, it is one of the most informed contributions to the current literature. If one follows the writings of Huntington, Peters, Barnett, Hammes, et al, this type of warfare will be with us for the foreseeable future. As such, it is in the best interests of war-fighters and the political elites sending them into harm's way to understand how best to address insurgencies. While some of the conditions facing the coalition are unique to Iraq, many of the overarching realities are applicable to most contemporary insurgencies. As such, there will always be a Moqtada al-Sadr to exploit collateral damage in uniting the Shi'a in a frenzy of vengeance against the Sunni and their perceived backers, the United States. There will also be an equivalent Mullah Omar in Afghanistan. Those confronting them will benefit from having read and understood this book's message.

WE MOVE ONLY FORWARD: CANADA, THE UNITED STATES AND THE FIRST SPECIAL SERVICE FORCE, 1942—1944

WOOD, James A. Vanwell Publishing Limited, St Catharines, 2006, 238 pages.
\$29.95 CAN

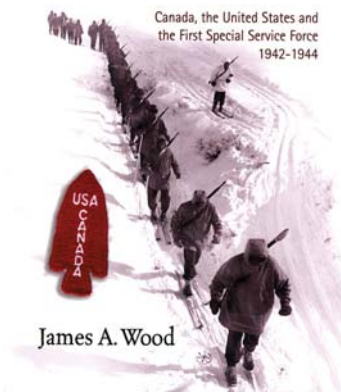
Reviewed by Mr Geoff Hall

In 1966 a book entitled *The Devils Brigade* was published followed in 1968 by a popular movie of the same name. Mr Wood's aim in this book is to acquaint the reader with the history of the 1st Special Service Force (1st SSF) while focusing on issues surrounding the Canadian contingent, officially called the 1st Special Service Battalion. His contention is the 1st SSF proved American and Canadian soldiers were melded together into an effective fighting force but did so against a background of miscommunication and bureaucratic tangles between Ottawa and Washington on issues such as pay inequity, discipline, national authority over the approval of proposed missions and especially reinforcement. His argument is that these issues led to the unit's eventual disbandment and are the reasons why the concept has not been attempted again.

The book first deals with how the Devil's Brigade was established. The concept of the 1st SSF started as Operation Plough: create a specialized commando force, trained

We move only forward

Canada, the United States and
the First Special Service Force
1942-1944



in winter warfare and equipped with armoured over snow vehicles, to conduct long range sabotage operations against key industrial targets in order to force the Germans to commit larger amounts of troops to guard them, starting with Norway. It became a joint British-American project during the US Army, Chief of Staff's first visit to the United Kingdom (UK) in April 1942. The Americans agreed to accept responsibility for the development of the over snow vehicle and the raiding force. Canada's initial involvement was limited to assisting the Americans with technical engineering problems associated with the development of the over snow vehicle. Reluctance by American strategic staff regarding the viability of the project led to a suggestion that Canadian troops be included in the force. In June 1942, it was agreed Canada would provide approximately half the force and the unit's second-in-command.

The next portion of the book deals with the selection and training of the soldiers at Fort Henry Harrison in Helena, Montana. Before troops could be selected, agreement had to be reached between the two countries on issues such as oath of allegiance, record, pay and discipline. The Americans initially wanted Canadian troops to swear allegiance to the United States, which would have necessitated them being released from Canadian service and joining the American Army. American pay scales and parachute pay were significantly higher than Canadian allowances. In the end an agreement was reached, although neither government ever formally ratified it. Troops would swear allegiance to their officers, regardless of nationality. Canadian troops would receive their pay and administration from Canada and their rations, equipment and quarters from America. How discipline was to be administered was never formally resolved. Of the 700 Canadians who initially volunteered, 259 were returned to Canada for various reasons. Finding replacements offered the first indication of the lack of a Canadian policy on what would become an ongoing issue—reinforcement.

The remainder of *We Only Move Forward* deals with the 1st SSF's combat operations. In September 1942, Operation Plough was cancelled and the hunt was on to find something else for the Force to do. This was complicated by the policy that Canadians would not be permitted to engage in operations without the approval of the Canadian government. In August 1943, 1st SSF was part of the force that was to campaign against the Japanese on the Aleutian Islands, which turned out to be a bloodless operation. Finally in November 1943, the Force was sent to Italy where it fought its famous movie battle at Monte la Difensa at a cost of 511 casualties, a quarter of its combat strength. In early 1944 the Force fought in the Mignano Gap to open up the Liri Valley. By the end of January 1944 less than half of the Canadians were fit for duty. Due to the lack of reinforcements, taking the Canadians out of the Force was considered for the first time. From February to May 1944, the 1st SSF fought at Anzio. In March, Canada provided a draft of 265 volunteers to the Force. In late May the Force was involved in the breakout from the Anzio beachhead and the advance on Rome, at a cost of approximately 750 casualties.

In August 1944, 1st SSF took part in the invasion of southern France. At the same time, the trickle of Canadian reinforcements stopped altogether. The Canadian Army found itself short of infantry replacements to the point that personnel from other arms

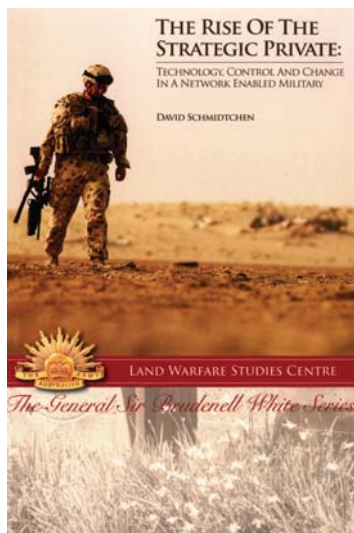
were being remustered as infantry. In October the Canadian Chief of Staff recommended that the 1st Canadian Special Service Battalion be disbanded. At the same time, General Eisenhower coincidentally decided to break up the 1st SSF. On December 5, 1944 the Force was officially disbanded and the Canadian soldiers were sent to reinforcement units in Italy and the UK to be used as individual infantry replacements despite recommendations that they be kept together as a formed group.

Although Mr Woods has published articles in various military history periodicals, this is his first book. He has succeeded in his aim—*We Only Move Forward* offers the reader a good look at the operational history of the Devil's Brigade while presenting an interesting view of the administrative and bureaucratic problems that affected it from its start. The photographs are interesting, the tables offer detail in an easily readable manner and the maps give the reader a reference without being too detailed. The two appendices give the reader the opportunity to delve into real reports made by the unit. I found it a very readable book.

THE RISE OF THE STRATEGIC PRIVATE: TECHNOLOGY, CONTROL, AND CHANGE IN A NETWORK ENABLED MILITARY

SCHMIDTCHEN, David. Duntroon, Australia, Land Warfare Studies Centre, 2007, 333 pages.

Reviewed by Dr. Paul Mitchell



David Schmidchen, in his comprehensive survey of network centric warfare's impact on modern militaries points out that, "my approach is that (it) is more a philosophy than a thing." Herein lies the challenge confronting militaries in their efforts to implement new networking technology into their existing structures. Modern military organizational structure traces its roots to shifts in technology and society that began to emerge in the sixteenth century. The current method of organizing the division of labour within military staffs was developed during the Napoleonic wars of the nineteenth century. It is no wonder that they struggle with adapting to a military reality that includes not only non-state actors, but also Youtube, camera phones, and blogs. Schmidchen's book offers the most comprehensive overview of how new developments in information technology are affecting military organizations and in the process he has written perhaps the most important book

on networks and militaries since the concept of network centric warfare (NCW) was introduced in 1999.

Schmidchen's approach is broad and multidisciplinary, something that may put off some readers. He delves into a broad range of academic disciplines including organizational theory, sociology, economics, and epistemology. While the work in general examines the efforts of the Australian Defence Force to develop a network enabled military, there is very little in Schmidchen's book that deals specifically with particular technological programmes or even the operational use of such things in the

field. Technology is, rather, examined in terms of a force that exerts change on the nature of society. As western militaries typically regard technology as a means of resolving problems, the value of Schmidtchen's approach is in revealing the reasons why technological programmes fail so frequently. With regard to networking technologies, failure often stems from issues emerging from the social dimension of the military environment.

As Schmidtchen notes, new information technology may overwhelm decision makers with data, it may both decentralize (mission command) and centralize decision-making (micromanagement), and finally, it may disassociate the decision maker from the effects of his decisions. The source of these issues are cultural and social in their nature, and lack clear cut solutions to them; understanding the social impacts that new technology is creating for militaries is thus critical both for making the best use of new technology as well as for implementing organizational change.

Along the way, Schmidtchen considers the social character of connectedness and the implication that networks have for hierarchical institutions, the social foundations of how we choose and use technology to solve work related problems, the impact those technologies have on the nature of work in organizations, and how those changes will cause shifts in how organizations prepare their members for the challenges of the future. In short, *The Rise of the Strategic Private: Technology, Control, and Change in a Network Enabled Military* considers the issue of networking from the foundations of the conceptual debate over shifts in information technologies, through to the environment in which organizations adopt such technology and concludes with an examination of these forces for training and education in the workforce.

The book has been written in the context of influencing the on-going debate over the future of the Australian Defence Force and as such, has an analysis of its *Force 2020* and other initiatives aimed at reforming the practice and business of defence in Australia. Nevertheless, this is a work with a much wider reach than simply defence managers there. *The Rise of the Strategic Private: Technology, Control, and Change in a Network Enabled Military* is the first re-evaluation of the concepts of networking in the defense environment to appear since the initial series of studies published by the Pentagon's Command and Control Research Programme first published *Network Centric Warfare* in 1999. While the material is at times "tough sledding," the payoff is worth the effort and will reward readers from a wide variety of interests in the field of modern technology and warfare, leadership, and organizational change.

THE STAND-UP TABLE

Commentary, Opinion and Rebuttal

WARTIME TRAINERS: ADAPTABLE, AGILE, AND CRITICAL TO SUCCESS

Major Paul Payne, The Royal Regiment of Canadian Artillery School, writes . . .

Given the importance of Canada's Land Forces in today's operations, it is a very exciting time to be part of The Royal Regiment of Canadian Artillery School (RCAS) and a critical element of Army transformation. Our mission is to train gunners for the realities of operations such as Afghanistan, guiding them in the art of leadership and providing them with the technical expertise to provide fire-support to the combined arms team. Training at the school is extremely demanding and challenging, but also immensely rewarding in that the individual training and operational individual training conducted contributes to the very serious business of preparing gunners for combat operations.

The Royal Regiment of Canadian Artillery is in the midst of making extraordinary strides in terms of Army and Artillery transformation. The integration of the M777 and mini unmanned aerial vehicles (MUAVs) into current operations, and the upcoming deployment of the hostile artillery locating (HALO) II acoustic sound ranging and lightweight counter-mortar radar (LCMR) capabilities into theatre, has earned the Artillery resounding praise from commanders at all levels of the CF. Over the course of the past eighteen months, as a result of unforecasted operational requirements (UOR), the Artillery has become an impressive force multiplier on combat operations.

Over the course of the past year and a half, the RCAS has fielded a new equipment training team (NETT), a nucleus of highly trained Artillery experts who have deployed across the globe to train on newly acquired equipment to allow for its seamless integration into the combined arms team and, subsequently, to train the field force as they prepare for deployments into a volatile theatre of operations. As one would imagine, the arrival of equipment and capabilities via UOR results in a significant impact on the training system, most notably on available training cadre, operational tempo, and the provision of sustainable operational individual training (IT). Given the urgency under which these capabilities are required in theatre, the demands placed upon our trainers are extremely wearing. Many of our soldiers currently employed within our training system are experiencing similar hardships and challenges as are our deployed forces. Our trainers are extremely valuable resources and they deserve individual attention and acknowledgment as the loss of their great contributions can easily prove to have insurmountable second and third order effects for the "other Army"¹—Canada's training Army.

Over the past twenty years, military technology has seen a revolution of sorts. Technological advances in global positioning systems (GPS), metallurgy, weaponry, and digital systems have challenged most contemporary militaries in terms of how to integrate cutting edge systems into the battlespace and the combined arms team as quickly and as successfully as possible. By examining the experiences surrounding the surveillance and target acquisition STA fielding, this article will serve as a synopsis of critical lessons learned by the RCAS with regard to the delivery of operational individual training results associated with the fielding of UOR systems within the Artillery and combined arms team.

BACKGROUND

The CF's STA capability has existed for decades. However, it has previously been narrowly focused on survey alone. The gunners employed within the regimental survey sections were trained to operate survey equipment and orient and fixate a gun position. That being said, there existed a very small cadre of officers and senior non-commissioned member (sr. NCM) who were fully trained in the STA classification. On an annual basis, one officer and one sr. NCM would be selected to attend the gunnery career course (GCC) in the United Kingdom. The GCC course graduated STA Instructors (STA IG) and assistant instructors-in-gunnery (STA AIG) with expertise in the understanding of multi-mission radars, the use of acoustics for weapon locating, the employment and deployment of the family of unmanned aerial vehicles (UAV). Upon successful completion of the course, STA IG and AIGs would be posted back to the School for employment within the STA cell. The cell, which rarely numbered more than four trained STA gunners, was responsible for designing and delivering the theoretical survey lectures associated with advanced Artillery IT courses. The only practical training the instructor cadre would receive beyond that provided by the GCC was via our participation in ABCA or coalition corps-level exercises. Given the unprecedented arrival of several UOR STA capabilities over the past eighteen months, and pending Artillery transformation, relying on resident STA expertise alone will not be sustainable in terms of force generation, and has proven to be nearly unsustainable to support the delivery of critical operational IT to task forces preparing to deploy overseas.

Armies smart enough to think ahead do what they can to be ready for the next conflict by examining future concepts, preparing doctrine, developing the proper physical, intellectual, and social capital for their armies, as well as training their soldiers for tasks both possible and probable.²

Future capabilities must be identified and defined today; the cadre of experts must also be trained now.

POINT OF DIMINISHING RETURNS

Perhaps the most critical lesson learned was that Canadian soldiers must be trained by Canadian trainers. In March 2006, in preparation for TF 3-06 deployment to Afghanistan, the MUAV Troop, comprised of gunners primarily from 2 RCHA, traveled to Israel to undergo training provided by the original equipment manufacturer (OEM). This training was designed to qualify inexperienced MUAV operators on how to employ and deploy the equipment during ongoing operations in Afghanistan. Given that OEM are not typically established to train military forces, this venture proved to be unsuccessful. The OEM neither had sufficient equipment nor instructors to complete the training. There was no semblance of a training plan nor a training standard to guide the effort. This resulted in operators not receiving sufficient training to develop an acceptable level of proficiency on the system. Additionally, by not training a cadre of trainers first, there was no instructional support to Canadian soldiers upon return to their home unit. The climax to this initial fielding was the capability being abandoned during TF 3-06 due, in part, to the low training level of the operators resulting in a loss of confidence on behalf of the manoeuvre commander. Later, in 2006, Directorate Land Requirements (DLR) and the training system attempted to rectify the situation by force generating an instructor cadre capable of delivering the necessary operational IT for the continued deployment of the MUAV. A team consisting of soldiers from the RCAS and DLR project staff traveled to Israel to undergo training direct from the OEM.

Immediately upon the "train-the-trainer" team's return from Israel, RCAS instructors identified numerous training shortfalls and began work on a new training plan in earnest

to guarantee the provision of a comprehensive, realistic and relevant package for Gunners deploying with Task Force (TF) 1-07. A serious deficiency was identified, in terms of equipment expertise and, once the TP was finalized and training commenced, an even more critical lesson was learned: sufficient quantities of equipment and spare parts must be made available prior to embarking upon a training course. The severely limited number of MUAV for training and deployment, coupled with a distinct lack of spare parts, have plagued this project from the outset, resulting in less than optimal training and significantly reduced confidence by the field force in this potential force multiplier.



TF 3-06 STA Troop undergoing MUAV training in CFB Petawawa

In the summer of 2006, the STA community again found itself playing catch-up immediately following the submission of the Artillery Weapons Locating System (AWLS) UOR for HALO II. At that particular time, the reservoir of trained STA gunners capable of delivering the required operational IT was virtually depleted. Most fortuitously, with the summer, came the arrival of a newly graduated STA AIG from the GCC course in the UK, resulting in the integration of a capable and relevant trainer into the STA cell. Early in October 2006, the RCAS STAAIG began detailed work with representatives from SELEX in completing the software configuration of the HALO system and designing the required training package, with an ultimate goal of deploying this capability to Afghanistan in February 2007. This was an extremely optimistic goal, keeping in mind that one STAAIG had been tasked to design, develop, and deliver the required training to ensure the gunners of TF 1-07 were capable of successfully deploying and employing the system under combat conditions in support of the combined arms team.

Most fortunately, the training system did heed OEM lessons learned. Associated with the integration of the MUAV into operations, a Canadian STA AIG received training from SELEX in the UK, subsequently returning to deliver the training to Canadian gunners. The RCAS did, however, also take great advantage of the expertise made available through SELEX representatives, personnel that included a recently retired UK STA gunner and a UK STAAIG who had recently returned from operations in Iraq. Both

of these representatives proved invaluable in their dissemination of information and insight into the employment and deployment of this system under challenging conditions in a dynamic theatre of operations. With this piece of the STA puzzle firmly in place, the next hurdle to overcome was the addition of a complementary system for the AWLS – the LCMR.



TF 3-06 STA Troop undergoing HALO training

NEARLY A BRIDGE TOO FAR

The arrival of the LCMR, again through UOR, was the straw that almost broke the camel's back. The STA cell, which at the time consisted of four soldiers, three of whom were formally STA trained, were all fully and inextricably engaged in the delivery of operational IT and the conduct of national qualification courses. The sole remaining STA instructor was a sergeant who had been posted to the STA cell due to his vast knowledge of artillery survey and weapon locating radar systems by virtue of deployment with OP Athena ROTO 0. In December 2006, the STA sergeant traveled to Fort Sill, Oklahoma, with a team consisting of project staff from Ottawa and RCAS trainers. Although knowledge of the LCMR within the US Army was limited, the military staff at Fort Sill delivered a first-rate training package on the system.

Over the Christmas holidays, the RCAS STA Sergeant worked feverishly to "Canadian-ize" the US Army tactics, training and procedures (TTPs) in anticipation of the first LCMR training course, scheduled for late January 2007, with a goal of deploying the capability into theatre alongside HALO II in February 2007. Keeping valuable lessons-learned regarding the Canadian delivery of training to fellow Canadians at the forefront, the RCAS intended to deliver a five-day training package to the TF 1-07 STA troop. However, due to contractual implications, negotiations resulted in US military contractors delivering the LCMR package to Canadian soldiers. This venture was not as successful as the previous two training endeavours, due to the fact that the newly trained Canadian team possessed substantially more relevant information and practical expertise on the system than did the US contractors. Although this issue did have a negative impact upon the training, the end-state did see the creation of a network of allies dealing with LCMR issues to ensure all coalition forces benefit from LCMR lessons learned. Notwithstanding the outstanding work and professionalism of the Canadian STA community, re-examining the successes associated with the 155mm M777 LW howitzer

project may have resolved some of the issues surrounding the STA projects prior to implementation.

In stark contrast, the M777 project was destined for success from the outset. Detailed negotiations with both US and Canadian procurement staff resulted in the delivery of four systems to Canada in December 2005. Prior to their arrival, the RCAS had proactively identified the instructor cadre for deployment to Fort Sill, Oklahoma, to receive training through the US Army new equipment training team (NETT). Committed to mission success, the RCAS team was comprised of Field Artillery AIGs with tremendous experience and expertise in the employment and deployment of howitzers, and vast instructional capabilities. The RCAS team worked in unison with the US NETT in designing and developing the M777 training package. Surprisingly, it was the initial intent of the US NETT to become conversant in Canadian gun drill and subsequently deliver the training to Canadian Gunners. This issue rapidly became the topic of several heated discussions between Canadian and US NETT; however, the end result determined Canadians would teach Canadian Gunners and the US NETT would provide technical assistance as required.



LCMR training in CFB Gagetown—Feb 2007

MADE IN CANADA

Canadian soldiers must receive training from Canadian instructors. As previously noted in the MUAV case, this is a critical issue when dealing with the development and integration of training on UOR equipment prior to deployment on operations. By adhering to this key training principle, we will ensure mission success. Conversely, for Canadian trainers to achieve a level of proficiency on UOR equipment synonymous with subject matter experts (SME), they must receive the training from industry experts. There exist two different categories of industry experts—civilian and foreign military. Training originating from the former results in material having to be “Canadian-ized” and militarized, whereas, the latter requires simple modification to Canadian Army parlance. Once the material is translated and developed into a recognized Canadian Army training plan, both the instructors and soldiers receiving the training are more at ease and better apt to assimilate the required skills versus fighting through an unfamiliar training environment. Remaining firmly committed to the key principle of, Canadian instructors

training Canadian soldiers will ensure that those about to deploy into a challenging theatre of operations have received the best possible training and all the conditions have been set for success. Those soldiers remaining within the training system are also better prepared for the training of the next task force—or are they?

A FEW GOOD SOLDIERS

Although the cadre of CF experts on the Artillery's UOR equipment is fully trained and is completely committed to the delivery of world-class training, there is a price to pay when it comes to the management of the operational tempo of the training team. Considerable resources, time, and money has been devoted to the development of STA SME and, by adhering to the tenet of Canadians training fellow Canadians, this small but dynamic team would be tasked twenty-four hours a day, seven days a week, 365 days a year, if we were to allow it.



LCMR training in CFB Gagetown—Feb 2007

When guidance is issued from theatre-level and Army commanders to deploy critical combat capabilities and force multipliers in accordance with a specified timeline, there is strong impetus to satisfy the intent at all costs. Through the conduct of battle procedure for the deployment, a timeline is usually established through the identification of the required training events with a view to synchronizing individual training needs with collective training needs. From experience, this has resulted in very finite periods of time that are relatively inflexible and normally ranging for a period of four to six weeks, depending on time of year, for the conduct of individual training. As a result, the training team is fully engaged during these timeframes with the training of the TF personnel.

As the responsibility for command of the TF rotates amongst the Land Force Areas (LFA), so too does the venue for the conduct of training. The training of MUAV troops for TF 1-07 commenced in August 2006 and was completed January 2007. This was a training package that was originally scheduled for a mere twenty training days; however, due to weather and severe lack of spare parts, the training required over eighty days in several locations. To mitigate the loss of training time due to harsh winter weather, subsequent training scheduled for TF 3-07 was conducted at CFB Comox, BC, from

February to March 2007. Despite hopes the change in venue would result in training aims being met, this training was halted due to weather. The training was subsequently continued at CFB Gagetown and will be completed in Wainwright during EXERCISE MAPLE GUARDIAN. Achievement of the mission aside, this situation resulted in the MUAV training team being deployed for over 110 days over the course of four months. The same operational tempo has been maintained by the HALO and LCMR training teams, and has also recently included a 30-day deployment to Afghanistan as part of a technical assistance visit (TAV). In much the same fashion, the M777 training team was deployed on temporary duty (TD) for over eighty days from November 2005 and March 2006. Although some may argue that these operational IT deployments are not as risky as the operational deployments themselves, and that the road to high-readiness is lengthier, the time away still has a seriously detrimental effect on the soldier and his family.



M777 training—Fort Sill, Oklahoma—Nov 2005

With the sustained deployment of troops to Afghanistan since 2004, there has been an abundance of media and medical interest in the effects deployments have on the families. Many of the emotions, signs, and coping mechanisms associated with a prolonged operational deployment relate to prolonged training deployments as well, albeit at a more frequent and disruptive rate. The feelings of confusion, anger, resentment or depression are experienced upon receipt of a pending operational deployment.³ A family can take steps to mitigate these feelings and are capable of developing coping mechanisms to last through a six to nine month deployment. Unfortunately, this same scenario occurs each time a trainer prepares for an extended period of time away to delivery training. Referring back to the periods of time away experienced by our M777 and STA training teams, this resulted in no less than three occasions where the entire family, including small children, were faced with having to deal with separation, and the feelings of wrong doing and resentment experienced by the young children.⁴ These extended TD trips have a detrimental effect on the families and result in separation, divorce, and financial concerns. The emotional and tempo concerns associated with time away from home are the same whether you are in mortal danger or not, and this is an issue that must be immediately addressed and managed by the chain of command. If we fail to acknowledge the sacrifices made by our trainers and their

families, their morale will be substantially reduced and their dedication to this mission-critical training will most certainly be lost—not to mention the fact that the deploying soldiers will not be receiving the standard of training required to deploy into a volatile theatre of operations if our SMEs opt to leave due to extremely intense operational tempo and a lack of support by the chain of command to the welfare of its soldiers and their families.

Just as honours and awards are important psychological stimuli during operations, so too are they in training. The achievement of high standards, innovation, efficiency, new TTPs and better support to training are all examples that warrant recognition and should be considered worthy of praise. Since the deployment of TF 1-06 to Kandahar, there has been considerable publicity surrounding the vitally important work our combat troops are conducting in Afghanistan. Recognizing there is an organization that is equally important in preparing soldiers for combat, commanders of the Army and the training system have been praising the efforts of the soldiers currently assigned to LFDTs. While the praise and commendation are working to keep the day-to-day execution of training and development of TTPs occurring, there still exists scepticism by the trainers as to the affect remaining within LFDTs may have upon themselves and their families.

CANADA'S "OTHER" ARMY

We have already outlined the hardships endured by both the family and the trainer as he or she is detached from home for extended periods of time. However, another critical issue requires acknowledgement. As it currently stands, becoming a SME in a particular discipline, one may encounter issues surrounding availability for career course, promotion, and a sense of contribution. As we have discovered within the RCAS STA cell, at present, there exists only one SME for each of the new capabilities. This has resulted in that one person being deployed to continuously conduct training and, therefore, unavailable to attend career courses such as the intermediate leadership qualification (ILQ) and advance leadership qualification (ALQ). Although there has been firm direction from the CDS concerning this exact issue, addressing unavailability due to deployment or re-integration, unavailability due to training deployments must also be considered.⁵ The truth will only be known at future merit boards. At present, it would appear that the CDS' message is not being deciphered appropriately as members within the training system are still being pressured to complete professional development courses to enhance their potential for promotion.

The obvious lack of availability to attend or complete career courses due to an intense operational tempo, coupled with the lack of promotion potential, will undoubtedly have a serious effect upon the morale of the trainers. Very soon, the perception amongst the field force will be that there are the "have" and the "have not"—those who have deployed to Afghanistan, and those who have not. Those who "have not", are perceived to lack the credibility and the credentials required for key appointment and senior leadership employment. The descent of one's morale and sense of contribution is soon to follow. This issue must be addressed immediately by leadership at every level, as it is a delineation that is absolutely false—trainers are making one hell of a contribution to the Army at war. Dialogue between forces currently deployed in Afghanistan, those recently returned, and trainers does aid in diffusing the sense of not contributing. Studying and discussing the reports gathered by ALLC with SMEs will identify that the training being conducted, both in individual and collective venues, is valid and is saving lives. Participation on TAVs has also been an extremely positive reinforcement tool toward the great work that is being done every day by the trainers in the "other Army"⁶.

CONCLUSION

Adherence to four basic tenants by the Canadian Army will ensure continued success with regard to the fielding of new capabilities:

- ◆ identify future capabilities now and start training the SME;
- ◆ sufficient quantities of systems and spare parts must exist prior to start of training;
- ◆ Canadian soldiers must be trained by Canadian trainers; and
- ◆ managing the operational tempo and career progression of the trainers must be a top priority.

The fielding of new capabilities via UOR is not unique to the Canadian Army's involvement in coalition operations. Over the past decade, other armies have also struggled through the process with varying degrees of success. The US Army made emergency upgrades to the M1A1 Abrams tank just prior to Operation Desert Storm and also used the operation to complete fielding and testing of the Multiple Launch Rocket System (MLRS) and Army Tactical Missile System (ATACMS). The British Army also fielded their MLRS systems during this timeframe, and both the British and Australian Armies have successfully deployed STA equipment in support of OIF operations in Iraq.

As the Canadian Army continues operations in Afghanistan and deals with other potential areas of concern, the inventory of capabilities will undoubtedly increase. At present, other branches of the Canadian Army are hurriedly fielding capabilities to contribute to success in Southwest Asia. The Armoured Corps will be fielding new tanks. The intelligence community will develop and deploy a covert operational capability. The engineers will continue with counter-IED devices. The Artillery will field a new multi-mission radar (MMR). The lessons learned by the Artillery NETT are the critical underpinnings to the provision of world-class operational IT. They also serve as reminders that there are other parts of the Army that are presently and will continue to contribute to the growing successes the Canadian Army and the nation as a whole is having in the global war on terrorism.

Endnotes

1. Statement made by MGen S.A. Beare, Comd LFDTS December 2006 during Christmas message speech to leadership of CTC Gagetown.
2. B-GL-310-001/AG-001, page 10—*Force Employment Concept for the Army of Tomorrow*.
3. AirForce Office of Special Investigations. "Coping with the Deployment of a Spouse or Partner". Retrieved 24 April 2007.
(<http://www.osi.andrews.af.mil/library/deploymentstress/theathomespouse/copingwiththedeploymentofaspouseorpartner/>)
4. Department of Defense. "When a Family Member is Deployed". Retrieved 24 April 2007.
(http://www.military.com/spouse/fs/0,,fs_deploy_coping,00.html)
5. CANFORGEN 142/06 CMP 066/06, dated 260844Z Sep 06, "Operational Deployment, Professional Qualification and Promotions".
6. Statement made by MGen S.A. Beare, Comd LFDTS December 2006 during Christmas message speech to leadership of CTC Gagetown.

COMMENTARY ON THE 33-DAY WAR: AN EXAMPLE OF PSYCHOLOGICAL WARFARE IN THE INFORMATION AGE

Mr. Vincent J. Curtis, writes ...

Dr. Pierre Cyril Pahlavi wrote a well researched and timely paper on the Israeli-Hezbollah conflict of the summer of 2006.¹ He detailed how Hezbollah inflicted, in his words, a 'crushing defeat on the symbolic level' upon Israel, and he offered up lessons on the 'asymmetrical challenge.' Dr. Pahlavi proposed that the Israeli-Hezbollah conflict was a good example of the new kind of asymmetrical war in the information age that western countries will have to fight.

The broad description Dr. Pahlavi gave of this new kind of war resembled that of William S. Lind's so-called "Fourth Generation Warfare."² (4GW) Dr. Pahlavi concluded that modern militaries would have to learn to fight this new kind of war symmetrically, and learn to win the hearts and minds of people around the world if they expect to win the war. He laid out the new challenge for strategists as "[t]he ability to tame information without controlling it, to impress the crowds, to seduce public opinion and to gain moral victories."

The principle of 'maintenance of morale', which underlies what Dr. Pahlavi was driving at, in waging wars like those in Afghanistan and Iraq is especially relevant to the political situation in Canada. Keeping up morale on the home front is essential if Canada is to continue to combat the Taliban in Afghanistan, while inflicting psychological defeats upon the Canadian home front hold greater prospects for the Taliban than any potential action on the battlefield.

The weaknesses in Dr. Pahlavi's argument are:

- ◆ the implication that the Israel-Hezbollah conflict is applicable generally, and to Canada's involvement in Afghanistan particularly;
- ◆ the proposition that psychological warfare is a major factor in deciding conflicts; and
- ◆ that western militaries have to adopt the methods of 4GW in order to win asymmetric wars.

Finally, the 'new challenge' he laid out for strategists cannot sustain a close analysis.

Let me dispose of that challenge quickly. "The ability to tame information without controlling it" is twaddle. The deceit and spin by which one impresses crowds and seduces public opinion tend to undermine democratic government at home would almost certainly be detected and exposed by a free and skeptical media, and would permanently tarnish the reputation of the Canadian Forces if caught trying to do it on behalf of the government of the day.

The exhortation to gain moral victories stands logically disconnected from the rest of the challenge. No clue is offered as to how Goliath gains a moral victory over David, and why in the first place a strategist should aim at a moral victory in preference to a tactical or a strategic one is not satisfactorily explained. The word victory implies a kind of decision, but a decision gained on the symbolic level doesn't sound like much payback for a nation-state that is investing blood and treasure for real results. In short, the insights of Clausewitz still hold the field.

This is not to deny that there is a wide-spread, superficial perception in some parts of the world that Hezbollah won a kind of victory over Israel in the summer of 2006. As military men, however, we have to look into the reality of things deeper than the perceptions of the world press. We shouldn't have to look to the opinion pages of the *The New York Times* to find out which side was victorious in a war.

With the considerations below, the perception that Hezbollah gained a decision will be changed. With this change of opinion, Hezbollah's victory will disappear, and with it the contention that psychological victories are of much consequence even in this allegedly new kind of war.

Hezbollah are the bad guys. Hezbollah is a terrorist organization that was founded, recruited, trained, and financed by Iran. One of its aims is the destruction of Israel, and no negotiation is going to change this. Hezbollah in Lebanon meets the description of a private militia against which the judgment of duly authorized tribunals cannot be enforced, whose unauthorized military force can challenge the authorized force of a *de jure* government, and it represents a threat to the existence of a just state.³ Hezbollah was the *de facto* government of the south of Lebanon. Contrary to Dr. Pahlavi's assertion, it is not an insurgency in Israel, as the Taliban are an insurgent force in Afghanistan and al-Qaeda in Iraq an insurgent force in that country.

Fans of the Toronto Maple Leafs know that psychological victories do not win you the Stanley Cup. A psychological victory and \$1.50 will get you a cup of coffee. On the other hand, a tactical victory will gain you the entire coffee shop, and all the coffee it has, all the donuts, and all the money in the till is yours. This is the difference between a psychological victory and a tactical one. A psychological victory is intangible, and is as much due to the spectators of the event as to the facts in the arena. A tactical victory is real, not ephemeral, and the effects of it are tangible.

The tangible results of 2006 were that the armistice agreement required Hezbollah to abandon the territory it held south of the Litani River, and the Lebanese army and an international force of peacekeepers moved in. Israel yielded not an inch of territory. Because Hezbollah was obliged to withdraw, Israel was made safe against attack by Katyusha rockets. Though not decisive, these tangible results favour Israel, not Hezbollah. Hezbollah fighters can preen and strut, the chattering classes can worry and fret, and Israeli citizens can go back to work.

The outbreak between Hezbollah and Israel in the summer of 2006 was not a war. It was not even a battle. It was an engagement. The war between Israel and Hezbollah began in 1982, and has not yet ended. Neither side seeks a final decision, so the war drags on in broken-backed fashion year after year.⁴ Hezbollah lacks the military power to destroy Israel, and Israel similarly lacks the power to eradicate Hezbollah.

People tend to believe what they want to believe, and the reaction to the engagement of a large part of the world media, especially that of Europe and Muslim countries, reflects pre-existing prejudices against the Jewish state. One might have asked Joseph Goebbels, Nazi Germany's Minister of Propaganda, for an honest assessment of Germany's prospects in World War II, as consult elements of the media for its opinion of Hezbollah's performance in 2006. Hezbollah's 'victory' consisted in still being able to extend an up-raised middle digit from under the rubble when international pressure ended the engagement.

Israel exhibits none of the psychological symptoms of defeat that are discussed by Clausewitz. He mentions a loss of confidence, the sense that the enemy is stronger, that further effort is useless, of hesitation in everything. It is true the Israelis are mortified that their armed forces did not decisively smash Hezbollah's organization south of the Litani River in the allotted time. But this mortification is not the same as the psychology of defeat. Israel does not have that sense of shame, fear, and exhaustion that accompanies a real defeat. Its morale is not broken. On the contrary, it is Israel that is ready for another round, while the people of Lebanon are fearful their country would not survive another of Hezbollah's stunts. They are resentful that Hezbollah dragged Lebanon into the middle of its fight with Israel.

The only chance Israel stood of gaining a psychological victory was to kill Hezbollah leader Sheikh Hassan Nasrallah in an air raid, and he was hiding in Tehran.

As a measure of values, what was ranked as another psychological victory for Hezbollah, "defeated" Israel was condemned for the excessive destruction it inflicted in Lebanon, vastly in excess of that inflicted by Hezbollah on Israel.

Because Hezbollah is a terrorist organization and not a nation state, it was not regarded as sporting by the media to point out that Hezbollah's wanton targeting of civilians in Israel and use of human shields in Lebanon are contrary to the Geneva Convention and the Law of Armed Conflict. Unscrupulous though it was, Hezbollah was restrained from attacking Haifa with long range guided missiles, and had to content itself with firing unguided Katyusha rockets into mostly empty terrain. Had Hezbollah reached Haifa it would have confirmed that its patron Iran was supplying Hezbollah with sophisticated rockets through Syria. This would have seriously changed the character of the conflict. Had Haifa been struck with long range missiles, Israel would have attacked Syria, and the United States would have moved against Iran. Thus, Hezbollah appeared to succeed because it was restrained by the caution of its patrons. Its little skirmish was not lost in a larger war.

The dimensions of the claim that Hezbollah defeated Israel by means of psychological operations in 2006 are now reduced to their proper proportions. Let me now turn to the claim that western militaries will have to learn to fight 4GW symmetrically and engage in a worldwide hearts and minds campaign to win this new kind of war.

Much of the tactics of 4GW are contrary to the Geneva Convention and the Law of Armed Conflict. Hence, western countries ought to be careful about wholesale adoption of those methods. If western militaries applied the tactics of 4GW symmetrically, they would engage in wanton attacks and atrocities against innocent civilians in order to gain the compliance of the population to our rule and to humiliate the guerrilla movement that cannot protect its people. These actions are contrary to our war aims, and as tactics, tend to be self-defeating. While Special Forces can be raised that can make surgical attacks against the guerrilla movement, western militaries by and large are condemned to fight 4GW asymmetrically. So long as the western country maintains the political and military initiative, that asymmetry is favorable to the western country.⁵

The proposition that a worldwide hearts and minds campaign needs to be waged in order for a western country to win a 4GW conflict seems far-fetched. Canada and Afghanistan ought to be enough, in our case. Traditional methods of diplomacy and politics have not been proven to fail thus far in Iraq and Afghanistan, although more involvement by politicians is called for.⁶ It would be a case of over tasking and a waste of resources if a worldwide campaign were assigned to the Canadian military. It could endanger democracy at home if the Canadian government applied the full panoply of 'spin', disinformation, pressure, deceit, and propaganda against the public in order to win an affair like Afghanistan. Western militaries, which belong to and operate under the control of civilian governments, are not designed to conduct wide-ranging political campaigns at home or abroad; and the Canadian Forces are in no sense parallel to Hezbollah as an organization.

The conflict between Israel and Hezbollah is a special case not applicable to Canada's effort in Afghanistan or to America's in Iraq. The existence of Israel is at stake in its conflict with its neighbors, as Canada's and America's existences are not through their involvement in Afghanistan and Iraq. Psychological 'victories' over the Jewish state are easily given the prejudices and expectations prevalent today and meaningless because Israel will not allow itself to die of low morale. Israel is not trying to beat down an insurgency within its own borders.

On the other hand, Canada's effort in Afghanistan (and America's in Iraq) is a voluntary overseas expedition, and its sustainment depends entirely upon our politicians' assessment of that effort in relation to the national interest, and perhaps to their own domestic political interest. The audience in the arena, the Canadian public, isn't paying

enough attention to what the Taliban say to be seduced into awarding them a psychological victory. The maintenance of morale at home ought to remain a traditional political matter, not a new psychological operation for the Canadian Forces, if one cherishes Canadian democracy.

The only psychological blow the Taliban can lay upon Canada is to kill a Canadian soldier, and for this an elaborate propaganda machinery and effort by the Taliban are unnecessary when we have our own news media constantly taking our temperature. Within the Afghanistan theatre itself, the only sort of psychological campaign Canada needs to wage is to make our aim clear, to mean what we say, and to speak out for justice, order, and peace in Afghanistan. And annihilate those who disagree.⁷ This is the KISS principle as applied to Canadian Information Operations. Even this much cannot be done until the government has given the military an aim, and declared that we are at war. Once given, we engage in Full Spectrum Operations. If the rest of the world even cares, it doesn't much matter.

Three-Block War (3BW) is inherently asymmetric. Just as Full Spectrum Operations (FSO) is the operational content of 3BW supplied by the western country, so-called Fourth Generation Warfare can be the operational content of 3BW supplied by the insurgency. But Israel is not engaged in 3BW. Though asymmetric, the war between Israel and Hezbollah is not 3BW for Israel's involvement is not voluntary, and Israel is not expending blood and treasure trying to rebuild Lebanon. This difference is crucial in assessing the strategic value of psychological victories, insofar as they have any, and in comparing the Israel—Hezbollah conflict to others.

So how does Goliath thwart a psychological defeat? The method by which Goliath thwarts David's effort at a psychological victory is to lower expectations. Now that western populations have some experience of it, it can be said truthfully and convincingly that eradicating an insurgency can be as difficult as eradicating an infestation of ladybugs. It takes persistence. If pure psychology mattered, the United States would have been out of Iraq in 2004. We just have to decide that it's worth it.

There is nothing as devastating to psychology as a dose of reality. A psychological victory over Canada on the world stage, of the kind claimed by Hezbollah over Israel, is impossible. In the first place, most of the world is uninterested in Canadian affairs, as the world is interested in the Middle East. In the second, Op MEDUSA smashed the Taliban and their pretensions to military prowess.

FSO is the proper response of a western country to 3BW, not symmetric 4GW. The benefits to the people we are trying to help with FSO are real, not merely psychological. If our expeditionary forces produce the tactical victories, the psychology will take care of itself. We should not think about undermining democracy at home to win an affair in Afghanistan, just because terrorist organizations unscrupulously mix politics and violence.

Endnotes

1. Dr. Pierre Cyril Pahlavi, "The 33-Day War: An Example of Psychological Warfare in the Information Age" *Canadian Army Journal* Vol. 10.2, pp 12-24.
2. Vincent J. Curtis, "The Theory of Fourth Generation Warfare" *Canadian Army Journal* Vol. 8.4, pp 17-32.
3. Vincent J. Curtis, "The Three Block War: It's Causes and the Shape of the Peace" *Canadian Army Journal* Vol. 10.2, pp 49-65.
4. Cf. Book 8 "War Plans" Carl von Clausewitz *On War* H-P translation, Everyman's Library, Toronto, 1993.
5. Curtis, Theory of 4GW, Loc. Cit.
6. Ibid.
7. For a discussion of the psychological effects of annihilation see: Vincent J. Curtis Understanding Schlieffen *ADTB* 6.3 pp 56-65.